

**RAILROAD COMMISSION OF TEXAS  
HEARINGS DIVISION**

**OIL & GAS DOCKET NO. 01-0305096**

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**GRANTING THE APPLICATION OF PETRO WASTE ENVIRONMENTAL, LP,  
PURSUANT TO STATEWIDE RULE 8 AND STATEWIDE RULE 78 FOR A PERMIT  
TO OPERATE A COMMERCIAL WASTE SEPARATION AND DISPOSAL FACILITY,  
MCMULLEN COUNTY, TEXAS**

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**FINAL ORDER**

The Commission finds that after statutory notice in the above-numerated docket heard on October 16-20, 2017 the presiding Examiners have made and filed a report and recommendation containing findings of fact and conclusions of law, for which service was not required; that the proposed application submitted by Petro Waste Environmental, LP is in compliance with all statutory requirements; and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the Examiners' report and recommendation, the findings of fact and conclusions of law contained therein, and any exceptions and replies thereto, hereby adopts as its own the findings of fact and conclusions of law contained therein, and incorporates said findings of fact and conclusions of law as if fully set out and separately stated herein.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the Application of Petro Waste Environmental, LP, Pursuant to Statewide Rule 8 and Statewide Rule 78 for a Permit to Operate a Commercial Stationary Waste Separation and Disposal Facility, Application Control Nos. STF 080 and associated pits, McMullen County, Texas, is hereby **GRANTED** in accordance with the attached permit.

Each exception to the Examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

It is further **ORDERED** by the Commission that this order shall not be final and effective until 25 days after the Commission's order is signed, unless the time for filing a motion for rehearing has been extended under Tex. Gov't Code §2001.142, by agreement under Tex. Gov't Code §2001.147, or by written Commission Order issued pursuant to Tex. Gov't Code §2001.146(e). If a timely motion for rehearing of an application is filed by any party at interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. Pursuant to Tex. Gov't Code §2001.146(e), the time allotted for Commission action on a motion for rehearing in this case prior to its being overruled by

operation of law is hereby extended until 90 days from the date Commission Order is signed.

Done this 19th day of June, 2018.

RAILROAD COMMISSION OF TEXAS

*Christi Craddick*

CHAIRMAN CHRISTI CRADDICK

*Ryan Sitton*

COMMISSIONER RYAN SITTON

*Wayne Christian*

COMMISSIONER WAYNE CHRISTIAN

ATTEST:

*Kathy Way*

SECRETARY

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

Permit Nos: STF-080,  
P012114, P012115, P012116, P012117, P012118,  
P012119A, P012119B, P012119C, P012119 D,  
P012120A, P012120B, P012120C, P012120D,  
P012108 (Disposal Pit #1), P012109 (Disposal Pit #2),  
P012110 (Disposal Pit #3), P012111 (Disposal Pit #4) and  
P012112 (Disposal Pit #5)

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

Based on information contained in the application received March 25, 2014, the amendment request received on November 10, 2016, the amendment request received on March 30, 2017, and subsequent information received during the October 16-20, 2017 hearing you are hereby authorized to receive, store, handle, treat and dispose of certain non-hazardous oil and gas wastes as specified below at the following facility:

**McMullen County Separation & Disposal Facility (330 acres)**  
Latitude, Longitude: 28.519539°, -98.561722°  
McMullen County, Texas  
RRC District 01, San Antonio

**NARRATIVE DESCRIPTION OF PROCESS:**

Incoming oil and gas waste is directed to either the Settling Basins, 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 Railroad Commission of Texas (RRC) permitted Class II injection well for disposal. The accumulated solids from the Settling Basins will be transferred into a Receiving Pit or directed into an active Disposal Pit.

The Receiving Pits will be utilized to further separate and dry the solids before placement in the Disposal Pits. Solid wastes recovered from the Receiving Pits must pass a paint filter test before placement into an active Disposal Pit. Fluids recovered from the Receiving Pits and contact storm water will be pumped or conveyed to the Collecting Pit then transported to a RRC permitted, off-site Class II injection well for disposal.

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

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

#### I. GENERAL PERMIT CONDITIONS

- A. The effective date of this permit is XXXX and expires on XXXX.
- B. The permittee may not receive, store, handle, or dispose of oil and gas wastes or fluids at the facility until financial security in the amount of **\$4,033,880.00** is provided and approved by the RRC for the referenced location. This amount provides financial security for all RRC permitted waste management and disposal pit permits allocated for this facility.
- C. In accordance with 16 TAC § 3.78 the permittee shall maintain financial security in the amount of **\$4,033,880.00** until this facility has been closed in accordance with this permit. Technical Permitting reserves the right to revise this amount, as necessary. Prior to any modification of this facility that would require increased financial security, an updated closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC prior to making that modification.
- D. No waste may be received at the referenced facility until 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 section of McMullen County, Texas, and proof of the filing with McMullen 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 Permit Condition X. of this permit have been completed, developed and sampled. The documentation required by Permit Condition X.A. and X.B. must be provided to and approved by Technical Permitting **within 30 days** after installation of the groundwater monitoring wells.
- F. A copy of the site-specific Spill Control Plan that details means and methods of waste management and containment in the event of a release or discharge must be maintained on-site and made available to RRC staff for review and inspection upon request.
- G. The facility's Stormwater Management Plan shall be maintained on-site and made available upon request of the RRC.
- H. Technical Permitting in Austin and the appropriate District Office must be notified in writing when construction of the facility is to be initiated and upon completion of each disposal pit and waste management unit.

- I. 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, treating or disposing of oil and gas waste until the appropriate District Office has performed an inspection of the completed facility and has verified that the facility is constructed in accordance with the application and this permit.
- J. The permittee may not receive, store, handle, treat or dispose of oil and gas waste at the facility until all necessary air permits (if any) are obtained from the Texas Commission on Environmental Quality (TCEQ).
- K. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of the subject facility without an additional permit from the Commission if: (1) the OSSF waste is not commingled with any other oil and gas waste; (2) the system is designed by a Professional Engineer registered in the state of Texas or a sewage system installer licensed in the state of Texas; and the construction, operation, and (3) maintenance of the OSSF complies with all applicable local, county, and state requirements.
- L. 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.
- M. 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.
- N. Any deviation from this permit must be approved by amendment from Technical Permitting in Austin before implementation.
- O. This permit does not authorize discharge from the facility of any oil and gas waste, including contaminated or contact storm water.
- P. Any soil additives, bioaccelerators or treatment chemicals must be approved by Technical Permitting prior to use at the facility.
- Q. 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 RRC approval.
- R. 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 the American Society for Testing and Materials (ASTM International) and certified by a Texas licensed Professional Engineer.

- S. 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.
- T. 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.
- U. 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.
- V. The permittee shall submit a Quarterly Report according to the following:
  - 1. The report shall contain applicable information as required in Permit Conditions III.H, IV.M., V.D., VI.B.16., VI.C.12, VI.E.13., VII.B.13., VIII.B.13., X.C., and XII.H.
  - 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 corresponding chain of custody as specified in Permit Conditions III.H. and X.C shall be included.
- W. Failure to comply with any provision of this permit shall be cause for modification, suspension, termination or cancellation of this permit if Technical Permitting determines that the permittee is in violation of Statewide Rule 8 (d)(6) (E).

## II. AUTHORIZED WASTES

- A. Only oil and gas wastes subject to the jurisdiction of the RRC that are non-hazardous according to Subtitle C (Resource Conservation and Recovery Act (RCRA)), may be received. You may receive, store, handle, treat, process, and dispose of only the following oil and gas wastes:
  - 1. Water-based drilling fluids and associated cuttings;
  - 2. Oil-based drilling fluids and associated cuttings;
  - 3. Iron sulfide, which has been fully oxidized;

4. Contaminated soils from crude oil spills, pipeline condensate, and saltwater spills;
  5. Solid waste generated from gas dehydration and sweetening activities (spent filters and filter media, molecular sieves, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber sludge);
  6. Waste material and precipitate from produced water or flow-back water collecting pits;
  7. Produced formation sand;
  8. Non-injectable waste waters (too many solids to directly inject into an injection well without pretreatment for solids removal);
  9. Spent activated carbon and other oil and gas waste filtering and separation media; and
  10. Inert wastes (such as contaminated concrete or wood) as defined by Statewide Rule 8.
- 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 Condition III.E.
- 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. All waste haulers received at the facility must be currently permitted Oil and Gas Waste Haulers and must have the subject facility listed as an approved disposal facility on their "*Oil and Gas Waste Hauler's Authority to use Approved Disposal/Injection System*", (Form WH-3).

### III. WASTE TESTING AND RECORD KEEPING REQUIREMENTS

- A. For the purposes of this permit a representative sample of incoming waste is defined as a composite sample composed of four grab samples mixed to form one composite 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 microrentgens per hour or greater may not be unloaded or processed at the facility unless further analysis of the waste demonstrates that the waste does not exceed 30 picocuries per gram of Radium-226 combined with Radium-228, or 150 picocuries per gram of any other radionuclide.

- C. All waste shall pass a Paint Filter Test (EPA Method 9095) prior to interment into a disposal pit. Test results from each Paint Filter Test must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Permit Condition I.V.
- D. Prior to receipt at the site, representative samples of waste from commercial oil and gas facilities and reclamation plants must be analyzed for either of the parameters listed below and may not exceed the limitation for the respective parameters:

<u>PARAMETER</u>	<u>LIMITATION</u>
Total Organic Halides (TOX) (EPA Method 9020B)	100 mg/l
<b>or</b>	
Extractable Organic Halides (EOX) (EPA Method 9023)	100 mg/kg

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 acceptance of that waste.

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

<u>PARAMETER</u>	<u>LIMITATION</u>
Corrosivity	pH 2.0 -12.5 standard units (s.u.) (EPA Method 1110A, 9040C or equivalent)
Ignitability	Flash Point < 60° C (EPA Method 1010A, 1020B, or 1030A)
Reactivity	No materials exhibiting the characteristic of reactivity as defined by RCRA
Toxicity	



No materials exhibiting the characteristic of toxicity as defined by RCRA  
(EPA Method 1311)

Metals: Toxic Characteristic Leaching Procedure (TCLP)  
(EPA Method 1311/6010/6020/7147A)

Arsenic (As)	< 5.0 mg/L
Barium (Ba)	< 100.0 mg/L
Cadmium (Cd)	< 1.0 mg/L
Chromium (Cr)	< 5.0 mg/L
Lead (Pb)	< 5.0 mg/L
Mercury (Hg)	< 0.2 mg/L
Selenium (Se)	< 1.0 mg/L
Silver (Ag)	< 5.0 mg/L

Benzene  
(EPA Method 1311/8260/8021B) < 0.5 mg/L

- A. The permittee must maintain the following records on each load of waste accepted at the facility for a period of three (3) years from the date of receipt:
1. Description of the site where the waste was generated, including:
    - 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; and
    - iii. County;
  2. Name and RRC permit number of the transporter;
  3. Volume of waste material (specify units); and
  4. Detailed description of the type of waste, including any analysis required by Permit Conditions III.B., III.C., III.D. and III.E. above.
- F. The permittee shall maintain the following records on each load of waste removed from the facility for a period of three (3) years from the date of receipt:
1. Date waste is removed and hauled to a disposal facility;
  2. Name and RRC permit number of the transporter;

3. Volume (specify units) of each shipment of waste hauled to a disposal facility;
  4. Type of waste (basic sediment, water, water-based mud, etc.); and
  5. Name and permit number of the facility to which the waste was hauled to for disposal.
- G. 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.V. and shall include the following information:
1. All records required by Permit Conditions III.B., III.C., III.D., and III.E. above, as well as a table summary of waste receipts;
    - A. The total volume of each type of waste material received during the specific quarter as detailed in Permit Condition III.F; and
  2. Total volume of each type of waste that leaves the facility for disposal or final disposition during the quarter as detailed in Permit Condition III.G.

#### 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 March 30, 2017, which is attached to and incorporated into this permit as **Permit Appendix A**.
- B. The entire facility shall consist of and is defined by the following waste management unit designations:
  1. Truck Washout Bays and Settling Basin Area:
    - a. Eight Truck Wash Bays;
    - b. Dual channel Washout Trench (**P012118**);
    - c. Settling Basins (**P012119A, P012119B, P012119C, P012119D, P012120A, P012120B, P012120C, and P012120D**);
    - d. One 250-bbl gun barrel separator;
    - e. One 500-bbl water tank;
    - f. One 300-bbl water tank; and
    - g. One 500-bbl reclaimed oil tank.
  2. Waste Management Unit (WMU) 1:
    - a. Three Receiving Pits **P012115 (#1), P012116 (#2) and P012117 (#3)**;
    - b. One Collecting Pit (**P012114**);
    - c. One Disposal Pit **P012108 (#1)**; and
    - d. One Stormwater Retention Pond (#1).
  3. Waste Management Unit (WMU) 2:

- a. Three Disposal Pits **P012109 (#2), P012110 (#3) and P012111 (#4)**;
  - b. One Stormwater Retention Pond (#2).
4. Waste Management Unit (WMU) 3:
- a. One Disposal Pit **P012112 (#5)**;
  - b. One Stormwater Retention Pond (#3).
- C. A 100-foot buffer must be maintained between all waste management units and drainage features or surface waters. The outside toe of the perimeter berms for Disposal Pit **P012111 (#4), Stormwater Pond 2 (WMU 2) and Stormwater Pond 1 (WMU 1)** must have rock riprap stones with a median element diameter of 6-inches installed over the lateral extent of the appropriate berm wall, as specified in the application, and the construction must be consistent with the "*RIP RAP FLOOD PROTECTION PLAN AND DETAIL*" (Sheet C23) diagram received on March 30, 2017, which is attached and incorporated into this permit as **Permit Appendix B**.
- D. Silt fencing and/or filter rock dams or gabions (as appropriate) shall be installed between the limits of construction and all surface waters features (or seasonal streams) to provide a physical control and to modulate potential run-off. Vegetation must be established to provide additional erosional controls in the areas affected by construction. The silt fencing/rock filter dams must be inspected and maintained monthly and any repairs or accumulation of debris or sediment must be removed as appropriate.
- E. 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.
- F. No waste, treated or untreated, may be placed on the ground.
- G. 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.
- H. Any spill of waste, chemicals, or any other waste related material must be collected and containerized within 24 hours, and processed through the treatment process or disposed of in an authorized manner.
- I. Any chemical used in the treatment process shall be stored in vessels designed for the safe storage of that particular compound and these vessels shall be maintained in a leak free condition.
- J. Berms or containment structures must be constructed around all waste management units and 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 contact storm water within the waste management units. Refer to the stormwater management requirements specified in Permit Condition IX.

- K. All the storage tanks containing fluid waste or fuel shall be contained within dikes or berms. Secondary containment of 120% total storage capacity is recommended, however a firewall capacity that will capture 100% of the volume of the largest tank plus the volume of a 25 year/ 24-hour rainfall event for McMullen County is acceptable.
- L. 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 vehicle or livestock access. Fencing shall be required unless terrain or vegetation prevents truck or livestock access except through entrances with lockable gates.
- M. Each month an inspection of the entire facility must be performed on all concrete slabs, processing equipment, containment berms, and aboveground storage tanks for deterioration, leaks and spills. The records of each inspection must be kept on-site and maintained for a period of three (3) years from the date of the inspection. The following must be included in the inspection report and submitted as part of the Quarterly Report required by Permit Condition I.V.:
  - 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, roll-off boxes or containment berms for evidence of deterioration or leakage, and a description of corrective action taken, if any.
  - 3. The results of the monthly inspection of waste levels within the storage areas, tanks, and roll-off boxes, and a description of corrective action taken, if any.
  - 4. The results of the monthly inspections of the silt fencing/rock filter dams or gabions installed to control and modulate run-off and indicate whether debris has been removed or maintenance performed.

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

- A. The general layout and arrangement of the Truck Washout Bays and Settling Basins Area shall consist of eight truck wash bays; a dual channel Washout Trench (P012118); eight settling basins (P012119A, P012119B, P012119C, P012119D, P012120A, P012120B, P012120C and P012120D); one 250-bbl gun barrel separator; one 500-bbl water tank; one 300-bbl water tank; and one 500-bbl reclaimed oil tank and must be consistent with the schematic diagrams

provided in the "*TRUCK WASH AND SETTLING BASIN SITE PLAN*" (Sheet C19), the "*TRUCK WASH AREA AND DETAILS*" (Sheet C20) and the "*SETTLING BASIN AND DETAILS*" (Sheet C21), received March 30, 2017, which are attached to and incorporated 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 be constructed 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 20-feet on the north and 45-feet on the west and east sides. A concrete curb shall be constructed that is 12-inches in height by three-feet wide and completely surrounds the truck wash unloading bays and settling basin area. The washout bays slope towards the washout trench (**P012118**) located in the middle and collects waste that then gravity flows to the Settling Basins.

1. Use of the Washout Unloading Bays and the Washout Trench (**P012118**) is limited to the collection of wastewater, rinsate and residual solids generated from the washout of trucks and frac tanks. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
2. The floor of each bay shall have a minimum slope of 2% allowing for wash water to drain into the grated Washout Trench (**P012118**). The washout trench shall consist of two channels that are each three-feet wide and three-feet deep and extend the full length of the unloading bays (160-feet) and will gravity drain into the settling basins prior to disposal.
3. The usable capacity of the dual channel Washout Trench must not exceed 350 barrels.
4. A sign shall be posted identifying the Washout Trench and permit number using letters and numerals at least three inches in height.

C. The Settling Basins **P012119A, P012119B, P012119C, P012119D, P012120A, P012120B, P012120C, P012120D** are an interconnected weir system used to passively separate the incoming fluids and waste received from the Washout Area.

1. Settling Basins (**P012119A, P012119B, P012120A, and P012120B**) must have approximate dimensions of 61 feet long by 12 feet wide by six feet deep. Each 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.
2. Settling Basins (**P012119C, P012119D, P012120C, and P012120D**) must have approximate dimensions of 25 feet long by 12 feet wide by six feet deep. Each 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.
3. The total combined permitted capacity for all eight Settling Basins shall not exceed 2,960 barrels.
  4. A sign shall be posted identifying the permit number of each Settling Basin using letters and numerals at least three inches in height.
  5. Use of the Settling Basins is limited to the collection of wastes generated from the Truck Unloading and Washout Area and other oil and gas wastes specified in Permit Condition II.A. prior to disposal in a permitted off-site Class II injection well. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pits.
  6. At least two feet of freeboard must be maintained between the fluid level in each of the pits and the top of the pit wall.
  7. The concrete liner must be installed and maintained in accordance with best management and sound engineering practices.
  8. 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.
  9. The concrete tank pad shall be constructed 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; and
    - d. One 500-bbl reclaimed oil tank.
  10. The concrete tank pad shall be surrounded by a concrete block fire wall that is 2 feet 8 inches in height and eight inches wide and must maintain sufficient volume as specified in Permit Condition IV.K.
- D. Each pit must be emptied and visually inspected annually for deterioration and leaks. A record of this inspection and photographs of the interior of each pit must be maintained and shall be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Permit Condition I.V. The San Antonio District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection.
- E. The concrete liner must be inspected whenever evidence of liner leakage arises. If inspection of the concrete liner reveals a leak or other loss of integrity,

the liner must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.

- F. 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 collected 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.
- G. This permit does not authorize the discharge of waste from the pits to the ground surface or to surface water.
- H. 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.
- I. Unless otherwise required by conditions of this permit, construction, use, and maintenance of each pit must be in accordance with the information represented on the application (Form H-11) and attachments thereto.

#### VI. CONSTRUCTION AND OPERATION OF WASTE MANAGEMENT UNIT (WMU) 1

- A. The general layout and arrangement of WMU 1 consisting of Receiving Pits P012115 (#1), P012116 (#2), P012117 (#3), Collecting Pit P012114, Disposal Pit P012108 and Stormwater Retention Pond (#1), must be consistent with the schematic diagrams "*DISPOSAL CELL 1 SITE PLAN*" (Sheet C2), received March 30, 2017, which is attached to and incorporated into this permit as **Permit Appendix D**.
- B. THE CONSTRUCTION AND OPERATION OF THE RECEIVING PITS **P012115 (#1), P012116 (#2), P012117 (#3)**
  - 1. The Receiving Pits **P012115 (#1), P012116 (#2), P012117 (#3)**, must be constructed as shown on the diagrams "*RECEIVING PITS 1 AND 2 PLAN AND DETAILS*" (Sheet C5), and "*RECEIVING PIT 3 PLAN AND DETAILS*" (Sheet C6), received March 30, 2017, which are attached and incorporated into this permit as **Permit Appendix E**.
  - 2. Use of the pits are limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II.A. prior to disposal by injection into a Class II disposal well or placement into the active on-site disposal pits. No other oil field fluids or oil and gas wastes may be stored or staged in the pits.
  - 3. A sign shall be posted identifying each Receiving Pit by name and permit number using letters and numerals at least three inches in height.

4. Receiving Pit **P012115** (#1) must have dimensions no greater than 350 feet by 172 feet by 10.0 feet. The usable capacity must not exceed 57,063 barrels or 11,866 cubic yards.
5. Receiving Pit **P012116** (#2) must have dimensions no greater than 350 feet by 172 feet by 10.3 feet. The useable capacity must not exceed 58,627 barrels or 12,191 cubic yards.
6. Receiving Pit **P012117** (#3) must have dimensions no greater than 422 feet by 287 feet by 10.6 feet. The useable capacity must not exceed 57,338 barrels or 11,923 cubic yards.
7. The Receiving Pits (P012115, P012116 and P012117) must be constructed in accordance with the liner installation methods included in the application and consist of 12-inches of compacted subgrade, a Geosynthetic Clay Liner (GCL) liner, a 60-mil high-density polyethylene (HDPE) secondary liner, and a 60-mil high-density polyethylene (HDPE) primary liner. The primary liner shall be covered with at least 24 inches of protective soil that is excavated from on-site.
8. At least two feet of freeboard must be maintained between the fluid level in each of the pits and the top of the pit.
9. 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.
10. Berms must be constructed to completely surround each pit or waste management unit. The slope of each berm wall may not exceed a one to three (vertical to horizontal) ratio and must meet compaction criteria as specified in Permit Condition IV.J.
11. 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. Refer to the "*RECEIVING PITS 1 AND 2 PLAN AND DETAILS*" (Sheet C5) **Permit Appendix E**.
12. Each Receiving Pit must be equipped with a Leak Detection System (LDS), which will consist of a geonet drainage layer with a thickness of at least 200 mils placed between the primary and secondary liners, along with a leak detection trench/sump and riser that are designed to maintain sufficient capacity to allow continuous flow and fluid evacuation.
13. The liner systems and the LDS must be installed in accordance with the application, the material manufacturer's specifications and sound engineering practices.
14. The floor of each pit must have at least a 2% slope to allow fluids to freely drain to the leak detection sump.



15. 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:
  - a. Date of fluid level measuring;
  - b. Fluid level or volume;
  - c. Volume of fluid removed;
  - d. Electrical conductivity; and
  - e. Chloride concentration of the fluids removed.
16. A report of all records required by Permit Condition VI.B.15 above must be submitted in table form within the Quarterly Report required by Permit Condition I.V. The physical record must be maintained by the permittee for the life of the pit. The physical record shall be filed with the RRC upon request.
17. If the leak detection system indicates a possible liner system failure, the liner system must be inspected for deterioration and leaks within five days of the initial detection of the failure. The San Antonio District Office must be notified of that fact by phone or email within 24 hours of the initial detection of the failure. No additional waste shall be added to the pit in the event of a liner system failure. After inspection, the identified failed component must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.
18. A liner system failure for Receiving Pit **P012115** (#1) is defined as any of the following:
  - a. A leak rate from the primary liner greater than the Action Leakage Rate (ALR) of 1,381 gallons per day or 1,000 gallons per acre per day (GPAD).
  - b. Any failure in the leak detection and return system or any component thereof.
  - c. Any detected damage to or leakage from the secondary liner.
19. A liner system failure for Receiving Pit **P012116** (#2) is defined as any of the following:
  - a. A leak rate from the primary liner greater than the Action Leakage Rate (ALR) of 1,381 gallons per day or 1,000 gallons per acre per day (GPAD).
  - b. Any failure in the leak detection and return system or any component thereof.
  - c. Any detected damage to or leakage from the secondary liner.

20. A liner system failure for Receiving Pit **P012116** (#3) is defined as any of the following:
  - a. A leak rate from the primary liner greater than the Action Leakage Rate (ALR) of 1,387 gallons per day or 1,000 gallons per acre per day (GPAD).
  - b. Any failure in the leak detection and return system or any component thereof.
  - c. Any detected damage to or leakage from the secondary liner.
21. No oil may be allowed to accumulate on top of the water or wastes stored in each pit. Any oil on top of the liquids must be collected 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.
22. This permit does not authorize the discharge of waste from the pits to the ground surface or to surface water.
23. 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.

**C. CONSTRUCTION AND OPERATION OF THE COLLECTING PIT P012114**

1. The Collecting Pit **P012114** must be constructed as shown on the "COLLECTING PIT PLAN AND DETAILS" (Sheet C7) diagram received March 30, 2017, which is attached to and incorporated into this permit as **Permit Appendix F**.
2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes and contact stormwater 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 staged in the pit.
3. A sign shall be posted identifying the Collecting Pit **P012114** by name and permit number using letters and numerals at least three inches in height.
4. The Collecting Pit **P012114** must have approximate dimensions of 399 feet by 266 feet by 19.4 feet. The usable capacity must not exceed 109,596 barrels.
5. The Collecting Pit shall be designed and constructed to collect and contain all contact stormwater over the area encompassing the receiving pits and the surrounding low permeability paving that may be generated during a 100-year, 24-hour storm event, while maintaining a minimum two-feet of freeboard.

6. At least two feet of freeboard must be maintained between the fluid level in the pit and the contact stormwater influent culvert within the pit.
7. The pit must be constructed in accordance with the liner installation methods included in the application and consist of 12 inches of compacted subgrade, a 60-mil HDPE secondary liner, and a 60-mil HDPE primary liner.
8. The pit must be equipped with a leak detection system, which will consist of a HDPE 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 the "*COLLECTING PIT PLAN AND DETAILS*" (Sheet C7) schematic in **Permit Appendix F**.
9. The liners and the leak detection system must be installed in accordance with the application, the material manufacturer's specifications and sound engineering practices.
10. The floor of the pit must have at least a 1% slope to allow fluids to drain to the leak detection sump.
11. 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 systems are inspected and the results of each inspection. This record shall include:
  - a. date of fluid level measuring;
  - b. fluid level or volume;
  - c. volume of fluid removed;
  - d. electrical conductivity; and
  - e. the chloride concentration of the fluids removed.
12. A report of all records required by Permit Condition VI.C.11 above must be submitted in table form within the Quarterly Report required by Permit Condition I.V. The physical record must be maintained by the permittee for the life of the pit. The physical record shall be filed with the RRC upon request.
13. If the leak detection system indicates a possible liner system failure, the liner system must be inspected for deterioration and leaks within five days of the initial detection of the failure. The San Antonio District Office must be notified by phone or email within 24 hours of confirmation of the liner system 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. A liner system failure for Collecting Pit **P012114** is defined as any of the following:

- a. A leak rate from the primary liner greater than the Action Leakage Rate (ALR) of 1,965 gallons per day or 1,000 gallons per acre per day (GPAD).
  - b. Any failure in the leak detection and return system or any component thereof.
  - c. Any detected damage to or leakage from the secondary liner.
14. Berms must be constructed to completely surround the pit or waste management unit. The slope of each berm wall may not exceed a one to three (vertical to horizontal) ratio and must meet compaction criteria specified in Permit Condition IV.J.
  15. A concrete curb will surround Collecting Pit P012114 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. Refer to the "*RECEIVING PITS 1 AND 2 PLAN AND DETAILS*" (Sheet C5) schematics in **Permit Appendix E**.
  16. 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 collected 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.
  17. This permit does not authorize the discharge of waste from the pit to the ground surface or to surface water.
  18. 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.

#### D. CONSTRUCTION OF DISPOSAL PIT P012108 (#1)

1. The Disposal Pit **P012108** (#1) may store untreated and partially treated waste and must be constructed and arranged as shown on the "*DISPOSAL PIT 1 PLAN AND DETAILS*" (Sheet C3) and "*DISPOSAL CELL DETAILS*" (Sheet C4) diagrams received March 30, 2017, which are attached to and incorporated into this permit as **Permit Appendix G**.
2. Technical Permitting in Austin and the San Antonio District Office must be notified in accordance with Permit Condition I.H. upon final completion of construction of each Disposal Pit. The permittee may not begin using the pit until the 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 Disposal Pit **P012108** by the name and permit number using letters and numerals at least three inches in height.
4. Disposal Pit **P012108** (#1) must have approximate dimensions of 1025 feet by 615 feet by 24 feet below ground surface (bgs) and 34.7 feet above grade. The footprint of the pit may not exceed 10.66 acres.
5. The operating capacity must not exceed 2,398,770 barrels or 498,853 cubic yards to accommodate the containment of a contact stormwater, while maintaining a minimum two-feet of freeboard.
  - a. The total capacity must not exceed 2,732,280 barrels or 568,210 cubic yards.
6. Berms must be constructed and maintained on all sides of the Disposal Pit with a slope no steeper than a one to three (vertical to horizontal) ratio and meet compaction criteria specified in Permit Condition IV.J.
7. The berms that separate the Disposal Pit from the non-contact storm water interior ditch must be at least four feet in height. Rip rap as specified in the application shall be installed to prevent erosion.
8. The Disposal Pit **P012108** shall be surrounded by a perimeter berm and roadway that includes interior and exterior ditches and culverts that will convey the non-contact storm water to the associated Stormwater Retention Pond (#1).
9. A liner anchor trench must be used to key the synthetic liner into the berm.
10. The Disposal 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 HDPE secondary liner, 60-mil HDPE primary liner and 24 inches of a protective soil layer that is not composed of waste.
11. The Disposal Pit **P012108** must be equipped with a leak detection system, including a HDPE 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.
12. The disposal pit must be equipped with a leachate collection system consisting of two leachate collection trenches that convey leachate to the collection sump. Leachate collected in the leachate collection sump must be removed through the respective leachate removal pipes and disposed of in an authorized manner.
13. The liners, leachate collection system and the leak detection system must be installed in accordance with the application, the

material manufacturer's specifications and sound engineering practices.

14. The floor of the pit must have at least a 2 % slope to allow fluids freely to drain to the collection trenches and associated sumps located at the low end of each cell.
15. A permanent boundary marker surrounding the disposal pit must be installed and maintained and must clearly identify the location of surface liner boundaries.
16. 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.

#### E. OPERATION OF DISPOSAL PIT P012108 (#1)

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 **P012109 (#2)** in Waste Management Unit (WMU) 2, the first Disposal Pit **P012108 (#1)** in Waste Management Unit (WMU) 1 must be filled to final grade, and the Permittee must have received approval from the San Antonio District Office. Disposal Pit P012109 may not begin accepting waste until (1) waste is no longer being accepted in Disposal Pit P012108, (2) capping and closure of the Disposal Pit P012108 has begun and (3) the Permittee has received approval from the appropriate District Office to begin accepting waste in the Disposal Pit P012109.
3. Once the Disposal Pit begins to accept waste above grade, the waste collected in that Disposal Pit must be stabilized, compacted and maintained to prevent collapse of the structure and must not have a slope steeper than a one to four (vertical to horizontal) ratio.
4. The Disposal Pit must maintain a two-foot horizontal freeboard (buffer) between the pit dikes and the edge of the waste.
5. Once the Disposal Pit begins to accept waste above grade, the pit shall be designed and constructed to include a dedicated contact water collection area to separate and contain all contact stormwater that may be generated during a 100-year, 24-hour storm event and received inside the pit, while maintaining a minimum two-feet of freeboard (buffer).
6. The contact stormwater collection area must remain free of waste during operations of the active Disposal Pit. Once the Disposal Pit has reached the above grade capacity, the collection area will be filled with waste and then the Disposal Pit must be capped and

closed according to the criteria specified in the application and Permit Condition XI.K.

7. The permittee must not construct or use any Disposal Pit in a manner that could exceed the financial security required by Permit Condition I.B.
8. All waste must pass a Paint Filter Test (EPA Method 9095) prior to interment into each Disposal Pit and the permittee must maintain records of the results from each Paint Filter Test for the life of the pit.
9. 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 collected 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.
10. No freestanding fluids may accumulate in the Disposal Pit. Any fluids must be removed within 72 hours of discovery and disposed of in an authorized manner.
11. This permit does not authorize the discharge of any oil and gas waste from any Disposal Pit.
12. 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:
  - a. date of fluid level measuring;
  - b. fluid level or volume;
  - c. volume of fluid removed;
  - d. electrical conductivity; and
  - e. chloride concentration of the fluids removed.
13. The information must be submitted in table form within the Quarterly Report required in Permit Condition I.V. 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 RRC upon request.
14. If the leak detection system indicates a possible liner system failure, the liner system must be inspected for deterioration and leaks within five days of the initial detection of the failure. The San Antonio District Office must be notified by phone or email within 24 hours of detection of the liner system 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. A liner system failure for Disposal Pit **P012108** is defined as any of the following:

- a. A leak rate from the primary liner greater than the (ALR) of 1,066 gallons per day or 100 (GPAD).
- b. Any failure in the leak detection system or any component thereof.
- c. Any detected damage to or leakage from the secondary liner.

**VII. CONSTRUCTION AND OPERATION OF WASTE MANAGEMENT UNIT (WMU) 2**

**A. CONSTRUCTION OF DISPOSAL PITS **P012109** (#2), **P012110** (#3) AND **P012111** (#4)**

1. The general layout and arrangement of Waste Management Unit (WMU) 2 consisting of Disposal Pits **P012109** (#2), **P012100** (#3), **P012111** (#4) and Stormwater Retention Pond (#2) must be consistent with the "*DISPOSAL CELLS 2, 3, AND 4 SITE PLAN*" (Sheet C9), "*DISPOSAL PIT 2, 3, AND 4 PLAN AND DETAILS*" (Sheet C10) diagrams received July 7, 2017, and the "*DISPOSAL PIT 2, 3, AND 4 DETAILS*" (Sheet C11) diagram received March 30, 2017, which are attached to and incorporated into this permit as **Permit Appendix H**.
2. Technical Permitting in Austin and the San Antonio District Office must be notified in accordance with Permit Condition I.H. upon the initiation and final completion of construction of each Disposal Pit. The permittee may not begin using the pit until the District Office has completed an inspection of the pit and provided verification that the pit is constructed in accordance with the application and this permit.
3. A sign must be posted identifying each Disposal Pit **P012109**, **P012110**, and **P012111** by name and permit number using letters and numerals at least three inches in height.
4. Disposal Pit **P012109** (#2) must have approximate dimensions of 851 feet by 561 feet by 28 feet below ground surface (bgs) and 30.8 feet above grade. The footprint of the pit may not exceed 10.46 acres.
  - a. The operating capacity must not exceed 2,627,970 barrels or 546,518 cubic yards to accommodate the containment of a contact stormwater, while maintaining a minimum two-feet of freeboard.
  - b. The final capacity must not exceed 2,874,242 barrels or 597,733 cubic yards.



5. Disposal Pit **P012110** (#3) must have dimensions of 857 feet by 561 feet by 26 feet below ground surface (bgs) and 34.2 feet above grade. The footprint of the pit may not exceed 11.04 acres.
  - a. The operating capacity must not exceed 2,847,222 barrels or 592,114 cubic yards to accommodate the containment of a contact stormwater, while maintaining a minimum two-feet of freeboard.
  - b. The final capacity must not exceed 3,233,945 barrels or 672,538 cubic yards.
6. Disposal Pit **P012111** (#4) must have internal waste containment dimensions no greater than 864 feet by 561 feet by 23 feet below ground surface (bgs) and 38.5 feet above grade. The footprint of the pit may not exceed 9.73 acres.
  - a. The operating capacity must not exceed 2,227,402 barrels or 463,215 cubic yards to accommodate the containment of a contact stormwater, while maintaining a minimum two-feet of freeboard.
  - b. The final capacity must not exceed 2,565,984 barrels or 533,627 cubic yards.
7. The total combined final capacity for Disposal Pits P012109 (#2), P01210 (#3) and P012111 (#4) shall not exceed 8,674,171 barrels or 1,803,898 cubic yards.
8. Berms must be constructed and maintained on all sides of the Disposal Pits with a slope no steeper than a one to three (vertical to horizontal) ratio and meet compaction criteria specified in Permit Condition IV.J.
9. The berms that separate the Disposal Pits from the non-contact storm water interior ditch must be at least four feet in height. Rip rap as specified in the application shall be installed to prevent erosion.
10. The Disposal Pits (P012109, P01210 and P012111) shall be surrounded by a perimeter berm and roadway that includes interior and exterior ditches and culverts that will convey the non-contact storm water to the associated Stormwater Retention Pond (#2).
11. A liner anchor trench must be used to key the synthetic liner into the berm.
12. The Disposal pits must be constructed in accordance with the liner installation methods included in the application and consist of 12 inches of compacted subgrade, Geosynthetic Clay Liner (GCL), a 60-mil HDPE secondary liner, 60-mil HDPE primary liner and 24 inches of a protective soil layer that is not composed of waste.

13. The Disposal pits must be equipped with a leak detection system, including a HDPE 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.
14. The disposal pit must be equipped with a leachate collection system consisting of two leachate collection trenches that convey leachate to their respective collection sumps. Leachate collected in the leachate collection sump must be removed through the respective leachate removal pipes and disposed of in an authorized manner.
15. The liners, leachate collection system and the leak detection system must be installed in accordance with the application, the material manufacturer's specifications and sound engineering practices.
16. The floor of the pits must have at least a 2 % slope to allow fluids to freely drain to the collection trenches and the associated sumps located at the low end of each cell.
17. A permanent boundary marker surrounding the disposal pits must be installed and maintained and must clearly identify the location of liner boundaries and the surface.
18. Unless otherwise required by conditions of this permit, construction, use, and maintenance of each pit must be in accordance with the information represented on the applications (Form H-11's) and attachments thereto.

**B. OPERATION OF DISPOSAL PITS P012109, P012110 AND P012111**

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 (**P012110**) in Waste Management Unit (WMU) 2, the first Disposal Pit (**P012109**) must be filled to final grade, and the Permittee must have received approval from the San Antonio District Office. Disposal Pit P012110 may not begin accepting waste until (1) waste is no longer being accepted in the Disposal Pit P012109, (2) temporary capping and closure of the Disposal Pit P012109 has begun and (3) the Permittee has received approval from the appropriate District Office to begin accepting waste in Disposal Pit P012110. The sequenced construction of the pits, perimeter berms, intercell berms, ditches and the capping/closure of the Disposal Pits P0120109, P012110 and P012111 must be consistent with the diagrams "*DISPOSAL CELL 2 PLAN & DETAILS*" (Sheet C13), "*DISPOSAL CELL 2 CAPPING PLAN AND DISPOSAL CELL 3 PLAN*" (Sheet C14), and "*DISPOSAL CELL 3 CAPPING PLAN AND DISPOSAL CELL 4 PLAN*" (Sheet

C15), received July 12, 2017, which are attached to and incorporated into this permit as **Permit Appendix I**.

3. Once each Disposal Pit begins to accept waste above grade, the waste collected in that Disposal Pit must be stabilized, compacted, and maintained to prevent collapse of the structure and must not have a slope steeper than one to a four (vertical to horizontal) ratio.
4. The Disposal Pits must maintain a two-foot horizontal freeboard (buffer) between the pit dikes and the edge of the waste.
5. Once the Disposal Pits begins to accept waste above grade, each pit shall be designed and constructed to include a dedicated contact water collection area to separate and contain all contact stormwater that may be generated during a 100-year, 24-hour storm event and received inside the pit, while maintaining a minimum two-feet of freeboard (buffer).
6. The contact stormwater collection area must remain free of waste during operations of the active Disposal Pit. Once the Disposal Pit has reached the above grade capacity, the collection area will be filled with waste and then the Disposal Pit must be capped and closed according to the criteria specified in the application and Permit Condition XI.K.
7. The permittee must not construct or use any Disposal Pits in a manner that could exceed the financial security required by Permit Condition I.B.
8. All waste must pass a Paint Filter Test (EPA Method 9095) prior to internment into each Disposal Pit and the permittee must maintain records of the results from each Paint Filter Test for the life of the pit.
9. 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 collected 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.
10. 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.
11. This permit does not authorize the discharge of any oil and gas waste from any Disposal Pit.
12. 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:
  - a. date of fluid level measuring;

- b. fluid level or volume;
  - c. volume of fluid removed;
  - d. electrical conductivity; and
  - e. chloride concentration of the fluids removed.
13. The information must be submitted in table form within the Quarterly Report required in Permit Condition I.V. 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 RRC upon request.
14. If the leak detection system indicates a possible liner system failure, the liner system must be inspected for deterioration and leaks within five days of the initial detection of the failure. The San Antonio District Office must be notified 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 identified failed component must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit. A liner system failure for Disposal Pits **P012109**, **P012110**, and **P012111** is defined as any of the following:
- a. A leak rate from the primary liner greater than the ALR is defined as a rate greater than 100 GPAD.
    - i. The ALR for Disposal Pit P012109 is 1,046 GPD;
    - ii. The ALR for Disposal Pit P012110 is 1,104 GPD;
    - iii. The ALR for Disposal Pit P012111 is 973 GPD.
  - b. Any failure in the leak detection system or any component thereof.
  - c. Any detected damage to or leakage from the secondary liner.

#### **VIII. CONSTRUCTION AND OPERATION OF WASTE MANAGEMENT UNIT (WMU) 3**

##### **A. CONSTRUCTION OF DISPOSAL PIT P012112 (#5)**

1. The general layout and arrangement of Waste Management Unit (WMU) 3 consisting of Disposal Pit P012112 (#5) and Stormwater Retention Pond (#3) must be consistent with the schematic diagrams provided on the "*DISPOSAL CELL 5 SITE PLAN*" (Sheet C16), and "*DISPOSAL CELL 5 PLAN AND DETAILS*" (Sheet C17), received March 30, 2017, which are attached to and incorporated into this permit as **Permit Appendix J**.

2. Technical Permitting in Austin and the San Antonio District Office must be notified in accordance with Permit Condition I.H. upon initiation and final completion of construction of each Disposal Pit. The permittee may not begin using each pit until the District Office has completed an inspection of the pit and provided verification that the pit is constructed in accordance with the application and this permit.
3. A sign must be posted identifying Disposal Pit **P012112** by name and permit number using letters and numerals at least three inches in height.
4. Disposal Pit **P012112** (#5) must have approximate dimensions of 1024 feet by 852 feet with 22 feet below ground surface (bgs) and 46.7 feet above grade. The footprint of the pit may not exceed 13.74 acres.
  - a. The operating capacity must not exceed 3,379,988 barrels or 702,909 cubic yards to accommodate the containment of a contact stormwater, while maintaining a minimum two-feet of freeboard.
  - b. The final capacity must not exceed 3,774,479 barrels or 784,948 cubic yards.
5. Berms must be constructed and maintained on all sides of the Disposal Pit with a slope no steeper than a one to three (vertical to horizontal) ratio and meet compaction criteria specified in Permit Condition IV.J.
6. The berms that separate the Disposal Pit from the non-contact storm water interior ditch must be at least four feet in height. Rip rap as specified in the application shall be installed to prevent erosion.
7. The Disposal Pit **P012112** shall be surrounded by a perimeter berm and roadway that includes interior and exterior ditches and culverts that will convey the non-contact storm water to the associated Stormwater Retention Pond (#3).
8. A liner anchor trench must be used to key the synthetic liner into the berm.
9. The Disposal Pit P012112 must be constructed in accordance with the liner installation methods included in the application and consist of 12-inches of compacted subgrade, Geosynthetic Clay Liner (GCL), a 60-mil HDPE secondary liner, 60-mil HDPE primary liner and 24 inches of a protective soil layer that is not composed of waste.
10. The Disposal pit must be equipped with a leak detection system, including a HDPE 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.

11. The Disposal Pit must be equipped with a leachate collection system consisting of one leachate collection trench and sump. Leachate collected in the leachate collection sump must be removed through the leachate removal pipe and disposed of in an authorized manner.
12. The liners, leachate collection system and the leak detection system must be installed in accordance with the application, the material manufacturer's specifications and sound engineering practices.
13. The floor of the pit must have at least a 2 % slope to allow fluids to drain to the collection trench and associated sump located at the low end of the cell.
14. A permanent boundary marker surrounding the disposal pit must be installed and maintained and must clearly identify the location of surface liner boundaries.
15. 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 OF DISPOSAL PIT P012112 (PIT #5)**

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 Disposal Pit **P012112 (#5)** in Waste Management Unit (WMU) 3 Disposal Pit **P012108 (#1)**, of Waste Management Unit (WMU) 1, must be capped and closed. Disposal Pits **P012109, P012010 and P012011** in Waste Management Unit (WMU) 2 must be filled to final grade, and final capping has been initiated, and the Permittee must have received approval from the San Antonio District Office. Disposal Pit P012112 may not begin accepting waste until (1) waste is no longer being accepted in the Disposal Pit P012011, (2) the final capping and closure of Disposal Pits **P012109, P012010 and P012011** has begun and (3) the Permittee has received approval from the appropriate District Office to begin accepting waste in Disposal Pit P012112 (#5).
3. Once the Disposal Pit begins to accept waste above grade, the waste collected in that Disposal Pit must be stabilized, compacted and maintained to prevent collapse of the structure and must not have a slope steeper than one to four (vertical to horizontal) ratio.
4. The Disposal Pit must maintain a two-foot horizontal freeboard (buffer) between the pit dikes and the edge of the waste.

5. Once the Disposal Pit begins to accept waste above grade, the pit shall be designed and constructed to include a dedicated contact water collection area to separate and contain all contact stormwater that may be generated during a 100-year, 24-hour storm event, and received inside the pit while maintaining a minimum two-feet of freeboard (buffer).
6. The contact stormwater collection area must remain free of waste during operations of the active Disposal Pit. Once the Disposal Pit has reached the above grade capacity, the collection area will be filled with waste and then the Disposal Pit must be capped and closed according to criteria specified in the application and Permit Condition XI.K.
7. The permittee must not construct or use any Disposal Pit in a manner that could exceed the financial security required by Permit Condition I.B.
8. All waste must pass a Paint Filter Test (EPA Method 9095) prior to internment into a Disposal Pit and the permittee must maintain records of the results from each Paint Filter Test for the life of the pit.
9. 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 collected 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.
10. No freestanding fluids may accumulate in the Disposal Pit. Any fluids must be removed within 72 hours of discovery and disposed of in an authorized manner.
11. This permit does not authorize the discharge of any oil and gas waste from any Disposal Pit.
12. 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:
  - a. date of fluid level measuring;
  - b. fluid level or volume;
  - c. volume of fluid removed;
  - d. electrical conductivity; and
  - e. chloride concentration of the fluids removed.
13. The information must be submitted in table form within the Quarterly Report required in Permit Condition I.V. 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 RRC upon request.

14. If the leak detection system indicates a possible liner system failure, the liner system must be inspected for deterioration and leaks within five days of the initial detection of the failure. The San Antonio District Office must be notified by phone or email within 24 hours of detection of the liner system 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. A liner system failure for Disposal Pit **P012112** is defined as any of the following:

- a. A leak rate from the primary liner greater than the ALR of 1,374 gallons per day or 100 GPAD.
- b. Any failure in the leak detection system or any component thereof.
- c. Any detected damage to or leakage from the secondary liner.

## IX. STORMWATER MANAGEMENT

- A. A perimeter berm that surrounds each separate Waste Management Unit and each accompanying storm water retention pond must be constructed and maintained to provide a physical barrier to prevent potential commingling of contact and non-contact stormwater. The perimeter berm must be constructed to a minimum height of at least four feet with a slope no steeper than a one to three (vertical to horizontal) ratio. It must include a rip rap rock drainage swale in the perimeter ditch that extends at least two feet up the interior of the perimeter berm and the access road to prevent erosion. Construction must be consistent with the application and the "*BERM LOCATIONS*" (Attachment H) schematic, received June 27, 2017, which is attached to and incorporated into this permit as **Permit Appendix K**.
- B. Berms, ditches and related features that convey contact water shall be lined with cement stabilized fill, concrete, or similar low permeability material.
- C. Berms and other containment structures must be constructed around all waste management units and waste storage areas. These structures must be used to divert non-contact storm water around the waste management areas, and isolate and contain contact storm water within the waste management units. Spills or releases into the interior ditch must be collected immediately to prevent contact with stormwater. Construction of all of all stormwater management area structures must be consistent with the "*STORMWATER AREAS*" (Attachment E-1) and the "*STORMWATER MANAGEMENT SCHEMATIC DURING FACILITY OPERATION*" (Attachment E-2), received June 27, 2017, which are attached to and incorporated into this permit as **Permit Appendix L**.



- D. Diversion berms must be constructed and maintained to prevent the commingling of contact stormwater from the perimeter ditch in the receiving and collecting pit area with the non-contact stormwater from the access road ditches and 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 F** and the "*STORMWATER AREAS*" (Attachment E-1) and the "*STORMWATER MANAGEMENT SCHEMATIC DURING FACILITY OPERATION*" (Attachment E-2), diagrams available in **Permit Appendix L**.
- E. Slide gates must be installed at the entrance of each culvert that connects the interior ditch to the Stormwater Retention Ponds (#1, #2 and #3), construction of the slide gates must be consistent with the "*BERM LOCATIONS*" (Attachment H) schematic, which is attached to and incorporated into this permit as **Permit Appendix K**. Spills and releases into the interior ditch must be collected and containerized immediately to prevent contact with stormwater.
- F. In the event that contact storm water enters a 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.
- G. Contact storm water must be contained within the waste management units. Contact storm water must be removed and disposed of in an authorized manner.
- H. 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 volume for McMullen County as specified in Permit Conditions IV.J. and IV.K. respectively.
- I. 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 slides gates. The slide gates must be located at the entrance of the culverts that are used to convey non-contact storm water to the appropriate Storm Water Retention Pond. Each Storm Water Retention Pond must be constructed to contain storm water generated from a 100-year, 24-hour storm event volume for McMullen County, while maintaining the required two (2) foot of freeboard.
- J. 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**

- B. Sixteen groundwater monitor wells must be installed as represented on the "*PROPOSED GROUNDWATER MONITORING WELL NETWORK*" (Figure 2), diagram received March 30, 2017, which is attached and incorporated into this permit as **Permit Appendix M**.

1. The wells must be completed 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 from the first groundwater-bearing unit.
  4. Provisions must be made to protect the well heads from damage by vehicles and heavy equipment.
  5. Each well must be maintained in good condition with a lockable water-tight expansion cap that prohibits unauthorized access.
  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 ASTM D 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 groundwater or saturated soils. The sand pack size should be compatible with the well screen slot size, as well as the local lithology.
    - b. The 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 real or arbitrary benchmark and mean sea level.
    - d. A potentiometric surface map showing static water levels and the estimated groundwater flow direction and the calculated groundwater flow gradient.
- C. All groundwater monitoring wells must be sampled or monitored for the following parameters after installation and quarterly thereafter:

<b><u>PARAMETER</u></b>	<b><u>UNITS</u></b>
Static Water Level	Feet (ft)
Total Depth	ft
Benzene ( <i>EPA Method 8260/8021B or equivalent</i> )	mg/L
Total Petroleum Hydrocarbon (TPH) ( <i>Method TX1005</i> )	mg/L
Total Dissolved Solids (TDS) ( <i>Standard Method 160.1 or equivalent</i> )	mg/L

pH (EPA Method 150.1 or equivalent)	s.u.
Calcium, Magnesium, Potassium, and Sodium (EPA Method 6020 or equivalent)	mg/L
Bromides, Carbonates, Chlorides, Nitrates, and Sulfates (EPA Method 300 or equivalent)	mg/L

- D. Copies of the results must be filed with Technical Permitting as part of the Quarterly Report required in Permit Condition I.V. 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 San Antonio 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 waste related materials must be processed through the facility and removed from the facility for authorized reuse or disposed of in an authorized manner.
- C. Waste processing equipment, aboveground storage tanks, and any other equipment not associated with the maintenance of the facility storage must be removed.
- D. Provisions must be taken to prevent erosion both during and following closure.
- E. Excluding Disposal Pit areas and Stormwater Management areas as specified in Permit Condition XII.E., the entire facility must be backfilled as necessary, contoured to original grade and re-vegetated.
- F. Closure of the Truck Washout Bays/Trench, Settling Basins, Receiving Pits, and Collecting Pit Areas shall be as follows:
  1. The contents of all tanks, vessels, or other containers must be disposed of in an authorized manner.
  2. All non-maintenance related equipment must be removed and salvaged, if possible, or disposed of in an authorized manner.
  3. The concrete unloading bays, washout trench, Settling Basins, concrete pads and access roads shall be cleaned, demolished and the concrete rubble and wash-water must be disposed of in an authorized manner.
  4. The washout trench, Settling Basin, Receiving Pit and Collecting Pits must be dewatered, emptied, backfilled, compacted, and properly closed. All wastes, including the

liners, must be removed and disposed of in an authorized manner.

5. Twelve inches of soil from beneath the concrete unloading bays, concrete liners, concrete aprons, and all visually contaminated soils from beneath the synthetic pit liners shall be excavated and removed. The contaminated soil must be disposed of in an authorized manner.
6. Once waste removal is completed, a soil sampling plan must be submitted to Technical Permitting to characterize the scope of any contamination 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 Bays/Trench, Settling Basins, Receiving Pits, and Collecting Pit Areas.
7. Soil samples required by Permit Condition XI.F. must be analyzed for the Parameters listed in Permit Condition XI.G., and those Parameter Limitations shall not be exceeded. If soil parameter limitations are exceeded, the waste must be disposed of in an authorized manner.

G. Soil samples required by Permit Conditions XI.F. must be analyzed for the following Parameters and shall not exceed the specified Limitations:

<b><u>PARAMETER</u></b>	<b><u>LIMITATION</u></b>
pH (EPA Method 9045C or equivalent)	6 to 10 standard units
Electrical Conductivity (EC) <sup>1</sup>	≤ 4.0 mmhos/cm
Total Petroleum Hydrocarbon (TPH) (EPA Method 5035A/TX1005)	≤ 10,000 mg/kg or 1 % by weight
Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method 5035A/8021/8260B)	≤ 30 mg/kg
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

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

- H. A summary of the soil sampling required by Permit Conditions XI.F. 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 XI.G. is considered waste and must be disposed of at an authorized disposal facility.
- J. Once the results of the closure activities have been approved by the RRC, all non-disposal pits must be dewatered, emptied, backfilled, and compacted within 120 days of final cessation of use of each pit. Final surface grading of the pits and the storage tank battery areas must be accomplished in such a manner that rainfall will not collect at these former locations. Upon final closure, the appropriate District Office and Technical Permitting in Austin shall be notified in writing.
- K. Closure of the Disposal Pits **P012108 (#1), P012109 (#2), P012110 (#3), P012111 (#4) and P012112 (#5)** must be as follows:
1. Once each Disposal Pits has reached its permitted capacity:
    - a. Waste material in the Disposal Pits must be compacted and stabilized, so that the structure will not fail or erode;
    - b. Waste material in the Disposal Pits must be graded so that rainwater will not collect on top of the pit;
    - c. The compacted waste must be covered with a cap that must consist of an impermeable compacted clay liner that is 12 inches thick, overlain by a HDPE liner with a thickness of at least 60 mils, overlain with a geocomposite layer, overlain by a layer of soil that is 18 inches thick compacted to at least 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density, and seeded with appropriate vegetation for the geographic region.

- d. Unless otherwise required by conditions of this permit, final closure of the Disposal Pits must be consistent with the application and details provided on the "*DISPOSAL CELL 1 CAPPING PLAN AND DETAILS*" (Sheet C8), and the "*DISPOSAL CELL 5 CAPPING PLAN*" (Sheet C18) diagrams received March 30, 2017, and the "*DISPOSAL CELLS 2, 3, AND 4 CAPPING PLAN*" (Sheet C12), diagram received on July 12, 2017, which are attached to and incorporated into this permit as **Permit Appendix N**.

## **XII. POST-CLOSURE CARE AND MONITORING**

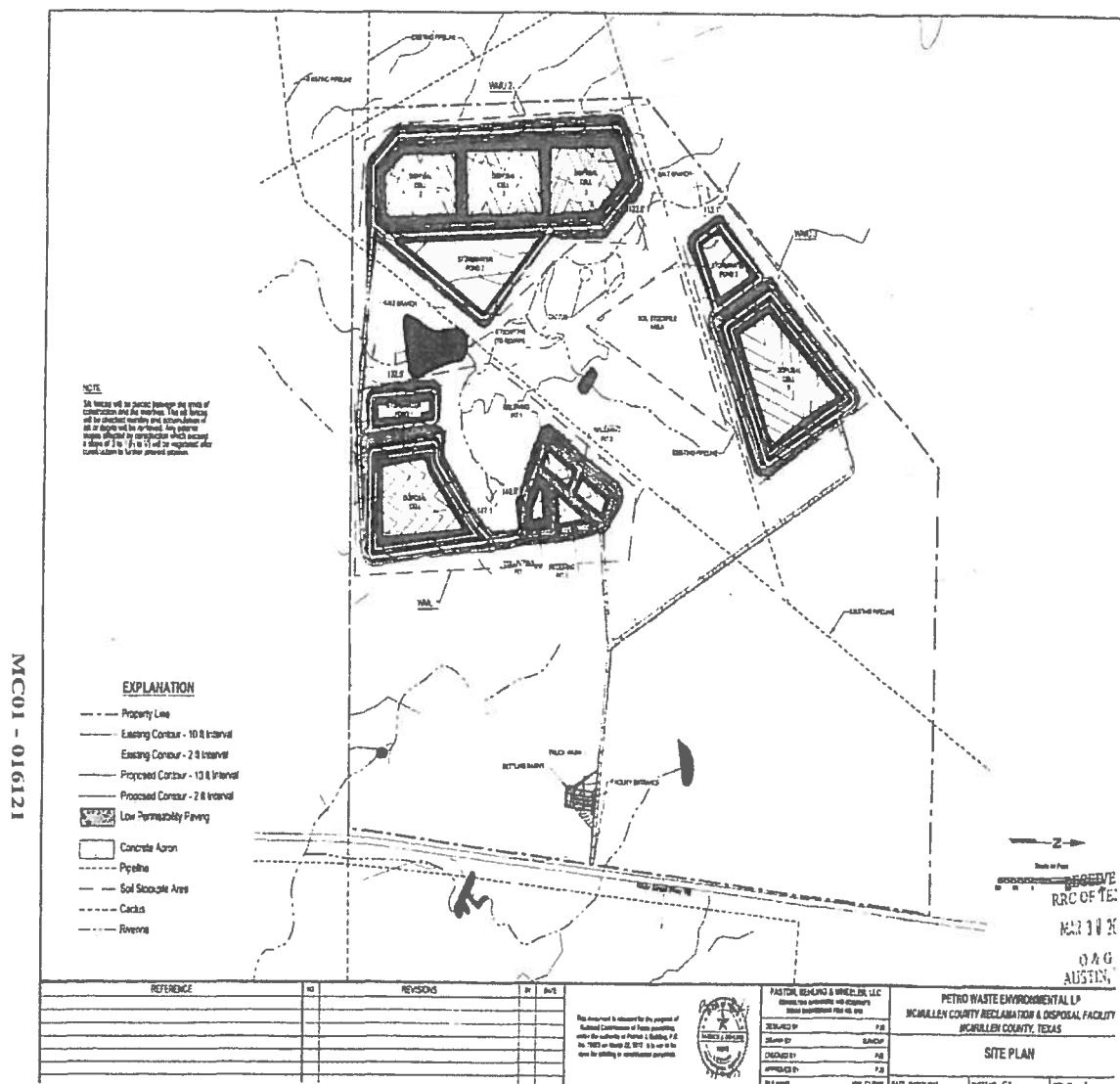
- A. In accordance with 16 TAC § 3.78 the permittee shall maintain financial security in the amount of **\$357,000.00** after the facility has been closed for the post-closure monitoring requirements in accordance with this permit. Technical Permitting reserves the right to revise this amount, as necessary. Prior to closure an updated post-closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC prior to the operating financial security referenced in Permit Condition I.B. will be released.
- B. The site will be monitored for a period of no less than five years after closure of the facility.
- C. Post-closure care must include quarterly inspections of the entire facility by a Texas registered Professional Engineer for signs of deterioration.
- D. Any areas showing signs of erosion must be contoured, backfilled, and reseeded as necessary.
- E. Once the facility is no longer in operation the stormwater must be handled in manner that is consistent with the "*STORMWATER MANAGEMENT SCHEMATIC AFTER FACILITY CLOSURE*" (Attachment E-3) diagram, received on June 27, 2017, which is attached to and incorporated into this permit as **Permit Appendix O**.
- F. All groundwater monitoring wells must remain operational, and monitoring requirements must continue as specified in Permit Condition X.B. until written approval from Technical Permitting in Austin is granted for plugging and abandoning the wells.
- G. The leak detection system and the leachate collection system for the Disposal Pits must be maintained and monitored quarterly. Any leachate detected must be collected and disposed of in an authorized manner.
- H. 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 Permit Condition I.V.
- I. 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 MAY 22, 2018.

# Permit Appendix A


## "SITE PLAN" (Sheet CI)



### EXPLANATION

---	Property Line
-----	Existing Contour - 10 ft Interval
-----	Existing Contour - 2 ft Interval
-----	Proposed Contour - 10 ft Interval
-----	Proposed Contour - 2 ft Interval
	Low Permeability Paving
	Concrete Area
-----	Pipeline
-----	Soil Slooscape Area
-----	Culverts
-----	Rivers

[illegible]

<p>This document is submitted for the project of <b>Remediation and Restoration of Former Airfield at Fort Hood, Texas</b> under the authority of Federal Acquisition Regulation, 48 CFR 101-11.6 and 101-11.7. It is to be used for the purpose of obtaining a construction contract.</p>	 <p>UNITED STATES OF AMERICA 10/1/00</p>	<p><b>PASTOR, REMEDIATION &amp; WHEELER, LLC</b> Remediation and Restoration of Former Airfield at Fort Hood, Texas 3000 Southwest 10th Ave. Ste. 200 Fort Lauderdale, FL 33309 Phone: (954) 571-1000 Fax: (954) 571-1001 Email: info@pastorremediation.com</p>	<p><b>PETRO WASTE ENVIRONMENTAL LP</b> McCOMB COUNCIL RESTORATION &amp; DISPOSAL FACILITY McCOMB COUNCIL, TEXAS</p>	<p><b>SITE PLAN</b></p>
<p><b>DATE:</b> 10/1/00</p>	<p><b>PROJECT NO.:</b> 001</p>	<p><b>PROJECT NAME:</b> Petro Waste Environmental LP</p>	<p><b>PROJECT LOCATION:</b> McComb Council, Texas</p>	<p><b>PROJECT STATUS:</b> In Progress</p>

PASTOR, REMOND & WHEELER, LLC CONSULTING AND ENGINEERING 8000 WESTPARK DRIVE SUITE 200	PETRO WASTE ENVIRONMENTAL LP MCALLUM COUNTY RECLAMATION & DISPOSAL FACILITY MCALLUM COUNTY, TEXAS					
DRAWN BY		F.B.				
CHECKED BY	RANDY					
DATE		F.B.	SITE PLAN			
REV	DESCRIPTION	DATE	BY	CHKD	APP'D	



