

**RAILROAD COMMISSION OF TEXAS
HEARINGS DIVISION**

**OIL AND GAS DOCKET
NO. 04-0286186**

**FINAL ORDER
GRANTING THE APPLICATION OF SABLE ENVIRONMENTAL II, LLC, PURSUANT
TO STATEWIDE RULE 8 FOR A PERMIT TO OPERATE A COMMERCIAL
SEPARATION, RECLAMATION, AND DISPOSAL FACILITY, APPLICATION
CONTROL NOS. STF 059, R9 04-1301, PITS 011946 A/B/C, 011947 A/B/C, 011948
AND 011949, JIM WELLS COUNTY, TEXAS**

The Commission finds that after statutory notice in the above-numbered docket heard on February 5, 2014, and July 14, 2014, the presiding examiners have made and filed a report and proposal for decision containing findings of fact and conclusions of law, which was served on all parties of record; that the proposed application 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 proposal for decision, 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 Sable Environmental II, LLC, Pursuant to Statewide Rule 8 for a Permit to Operate a Commercial Separation, Reclamation, and Disposal Facility, Application Control Nos. STF 059 and associated pits, Jim Wells 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.

This order will not be final and effective until 20 days after a party is notified of the Commission's order. A party is presumed to have been notified of the Commission's order three days after the date on which the notice is actually mailed. If a timely motion for rehearing 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 the order is served on the parties.

Done this 13th day of November, 2014.

RAILROAD COMMISSION OF TEXAS

Christi Craddick
CHAIRMAN CHRISTI CRADDICK

David Porter
COMMISSIONER DAVID PORTER

Barry T. Smitherman
COMMISSIONER BARRY T. SMITHERMAN

ATTEST:

Kathy Way
SECRETARY

Permit to Receive, Store, Handle, Treat, and Dispose of Oil and Gas Waste

Permit Nos. STF-059

R9 04-1301

P011946A, P011946B, P011946C

P011947A, P011947B, P011947C

P011948, P011949

SABLE ENVIRONMENTAL II LLC
711 N CARANCAHUA STE 1130
CORPUS CHRISTI TX 78401

Based on information contained in your application received February 8, 2013 and subsequent information received to date, you are hereby authorized to receive, store, handle, treat, and dispose of certain oil and gas wastes as specified below at the following facility:

Sable Commercial Oil and Gas Waste Separation, Reclamation, and Stationary Treatment Disposal Facility
G.H. & H.R.R.CO. A-196 and MICHAEL DUGAN A-135 Surveys
Latitude/Longitude: 27.933056°, -98.013056°
Jim Wells County, Texas
RRC District 04, Corpus Christi

NARRATIVE DESCRIPTION OF PROCESS:

Incoming waste will be offloaded at the Material Processing Station or the active Disposal Cell depending on the liquid content and composition of the waste. Liquid waste will be placed into one of the Separation Pits allowing chemicals and gravity to separate the solids and liquids. The separated liquids will be pumped to the tank system in the Separation Area for separation into the oil and water tanks. Recovered oil will be sold or salvaged, and waste water will be disposed of in an authorized manner. Solids dredged from the Separation Pits and delivered to the site will be placed on the Working Area for further dewatering and treatment, and then placed on the Drying Pad or directly into the active Disposal Cell. The Working Area and the Drying Pad are sloped to allow liquids to drain into a drainage channel, which returns residual liquids to the Separation Pits. Dry waste received at the facility and from the Drying Pad will be placed into the active Disposal Cell. Stabilized waste received at the facility will be placed directly into the active Disposal Cell.

Authority is granted to receive, store, handle, treat and dispose of oil and gas wastes in accordance with Statewide Rule 8 and subject to the following minimum conditions:

I. GENERAL PERMIT CONDITIONS

A. This permit is effective **November 13, 2014**, and expires **November 13, 2019**.

- B. No waste may be received at the referenced facility until financial security in the amount of \$1,750,340.00 for Permit Nos. 059, R9 04-1301, 011946A/B/C, 011947A/B/C, 011948, and 011949 is provided to and approved by the Commission.
- C. The permittee shall maintain financial security in the amount approved by Technical Permitting 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 Commission prior to making that modification.
- D. 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 Commission'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."
- E. No waste may be received at the referenced facility until a restrictive covenant is signed by a representative of Sable Environmental II, LLC, the landowner, and a representative of the Railroad Commission of Texas; and the signed document is filed in the Real Property Records of Jim Wells County, Texas, and proof of filing with Jim Wells County is submitted to the Commission.
- F. No waste may be received at the referenced facility until the monitor wells required by Condition XI. of this permit have been completed. The documentation required by Condition XI.H. must be provided to and approved by Technical Permitting within 30 days after installation of said wells.
- G. No waste may be received at the referenced facility until, upon completion of facility construction, a revised Spill Prevention, Control and Countermeasure (SPCC) Plan is provided to and approved by Technical Permitting. A copy of the approved SPCC Plan must be maintained on-site and made available for review and inspection.
- H. The permittee may not begin receiving, storing, handling, or treating oil and gas waste at the facility until any necessary air permits or exemptions are obtained from the Texas Commission on Environmental Quality.
- I. This permit may be considered for administrative renewal upon request and subsequent review by the Commission.
- J. This permit is nontransferable without the consent of the Commission. Any request for permit transfer should be filed with Technical Permitting in Austin.

- K. Technical Permitting in Austin and the Corpus Christi District Office must be notified in writing when construction of the facility is initiated.
- L. Technical Permitting in Austin and the Corpus Christi District Office must be notified in writing upon final completion of construction of the facility. The permittee may not begin receiving, storing, handling, or treating oil and gas waste until the District Office has performed its inspection of the completed facility and has verified that the facility is constructed in accordance with the application and this permit.
- M. A Skim Oil/Condensate Report (Form P-18) must be filed for every month in which skim oil is recovered during the operation of this facility.
- N. 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.
- O. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of the subject facility without an additional permit from the Commission if: the OSSF waste is not commingled with any other oil and gas waste; the system is designed by a professional engineer registered in the state of Texas or a sewage system installer licensed in the state of Texas; and the construction, operation, and maintenance of the OSSF complies with all applicable local, county, and state requirements.
- P. The permittee shall make all records available for review and copying during normal business hours upon request of Commission personnel.
- Q. All laboratory analyses required to be performed in accordance with this permit must be performed using appropriate EPA or Standard Methods by an independent NELAP Certified laboratory neither owned nor operated by the permittee.
- R. Failure to comply with any provision of this permit or any determination by the Commission that this permit is being abused will be cause for enforcement action including, but not limiting to, modification, suspension, or termination of this permit.
- S. The permittee must submit a Quarterly Report containing the applicable information required in Conditions II.B., III.D., IV.K., VII.K., VII.R., VII.U., VIII.D., IX.G., X.Q., XI.J., and XIII.F. of this permit.

The first Quarterly Report must cover the period beginning on the effective date of the permit and ending **December 31, 2014**. The reporting periods must thenceforth be January 1 through March 31, April 1 through June 31, July 1 through September 30, and October 1 through December 31 of each year.

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

- T. Unless otherwise dictated by this permit, construction and operation of the facility must be as represented in the original application and subsequent information received to date by Technical Permitting in Austin.
- U. Any deviation from the permit must be approved by amendment from Technical Permitting in Austin before implementation.

II. INCOMING WASTES

A. AUTHORIZED WASTES

1. Only the following RCRA-exempt or non-hazardous wastes subject to the jurisdiction of the Railroad Commission of Texas may be received or processed at this facility:
 - a. Water-based drilling fluids and associated cuttings;
 - b. Oil-based drilling fluids and associated cuttings;
 - c. Contaminated soils from crude oil spills, pipeline and saltwater spills from production operations;
 - d. Absorbent pads from crude oil spills;
 - e. Formation sands and other solids from saltwater storage tanks or vessels and saltwater pits;
 - f. Solid waste from gas dehydration and sweetening (spent filters and filter media, molecular sieves, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber sludge);
 - g. Production tank bottoms;
 - h. Liners and bottoms from reserve pits.
2. RCRA non-exempt wastes under the jurisdiction of the Commission may be accepted and processed at the facility if analytical results demonstrate that the waste is characteristically non-hazardous.
3. No free oil may be disposed of at the facility.
4. No iron sulfide waste may be received or disposed of at the facility unless the waste has been fully oxidized.

5. No oil and gas Naturally Occurring Radioactive Material (NORM) waste defined in 16 TAC §4.603 or waste from a facility that is licensed by the Texas State Health Services to process or treat oil and gas NORM waste may be received at this facility.
6. No waste may be received or disposed of at the facility if it is not a waste under the jurisdiction of the Railroad Commission of Texas. No hazardous waste as defined by the U.S. Environmental Protection Agency in 40 CFR Part 261 or industrial waste may be received or disposed of at the facility.
7. 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.

B. TESTING REQUIREMENTS FOR INCOMING WASTES

1. 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.
2. 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.)
3. Prior to receipt at the site, representative samples of waste from commercial oil and gas facilities and reclamation plants must be analyzed and may not exceed the limit for the following parameter:

<u>PARAMETER</u>	<u>LIMITATION</u>
Total Organic Halides (TOX) <i>EPA Method 9020B</i>	100 mg/kg

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

4. 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 levels:

<u>PARAMETER</u>	<u>LIMITATION</u>
Corrosivity	pH 2.0 – 12.5 s.u. <i>EPA Method 1110A</i>

Ignitability	Flashpoint<60°C <i>EPA Method 1010A, 1020B, or 1030A</i>
Reactivity	No materials exhibiting the characteristic of reactivity as defined by RCRA
Toxicity	No materials exhibiting the characteristic of reactivity as defined by RCRA <i>EPA Method 1311 (TCLP)</i>

<u>PARAMETER</u>	<u>LIMITATION</u>
Benzene (TCLP) <i>EPA Method 8260/8021B</i>	< 0.5 mg/l
Metals (TCLP) <i>EPA Method 6010/6020/7147A</i>	
Arsenic	< 5.0 mg/l
Barium	< 100.0 mg/l
Cadmium	< 1.0 mg/l
Chromium	< 5.0 mg/l
Lead	< 5.0 mg/l
Mercury	< 0.2 mg/l
Selenium	< 1.0 mg/l
Silver	< 5.0 mg/l

5. Each load of incoming waste, other than water-based drilling fluid and the associated cuttings, or oil-based drilling fluid and the associated cuttings, must be scanned for the presence of naturally occurring radioactive material (NORM) using a scintillation meter with a sodium iodide detector. Any load with a maximum reading of 50 microrentgens per hour or more may not be unloaded or processed at the facility unless further analysis of the waste demonstrates that the waste does not exceed 30 picocuries per gram Radium-226 combined with Radium-228 or 150 picocuries per gram of any other radionuclide.

III. RECORDKEEPING REQUIREMENTS

- A. 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 of the report. Form R-2 shall be completed in accordance with Rule 57.

- B. The permittee must maintain the following records on each load of waste received at the facility for a period of three (3) years from the date of receipt:
1. Description of the site where the waste was generated, including:
 - a. Generator name;
 - b. Lease name and number or gas ID or API Well Number;
 - c. Latitude/Longitude coordinates if waste was not generated on a lease;
 - d. County;
 2. Name of transporter;
 3. Amount of waste material (specify units); and
 4. A description of the type of waste material, including:
 - a. Fluid-to-Solid ratio; and
 - b. Detailed description of the type of waste including any analysis required by II.B. above.
- C. The permittee must maintain the following records on each load of outgoing waste sent from the referenced facility to an authorized disposal facility for a period of three (3) years from the date of shipment:
1. Description of the facility to where the waste is sent to for disposal, including:
 - a. Disposal operator name;
 - b. Disposal permit number; and
 - c. County;
 2. Name of transporter;
 3. Volume of waste material (barrels); and
 4. A detailed description of the type of waste material.
- D. A report of all records required by Conditions III.B. and III.C. above, as well as a summary of waste receipts including the cumulative volume of each type of material received and cumulative volume of each type of waste that leaves the facility for disposal on a monthly basis must be submitted to Technical Permitting in Austin and the Corpus Christi District Office as part of the Quarterly Report required in Condition I.S. of this permit.

IV. GENERAL SITE CONSTRUCTION AND MAINTENANCE REQUIREMENTS

- A. The arrangement of the facility shall be consistent with the site layout shown on the "MONITORING WELL LOCATIONS" figure dated January 25, 2013, attached to and incorporated as part of this permit as **Permit Appendix A**.
- B. The facility will consist of a Material Processing Station and two Disposal Cells. The Material Processing Station includes two Separation Pits, one Access Pad, one Working Area, one Drying Pad, four Truck Wash Bays, twelve Truck Ramps and one Separation Area. The arrangement of the Material Processing Station shall be consistent with the layout shown on the "SABLE MATERIAL PROCESSING AREA PLAN" figure dated January 25, 2013, attached to and incorporated as part of this permit as **Permit Appendix B**.
- C. A sign shall be posted at each entrance to the facility, which shall show the permit number in letters and numerals at least three inches in height.
- D. A perimeter berm must be constructed to surround the entire facility and shall be designed to prevent storm water run-on and prevent storm water runoff from the site. The perimeter berm must be constructed to a minimum height of at least 2 feet with a minimum 1:3 slope (height:width).
- E. Berms or containment structures must be constructed around all waste management areas. These structures shall be used to divert non-contact storm water around the waste management areas and contain the contact storm water within the waste management areas.
- F. The contact storm water must be contained within the waste management areas. Contact storm water shall evaporate or be removed and disposed of at an authorized facility.
- G. The non-contact storm water within the facility shall be conveyed away from the waste management areas to a Storm Water Detention Pond using a series of ditches, swales, and culverts. The Storm Water Detention Pond shall be constructed to contain the water from a 25-year, 24-hour storm event. Additional outfall water from the pond shall discharge via a concrete spillway and continue on a natural overland drainage path.
- H. A discharge permit from the Environmental Protection Agency (EPA) may be required for non-contact storm water discharges. If required, the permit from the EPA must be in place prior to commencement of discharge operations.
- I. The perimeter of the property must be enclosed with a fence suitable to keep out unauthorized access. The site is to be attended continuously or secured when

unattended. Access gates shall be closed and locked when not attended by facility personnel.

- J. 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.
- K. A monthly inspection of all components and equipment at the facility must be performed. Records of each inspection must be kept on site and submitted as part of the Quarterly Report required by Condition I.S. of this permit.

V. MATERIAL PROCESSING STATION CONSTRUCTION AND OPERATION

- A. The arrangement of the Material Processing Station shall be consistent with the detailed layout of the Material Processing Station received January 31, 2013, which is attached to and incorporated as part of this permit as Permit Appendix B. The Material Processing Station shall include the Separation Area Pits and Tanks, the Working Area, and the Drying Pad.
- B. Technical Permitting in Austin and the Corpus Christi District Office must be notified in accordance with Permit Condition I.L. upon final completion of construction of the Material Processing Station. The permittee may not begin using the station until the Corpus Christi District Office has completed an inspection of the station and provided verification that the station is constructed in accordance with the application and permit.
- C. Any waste received at the facility must begin treatment within seven days and the process must continue until treatment is completed. Waste from the treatment process must be disposed at an authorized oil and gas waste disposal facility. Recovered oil may be stored at the facility until the total volume reaches 1600 barrels.
- D. Plans for the installation and use of centrifuges at the facility must be submitted to Technical Permitting in Austin. Use of centrifuges is contingent upon Commission approval.
- E. Material Safety Data Sheets must be submitted to Technical Permitting in Austin for any additional chemical to be used in the treatment of waste at the facility. Use of the chemical is contingent upon Commission approval.
- F. Any material used in the treatment process shall be stored in vessels designed for the safe storage of the particular chemical. These vessels shall be maintained in a leak-free condition.
- G. A sign shall be posted identifying the Material Processing Station using letters at least three-inches in height.

VII. SEPARATION AREA PITS AND TANKS

- A. The Separation Area shall include two pits, one access pad, one Tank Pad, two 750-bbl cascade tanks, two 1,000-bbl gun barrel tanks, eight 750-bbl oil and water tanks, two 400-bbl oil storage tanks, two 400-bbl slop oil storage tanks, and one 3,000 gallon water tank.
- B. **Separation Pits** (P-011946 A,B,C and P-011947 A,B,C) shall be constructed of reinforced concrete and have floor thickness of ten inches and wall thickness of eight inches. A two-foot thick compacted clay liner shall be placed under the concrete floors and walls of the pits.
- C. Each Separation Pit shall be divided into three basins as follows:
 - 1. Basins A shall each be 54-feet long, 38-feet wide, and 12-feet deep.
 - 2. Basins B shall each be 24-feet long, 38-feet wide, and 12-feet deep.
 - 3. Basins C shall each be 20-feet long, 38-feet wide, and 12-feet deep.
 - 4. Basins A, B, and C shall each be separated by a vertical weir wall which shall be 9-feet 6-inches tall.
- D. Total storage capacity for each Separation Pit shall be 6,632 barrels.
- E. At least two feet of freeboard must be maintained between the fluid level of the pit and the top of the pit.
- F. A berm must be constructed around the Separation Pits with a minimum height of two feet and a minimum width at the base of fifteen feet. Slope of the berm wall may not exceed 1:3 (height : width).
- G. No oil may be allowed to accumulate on top of the water stored in the pit. Any oil on top of the water must be skimmed off.
- H. Whenever the permittee observes evidence of liner failure, the permittee must empty the pit and inspect the liner within seven days of the observation. The Corpus Christi District Office must be notified at least 48 hours before each inspection.
- I. The Separation Pits must be emptied and the liner must be visually inspected semi-annually for deterioration and leaks. The Corpus Christi District Office must be notified at least 48 hours before each inspection.
- J. If inspection of the liner reveals a leak or other loss of liner integrity, the liner must be replaced or repaired before resuming use of the pit.

- K. The permittee must maintain a record of when the Separation Pits are inspected and the results of each inspection must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of this permit.
- L. The **Access Pad** shall be located between the Separation Pits to allow machinery to access the pits.
- M. The access pad shall be constructed of reinforced concrete and shall measure 24- feet wide, 98-feet long, and 10-inches thick. A two-foot thick compacted clay liner shall be placed under the access pad.
- N. The **Tank Pad** shall be located adjacent to the separation pits, shall be constructed of reinforced concrete, and shall measure approximately 100-feet wide, 100-feet long, and 10-inches thick.
- O. The Tank Pad shall underlie tanks used in the separation process and tanks used to store the separated oil and liquid hydrocarbons.
- P. The Access Pad and the Tank Pad shall be cleaned and visually inspected semi-annually for deterioration and leaks. The Corpus Christi District Office must be notified at least 48 hours before each inspection.
- Q. If inspection of the Access Pad or Tank Pad reveals a leak or other loss of integrity, the area must be replaced or repaired before resuming use of the pad.
- R. The permittee must maintain a record of when the Access Pad and Tank Pad are inspected and the results of each inspection must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of this permit.
- S. All above ground tanks must be diked. Dikes must be constructed and maintained to contain 100% capacity of the largest tank, plus freeboard to contain a 25-year, 24-hour storm event.
- T. All tanks must be maintained in a leak-free condition. If inspection of a tank reveals deterioration and/or leaks, the tank must be emptied and repaired before resuming use.
- U. The permittee must maintain a record of when the tanks are inspected and the results of each inspection. A copy of the records shall be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of the permit.

VIII. WORKING AREA

- A. The Working Area shall include a concrete Work Pad, twelve Truck Transfer Ramps, four Truck Wash Bays, and one perimeter Collection Channel.

- B. All components of the Working Area must be emptied and must be visually inspected semi-annually for deterioration and leaks. The Corpus Christi District Office must be notified at least 48 hours before each inspection.
- C. If inspection reveals a leak or other loss of integrity, the component must be replaced or repaired before resuming use of the area.
- D. The permittee must maintain a record of when the Working Area is inspected and the results of each inspection must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of this permit.
- E. The **Work Pad** shall consist of one ten-inch thick concrete pad that is approximately 216-feet long and 184-feet wide, and shall be underlain with a two-foot thick compacted clay liner. The compacted clay liner shall be underlain by a compacted subgrade.
- F. The Work Pad shall receive high solids content waste initially delivered to the facility, dredged solids from the separation pits, and solids from the Separation Area tanks. The solids shall be mechanically worked and dewatered before being transferred to the Drying Pad.
- G. The Work Pad shall be sloped to the concrete perimeter Collection Channel.
- H. The maximum height of waste spread over the Work Pad shall not exceed one foot or about 7,120 barrels.
- I. The **Truck Transfer Ramps** shall have a ten-inch thick concrete base and shall provide access to the Work Pad for solid waste transfer, and to the separation pits for liquid waste transfer.
- J. The **Truck Wash Bays** shall have a ten-inch thick concrete base and shall be sloped to the perimeter Collection Channel.
- K. The fluid from the Truck Wash Bays shall gravity flow to the perimeter Collection Channel, and shall not accumulate in the truck wash bays.
- L. The perimeter **Collection Channel** shall be constructed of ten-inch thick concrete and underlain with a two-foot thick compacted clay liner.
- M. The perimeter Collection Channel shall be constructed to allow waste fluid from the Truck Wash Bays, the Drying Pad and the Working Area to gravity flow to the separation pits.
- N. The perimeter Collection Channel shall serve as a conduit for waste fluid run-off from the Drying Pad and the Working Area, and shall not accumulate and store waste.

IX. DRYING PAD

- A. The **Drying Pad** shall be a two acre, berm-enclosed area to temporarily hold solids for final drying before disposal into the onsite active disposal cell.
- B. The Drying Pad floor shall consist of a scarified and recompact subgrade overlain with a two-foot thick compacted clay liner. The clay liner shall be overlain with a twelve-inch thick layer of soil.
- C. The maximum height of waste spread over the Drying Pad shall not exceed one foot or about 15,500 barrels.
- D. The Drying Pad shall be sloped to the perimeter Collection Channel.
- E. The Drying Pad shall be inspected semi-annually to determine if the clay liner has been compromised or deteriorated. The Corpus Christi District Office must be notified at least 48 hours before each inspection.
- F. If inspection reveals loss of integrity, the Drying Pad must be repaired to as-built condition before resuming use of the area.
- G. The permittee must maintain a record of when the Drying Pad is inspected and the results of each inspection must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of this permit.

X. DISPOSAL CELL CONSTRUCTION AND OPERATION

- A. Technical Permitting in Austin and the Corpus Christi District Office must be notified in accordance with Permit Condition I.L. upon final completion of construction of a disposal cell. The permittee may not begin using the cell until the District Office has completed an inspection of the cell and provided verification that the cell is constructed in accordance with the application and permit.
- B. A sign shall be posted identifying each Disposal Cell using letters and numerals at least three-inches in height.
- C. The capacity of the disposal cells may not exceed the following:
 - 1. Disposal Cell No. 1 (P011948) = 223,457 cubic yards
 - 2. Disposal Cell No. 2 (P011949) = 222,332 cubic yards
- D. This permit does not authorize the discharge of any oil and gas waste from a disposal cell.

- E. Unless otherwise required by the conditions of this permit, construction, use, maintenance, and closure of the cell shall be in accordance with the information represented on the permit application and the attachments thereto.
- F. Berms must be constructed around each disposal cell with a minimum height of two feet above undisturbed ground level. Berms constructed within the caliche pit should have a minimum height of twenty feet above the pit floor. Slope of the berm walls may not exceed 1:3 (height: width). The top of the berms within the caliche pit shall be twelve feet wide to accommodate vehicular traffic.
- G. A liner anchor trench must be used to key the synthetic liner to the berm.
- H. The floor of each Disposal Cell must have at least a 1% slope to allow fluids to drain to the sump located at the low end of the cell.
- I. Disposal Cells must be lined with a high-density polyethylene primary liner with a thickness of at least 60 mils and a high-density polyethylene secondary liner with a thickness of at least 60 mils.
- J. Disposal Cells must be equipped with a leak detection system, which will consist of a geonet (on the floor) and geocomposite (on the side slopes) placed between the primary and secondary liners.
- K. The Disposal Cells must be constructed, and the liners and leak detection system must be installed in accordance with sound engineering practices and manufacturer's specifications.
- 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 chloride concentration of the fluids removed. This record must be maintained by the permittee for the life of the cell, and upon request of the Commission, the record shall be filed with the Commission.
- M. If the leak detection system indicates a failure, the Corpus Christi District Office must be notified of that fact within 24 hours of detection of liner failure. Liner system failure is defined as any of the following:
 - 1. If a leak occurs at a rate greater than the Action Leakage Rate, or 900 gallons per day, from the primary liner of the Disposal Cells.
 - 2. Any failure in the leak detection system or any component thereof.
 - 3. Any detected damage to or leakage from the secondary liner.

- N. If 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 before use of the Disposal Cell is resumed.
- O. The disposal cells must be equipped with a leachate collection system. Leachate collected in the leachate collection sump must be removed through the leachate removal pipe and disposed of in an authorized manner.
- P. No free oil may be allowed to accumulate on top of the waste stored in the disposal cell. Any free oil on top of the waste must be skimmed off.
- Q. All waste shall pass the Paint Filter Test (EPA Method 9095) prior to disposal in a disposal cell. Test results from each Paint Filter Test must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of this permit.
- R. No freestanding fluids may accumulate in a disposal cell. Any fluids must be removed within 72 hours of discovery and disposed of in an authorized manner.
- S. Upon final cessation of the use of a disposal cell, the cell must be closed in accordance with Condition XII.G. of this permit. Any request to modify the closure plan must be filed with Technical Permitting. Upon final closure, Technical Permitting in Austin and the District Office shall be notified in writing.
- T. Technical Permitting in Austin and the Corpus Christi District Office must be notified in writing at least 45 days prior to commencement of closure activities.

XI. MONITOR WELLS

- A. Three (3) monitor wells must be installed and numbered as represented on **Permit Appendix A**.
- B. Monitor wells must be completed in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).
- C. Monitor wells must be completed in the shallowest groundwater zone and the completion must isolate that zone from any deeper groundwater zone.
- D. The screened interval of the wells must be designed to intercept the top of groundwater.
- E. Provision must be made to protect the well heads from damage by vehicles and heavy equipment.

- F. Monitor wells must be maintained in good condition and in a way that prohibits unauthorized access.
- G. Monitor wells must be able to provide a sample of groundwater that is representative of the groundwater underlying the site for the duration of facility operations. If a monitor well is not capable of providing a representative sample, the permittee must notify Technical Permitting in Austin and install a replacement monitor well that is acceptable to the Commission.
- H. The following information must be submitted after the wells are completed:
 - 1. A soil boring log for each 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, total depth, and the top of the first encountered water or saturated soils.
 - 2. A well installation diagram for each well detailing construction specifications for each well, including riser and screen length, screen slot size, bentonite and cement intervals. The sand pack size should be compatible with well screen slot size and local lithology.
 - 3. A survey elevation for each well head reference point.
 - 4. A potentiometric map showing static water levels and the calculated direction of groundwater flow.
- I. The monitor wells must be sampled or monitored for the following parameters after installation and quarterly thereafter:
 - 1. Static Water Level
 - 2. Total Depth
 - 3. Benzene, *EPA Method 8260/8021B*
 - 4. Total Petroleum Hydrocarbons (TPH), *Method TX1005 (at least to C₄₀)*
 - 5. Total Dissolved Solids (TDS), *Standard Method 2540C*
 - 6. pH, *EPA Method 9045C*
 - 7. Soluble Cations and Anions (Listed), *Louisiana Dept. of Natural Resources Lab Procedures for Analysis of E&P Waste or equivalent*
- J. Copies of the results must be submitted as part of the Quarterly Report required by Condition I.S. of this permit.

XII. CLOSURE OF THE SITE

- A. Technical Permitting and the Corpus Christi District Office must be notified in writing at least 45 days prior to commencement of closure activities.

- B. All waste, chemicals, and materials must be processed through the facility and removed from the facility for authorized reuse, or disposed of in an authorized manner.
- C. The berms above undisturbed ground level shall be leveled. Berms constructed within the caliche pit shall remain in place.
- D. The Storm Water Detention Pond and all associated drainage channels to the pond shall be backfilled with clean fill and restored to natural grade. Topsoil shall be contoured and seeded with appropriate vegetation.
- E. Closure of the Material Processing Station shall proceed as follows:
 - 1. The contents of all containment areas, tanks, vessels or other containers shall be disposed of in an authorized manner.
 - 2. All treatment equipment and tanks will be removed and salvaged, if possible, or disposed of in an authorized manner.
 - 3. The concrete Access Pad, Tank Pad, Work Pad, truck transfer ramps, truck wash bays, and perimeter Collection Channel shall be dewatered, emptied, demolished, and the rubble disposed of in an authorized manner.
 - 4. The top twelve inches of soil at the Drying Pad shall be excavated and disposed of in an authorized manner.
 - 5. The concrete separation pits shall be dewatered and emptied. The floors and walls of the pits shall be steam cleaned, and shall be broken into rubble and buried in the pit.
 - 6. Soil samples must be taken as follows to characterize the scope of any contamination within the Material Processing Station.
 - a. A minimum of eight samples shall be taken from the area of the former Drying Pad;
 - b. A minimum of four samples shall be taken from the area of the former Work Pad;
 - c. A minimum of two samples shall be taken from the area of the former Tank Pad;
 - d. A minimum of one sample shall be taken from the areas of the former Truck Wash Bays and the solid and liquid waste Truck Transfer Ramps for a minimum of four samples total;
 - e. Prior to backfilling the Separation Pits, soil samples from each of the three basins within both pits shall be taken for a minimum of six samples total.

7. Soil samples shall be located in all areas where any leakage or staining has occurred. At the time of notification of closure and prior to sampling, a soil sampling plan shall be submitted to Technical Permitting in Austin.
8. Soil samples shall be analyzed and the following constituent levels shall not be exceeded:

<u>PARAMETER</u>	<u>CLOSURE LIMIT</u>
pH <i>EPA Method 9045C</i>	6.0 to 10.0 standard units
Electrical Conductivity (EC) <i>Louisiana Dept. of Natural Resources Lab Procedures for Analysis of E&P Waste or equivalent</i>	≤ 4.0 mmhos/cm
Total Petroleum Hydrocarbons (TPH) <i>Method TX1005 (at least to C₄₀)</i>	≤ 10,000 mg/kg
BTEX <i>EPA Method 8021/8260B</i>	≤ 30.0 mg/kg
Metals (total): <i>EPA Method 6010/6020/7471A</i>	
Arsenic	≤ 10.0 mg/kg
Barium	≤ 10,000 mg/kg
Cadmium	≤ 1.0 mg/kg
Chromium	≤ 5.0 mg/kg
Lead	≤ 200 mg/kg
Mercury	≤ 10.0 mg/kg
Selenium	≤ 5.0 mg/kg
Silver	≤ 200 mg/kg

- F. When acceptable constituent levels have been verified in writing by Technical Permitting, the Material Processing Station shall be restored to natural grade and seeded with natural vegetation. The pits shall be backfilled with clean fill, compacted, and closed in such a manner that rainfall will not collect at the pit location.
- G. Closure of the Disposal Cells shall be as follows:
 1. Once a disposal cell has achieved its capacity, waste material in the cell will be stabilized, graded to drain, and covered with a cap. Closure shall be in accordance with plans submitted with the original application and subsequent information received to date by Technical Permitting in Austin.

XIII. POST-CLOSURE CARE AND MONITORING

- A. The site will be monitored for a period of no less than five years after closure of the facility.
- B. Post-closure care shall include quarterly inspections of the entire facility by a registered professional engineer for signs of deterioration.
- C. Any areas showing signs of erosion shall be contoured and backfilled or reseeded.
- D. All monitor wells must remain functional for providing monitoring and reporting requirements until written approval from Technical Permitting in Austin is granted for plugging and abandoning the monitor wells.
- E. The leak detection system and the leachate collection system must be maintained and monitored quarterly. Any leachate detected shall be pumped out and disposed of in an authorized manner.
- F. A summary of the results of the post-closure monitoring activity shall be submitted to Technical Permitting in Austin as part of a Quarterly Report required in Condition I.S. of this permit.
- G. 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.