



RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

CES SWD TEXAS, INC.
PO BOX 1299
GAINESVILLE TX 76241

Re: Permit No. MR-0014, **AMENDED, Supercedes Permit Effective September 9, 2011**
Authorization to Treat Produced and Frac Flow-back Water for Re-use Using the Frac-Mate System
State of Texas
Districts 1, 2, 3, 4, 5, 6, 7B, 7C, 8, 8A, 9, and 10

Based on information contained in your application dated May 18, 2011, and subsequent information received to date you are hereby authorized to store, handle, treat, and recycle the following non-hazardous oil and gas wastes: produced water and frac flow-back water.

The Frac-Mate treatment process shall consist of the use of trailer-mounted treatment unit utilizing an oil/water separator, a dissolved air flotation unit, mixing tanks to aid in water softening, a gravity clarifier, and various filters to treat water-based oil and gas waste for reuse as fracturing fluid make-up water. This authority is granted in accordance with 16 TAC Chapter 4, Subchapter B, and subject to the following minimum conditions:

I. GENERAL PERMIT CONDITIONS

- A. The effective date of this permit is November 21, 2011.
- B. The authority granted by this permit expires on September 8, 2016.
- C. Only non-hazardous oil and gas wastes subject to the jurisdiction of the Railroad Commission of Texas and exempt from RCRA, Subtitle C may be treated. The permittee may store, handle, treat, and process only produced water and fracture flow back water at well sites.
- D. No oil and gas NORM (naturally occurring radioactive material) waste, as defined in 16 TAC § 4.603, or waste from a facility that is licensed by the Texas Department of State Health Services to process oil and gas NORM waste may be treated by this process.
- E. The Commission may consider this permit for administrative renewal upon review.
- F. Any request for renewal should be received at least 60 days prior to the permit expiration date.
- G. This permit is not transferable without the consent of the Commission. Any request for transfer of this permit should be filed with Technical Permitting in Austin at least 60 days before the permittee wishes the transfer to take place.

- H. The permittee shall submit a Semiannual Report containing the applicable information required in Condition V.A. of this permit.

The first Semiannual Report shall cover the period beginning on September 9, 2011 and ending December 31, 2011. The reporting periods shall thenceforth be January 1 through June 30 and July 1 through December 31 of each year.

The Semiannual Report shall be submitted to Technical Permitting in Austin no later than the 31st day of the month following the end of each reporting period, or each January 31 and each July 31, respectively.

- I. This permit does not authorize the discharge of any oil and gas waste from the treatment site, including contaminated stormwater.
- J. Material Safety Data Sheets must be submitted to Technical Permitting in Austin for any previously unrepresented chemical to be used in the treatment of waste. Use of the chemical is contingent upon Commission approval.
- K. Any soil, media, or other debris contaminated by a spill of waste or any other materials at the treatment sites shall be promptly cleaned up and processed through the treatment cycle or disposed of in an authorized manner.
- L. The permittee shall make all records required by this permit available for review and/or copying during normal business hours upon request of Commission personnel.
- M. Any pits to be used in conjunction with this facility not specifically authorized by 16 TAC § 3.8 must be permitted separately by the filing of Form H-11 and the supporting data.
- N. An independent laboratory neither owned nor operated by the permittee must conduct any analysis of sampling required by this permit, specifically by Conditions V.A.1.h. and V.A.1.k.

II. SITING

- A. When placed at a well site, the trailer-mounted treatment unit and all storage areas associated with the treatment process may not be located:
1. Within a 100 year floodplain.
 2. In a streambed.
 3. In a sensitive area.
- B. When placed at a well site, the trailer-mounted treatment unit and all storage areas associated with the treatment process must be located:
1. At least 100 feet from any surface water.
 2. At least 150 feet from any water wells.

III. OPERATION

- A. The permittee must notify the surface owner prior to moving the trailer-mounted treatment unit onto any oil or gas lease.

- B. The appropriate District Office must be notified at least 48 hours prior to placing the on-site-trailer-mounted treatment unit and all associated above ground storage equipment on an oil and gas lease and provide the name of the operator who generated the oil and gas waste to be treated, the lease name, the lease number and the well number for the lease on which the treatment unit will be placed.
- C. The permittee must place and keep the on-site trailer-mounted treatment unit on an oil and gas lease owned by the operator who generated the oil and gas waste to be treated, and the permittee/unit may only treat oil and gas waste generated at the lease where the unit is placed.
- D. All above ground storage vessels must be maintained in proper working condition.
- E. The recyclable product, as defined in 16 TAC Chapter 4, Subchapter B, shall consist of the water processed through the Frac-Mate System, which will subsequently be used for the makeup of fracture fluids.
- F. Oil and gas waste to be processed in the treatment unit must be stored in above ground tanks or a pit authorized to store it and pumped into the trailer-mounted treating equipment.
- G. Oil and gas waste utilized in the recycling process must be treated in the on-site trailer-mounted treatment units.
- H. The on-site trailer-mounted treatment units may not be kept on one well location for more than one year.
- I. The recyclable product must be stored in an above-ground storage tanks or authorized or permitted pits at the well site where it will be re-used in the well completion process.
- J. A maximum of 3,000 barrels of recyclable product may be stored at the well site at any given time.
- K. A maximum of 40 cubic yards of solid waste generated from the Frac-Mate System (settled solids, filter cake, etc.) may be stored at a well site at any given time. The solids must be stored in roll-off boxes.
- L. The recyclable product must be transferred to an operator who intends to utilize the product for its intended use or disposed of in an authorized manner within 60 days of its creation.
- M. The recyclable product may only be used as in the makeup of fracturing fluid at the well site at which it was generated or at another well site within the same field owned by the operator who generated the oil and gas waste prior to its treatment. Any excess recyclable product that is not used in the makeup of fracturing fluid must be disposed of in an authorized manner.
- N. The solid waste resulting from the treatment process must be disposed of in an authorized manner.
- O. The permittee must have personnel onsite during the hours in which the trailer-mounted treatment unit is located on an oil or gas lease and in operation. During hours that the trailer-mounted treatment unit is not in operation, the unit shall be locked and secured to prevent unauthorized access or use.

- P. A Skim Oil/Condensate Report (Form P-18) must be filed for every month in which skim oil is recovered during the operation of the Frac-Mate System and then subsequently sold.

IV. TRIAL RUN

For each treatment unit, the permittee must demonstrate the ability to successfully process oil and gas waste into a recyclable product. The trial run period covers the first 5,000 barrels of recyclable product produced by each treatment unit and meet the following conditions:

- A. Operations during the trial run shall be consistent with Conditions I, II and III of this permit.
- B. During the trial run, in addition to providing notification to the appropriate District Office as required by Condition III.B. Technical Permitting in Austin must also be notified at least 48 hours prior to placing the on-site-trailer-mounted treatment unit and all associated above ground storage equipment on an oil and gas lease and provide the name of the operator who generated the fluids to be treated, the lease name, the lease number and the well number for the lease on which the unit will be placed.
- C. A written report of the trial run must be submitted to Technical Permitting in Austin within 15 days of completion of the trial run. The trial run report shall contain information consistent with the Recordkeeping and Reporting Requirements of Condition V of this permit.
- D. The permittee may not continue to process waste after the completion of the trial run until Technical Permitting has reviewed the Trial Run written report and verified that oil and gas waste is successfully being converted to a recyclable product.

V. RECORDKEEPING AND REPORTING REQUIREMENTS

A. RECORDKEEPING

- 1. Records must be kept of all waste treated for a period of three (3) years from the date of treatment. These records must include the following for each treatment unit and treatment site:
 - a. Date appropriate district office was notified.
 - b. Name of the generator.
 - c. Name of the waste hauler, if applicable.
 - d. Lease Name, Lease Number or Gas I.D. Number and Well Number, or API Number where the treatment unit was placed.
 - e. Lease Name, Lease Number or Gas I.D. Number and Well Number, or API Number where the oil and gas waste that was treated was generated.
 - f. Lease Number or Gas I.D. Number and Well Number, or API Number where the recyclable product was re-used.
 - g. Classification of the water from each lease as frac flow-back water, produced water, or a mixture of the two.
 - h. The total dissolved solids, total suspended solids, oil, and scaling divalent ion concentrations of the frac flow-back or produced water from each lease used as feedstock for the Frac-Mate System.
 - i. Volume of produced water and frac flow-back water treated in the treatment process.
 - j. Volume of recyclable product resulting from the treatment process.
 - k. The total dissolved solids, total suspended solids, oil, and scaling divalent ion concentrations of the recyclable product generated from the Frac-Mate System.

Samples shall be collected at a frequency of one sample per 10,000 barrels of recyclable product generated.

- l. Volume of solid waste generate from the treatment process.
- m. The location at which the solid waste generated by the Frac-Mate System was disposed.
- n. Date(s) the oil and gas waste was processed through at the treatment unit.
- o. Date(s) the recyclable product was re-used.

B. REPORTING

- 1. A copy of the records required in Permit Condition No. V.A. must be submitted to Technical Permitting in Austin as part of the Semiannual Report required in Condition No. V.C. of this permit. If no waste was stored, handled, treated or re-used within a reporting period, a written statement indicating that no waste was stored, handled, treated or re-used must be submitted to Technical Permitting in Austin as part of the Semiannual Report required in Condition No. V.C. of this permit.

C. SEMI-ANNUAL REPORT

- 1. Beginning six (6) months from the date of the permit and every six (6) months thereafter, permittee shall submit a Semiannual Report containing applicable information as required in Conditions V.A. and V.B of this permit for the previous six (6) month period.

VI. CLOSURE

- A. All equipment associated with the treatment of oil and gas waste and the storage of recyclable product must be removed from the site within 120 days of the completion of the treatment process.
- B. The contents of any vessels or other containers, including unused recyclable product, shall be disposed of in an authorized manner within 120 days of completion of treatment process.

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



Michael Sims, P.E., Manager
Environmental Permits and Support
Technical Permitting

Notes:

- 1. Condition I.N. amended to specify the specific analyses that must be conducted by an independent laboratory.
- 2. Condition V.A.1.k. amended to specify the sampling frequency for recyclable product.

3. Condition III.L. amended to require the custody of the water be transferred to an operator within 60 days of its creation.
4. Condition III.O. amended to not require personnel to be onsite when the unit is not operational. However, the unit must be secured during these times to prevent unauthorized access.
5. Condition IV. amended to clarify the volume of recyclable product that must be processed during the trial run.

cc: All RRC Districts