

## PERMIT TO MAINTAIN AND USE A PIT

### Pit Permit No. P011290

K-3 Resources, L.P. is hereby authorized to maintain and use the pit designated as follows:

Drilling Fluid Disposal Pit  
Jim Wells County Facility  
4,000 feet FNL and 7,000 feet FEL of the A. Tinaja de Lara Survey, A-26  
Jim Wells County  
RRC District 04

Authority is granted to maintain and use the pit in accordance with Statewide Rule 8 and subject to the following conditions:

1. No waste may be received at the referenced facility until financial security in the amount of \$255,453 is provided to and approved by the Commission.
2. Use of the pit is limited to disposal of water base drilling fluids and associated cuttings with a chloride concentration of 3,000 mg/l or less. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit.
3. Dikes must be constructed to completely surround the pit to a height of at least 2 feet and width at base of six feet.
4. The capacity of the pit may not exceed 1,469,388 barrels.
5. The pit must be equipped with a level alarm or visual device to alert waste haulers using the pit that the fluid level in the pit has reached the maximum level allowed by this permit.
6. At least 2 feet of freeboard must be maintained between the waste level in the pit and ground level at all times.
7. The facility shall have a fence and lockable gate to prevent unauthorized access. Fencing is required around the entire approved disposal site.
8. Records must be kept of each load of waste received at the facility. Records must include:
  - a. name of the generator;
  - b. source of the waste (Lease Number and Well Number or Gas I.D. Number, and API Well Number);
  - c. the name of the carrier;
  - d. the date the waste is received;
  - e. the volume of the waste received; and
  - f. the chloride content (mg/l) of each load.

A copy of the records must be filed quarterly with Environmental Services in Austin and the Corpus Christi District Office. If no waste was received within a quarterly reporting period, a written statement indicating that no waste was received during that quarter must be filed in place of the quarterly report.

9. Monitor wells are required unless an on-site boring taken at the southeast corner of the pit and to a depth of 100 feet recovers no water in a 24-hour test. The test boring must be performed within 30 days of permit issuance. The District Office must be notified at least 72 hours prior to drilling the test boring. If the test boring recovers no water, a State of Texas Water Well Report must be submitted within 30 days of the boring along with a signed statement that no water was recovered in a 24-hour test. If water is recovered, monitor wells must be completed within 90 days of the test boring. The locations of the monitoring wells must be submitted to Environmental Services for approval prior to the placement of the wells.
  - A. The monitor wells must be completed as follows:
    - a. The wells must be completed in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).
    - b. The wells must be completed in the shallowest groundwater zone and the completion must isolate that zone from any deeper groundwater zone.
    - c. The screened interval of the wells must be designed to intercept the top of the groundwater.
    - d. Provision must be made to protect the well heads from damage by vehicles and heavy equipment.
    - e. The following information must be submitted after the wells are completed:
      - i. 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.
      - ii. A well installation diagram for each well.
      - iii. A survey elevation for each well head reference point.
      - iv. A potentiometric map showing static water levels and the calculated direction of groundwater flow.
  - B. The monitor wells must be monitored for the following parameters

after installation and quarterly thereafter:

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|-----------------------|---------------|
| a. Static Water level | h. Nitrates   |
| b. Benzene            | i. Carbonates |
| c. TPH                | j. Calcium    |
| d. TDS                | k. Magnesium  |
| e. Chlorides          | l. Sodium     |
| f. Bromides           | m. Potassium  |
| g. Sulfates           |               |

- C. A copy of all groundwater analytical results and measurements shall be submitted quarterly to Environmental Services in Austin.
10. Every month, a representative sample of material in the pit must be tested to determine the presence of hydrocarbons in the material. TPH (total petroleum hydrocarbons) test results must be submitted to the Commission's Austin Office (Environmental Services) and District Office immediately upon receipt of results to K-3. If no TPH are present for 12 consecutive months, then the testing frequency can be reduced to quarterly, with results furnished to the Commission's Austin Office and District Office.
  11. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the pit shall be in accordance with the information represented on the application (Form H-11) and attachments thereto.
  12. A sign shall be posted at the pit which shall show the pit permit number in numerals at least one inch in height.
  13. Upon final cessation of use of the pit, the pit must be closed in accordance with the Commission approved closure plan which is on file with the Commission at the time of the pit closure. Any request to modify the closure plan should be filed with Environmental Services. Upon final closure, the District Office shall be notified in writing.
  14. This permit is nontransferable without the consent of the Commission. Any request for permit transfer should be filed with Environmental Services in Austin.
  15. This permit does not authorize the discharge of any oil and gas wastes from the pit.
  16. Authority to use the pit expires on \_\_\_\_\_, or upon reaching the maximum disposal capacity authorized by this permit.

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