



RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

RIO VISTA LANDFARM LLC
PO BOX 2228
CLEBURNE TX 76033

RE: Amended Permit for Commercial Landfarming
Supersedes Permit Dated August 26, 2011
Jones-Johnson County Facility – 100 acres
Johnson County, Texas
Permit No. LF- 0296

This permit is your authority to landfarm water base drilling fluid and the associated solids on approximately 100 acres of the the 260 acre site in the Adam H. Sevier Survey, Abstract No. 753 and the Isaac Batterson Survey, Abstract No. 21 in Johnson County, Texas. The site is located 2.6 miles east of Rio Vista, Texas. A plat of the permitted disposal site is attached to and incorporated as **Permit Appendix A**. Landfarming authority is based upon information provided the original application submitted May 11, 2009, the request to transfer authority dated November 24, 2010, the amendment request dated November 16, 2011 and subsequent information received to date.

This permit is granted in accordance with Statewide Rule 8 of the Railroad Commission and is subject to the following provisions:

1. The effective date of this permit is December 22, 2011.
2. This authority to landfarm drilling fluids or the associated solids upon the approved site expires on August 25, 2016, or upon reaching the maximum authorized disposal capacity as indicated in Condition No. 13 of this permit.
3. No oil and gas waste other than water based drilling fluid and the associated solids may be landfarmed at the approved disposal site.
4. No water based drilling fluid or the associated solids with a chloride concentration in excess of 3,000 milligrams per liter may be landfarmed at the approved disposal site.
5. No oil base drilling fluid may be landfarmed at the approved disposal site.
6. A sign shall be posted at each entrance to the facility and shall show the permit number in letters and numerals at least one inch in height.

7. A sign shall be posted at each landfarm cell and shall show the cell number in letters and numerals at least one inch in height.
8. Berms must be constructed as show on **Permit Appendix A** and summarized as follows:
 - a) to completely surround each landfarm cell to a height of at least two feet and width at base of at least six feet; b) perimeter berms to a height of at least three feet and width at base of at least nine feet; and, c) bordering buffer (i.e., No Landfarm Zone) along drainage ways within the landfarm site to a height of at least four feet and a width of at least twelve feet. The berms must be thereafter maintained such that no stormwater runoff may enter or exit the approved landfarm area.
9. A forty-foot buffer zone must be maintained on both sides of any pipeline on the facility. No waste may landfarmed in this buffer zone.
10. Records must be kept of each load of waste received at the facility for a period of three (3) years from the date of receipt. These records must include the:
 - a) Name of the generator;
 - b) Source of the waste (Lease Name, Lease Number and Well Number, or Gas I.D. Number or API Number);
 - c) Name of the carrier;
 - d) Date the waste is received;
 - e) Volume of the waste received;
 - f) Chloride content (mg/l) of each load;
 - g) Cell number of the final disposition of waste; and,
 - h) Cumulative Volume of waste applied to each cell

A report containing the information required in Permit Condition No. 10 must be filed quarterly. 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. The first quarterly report shall cover the period beginning on August 26, 2011, and ending September 30, 2011. The reporting periods shall thenceforth be October 1 through December 31, January 1 through March 31, April 1 through June 30, and July 1 through September 30 of each year.

The quarterly report shall be submitted to Technical Permitting in Austin and the Kilgore District Office no later than the 30th or 31st day of the month following each reporting period, or each January 31, April 30, July 31, and October 31 respectively.

11. The facility shall have a fence and a lockable gate to prevent unauthorized access. Fencing is required around the entire approved disposal site except to the extent that terrain or vegetation prevents truck access to the site.
12. Drilling fluid and associated solids must be landfarmed on the approved disposal site in such a manner that the waste will not migrate off the approved disposal site or enter any

watercourse or drainage way, including any drainage ditch, dry creek, flowing creek, river, or any other body of surface water.

13. The permittee shall insure that waste is dispersed in an even manner and at a rate of no greater than 2,000 barrels per acre.
14. Within sixty (60) days after reaching the permitted maximum waste volume, the landfarm area shall be sampled as follows:
 - a. A minimum of one (1) grab sample from each one-acre area shall be collected from each of the following three (3) depth horizons:
 - i. 0 to 12 inches;
 - ii. 12 to 24 inches; and
 - iii. 24 to 36 inches.
 - b. Samples from a maximum of four adjacent one-acre areas (e.g. minimum of one (1) grab sample from each depth horizon from each acre) may be composited into a representative sample for each depth horizon for up to a four-acre area (e.g., 3 composite samples for each 4 acres) for analyses required by 15.c. of this permit.
 - c. The samples shall be collected and analyzed for the following parameters and may not exceed the following limitations:

<u>PARAMETER</u>	<u>LIMITATION</u>
Total Metals	(mg/kg)
Arsenic	10.0
Barium	10,000.0
Cadmium	10.0
Chromium	100.0
Lead	200.0
Mercury	10.0
Selenium	10.0
Silver	200.0

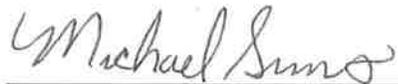
- d. A portion of each grab sample obtained from 0 to 12 inches from each one-acre area (e.g. one sample per acre) shall be analyzed for the following parameters and may not exceed the following limitations:

<u>PARAMETER</u>	<u>LIMITATION</u>
pH	6 – 10
Total Petroleum Hydrocarbons	< 1 % (measure up to C ₄₀ or greater)
Electrical Conductivity	≤ 4 mmhos/cm (saturated paste method)

- e. All laboratory analyses required to be performed by Condition 14 shall be performed by an independent laboratory neither owned nor operated by the permittee.

- f. The following documentation must be submitted to Technical Permitting in Austin and the Kilgore District office within thirty (30) days of the date of sample collection:
 - i. A copy of Permit Appendix A with the sampling locations shown;
 - ii. Sampling method(s) used; and
 - iii. Laboratory analyses including quality assurance/quality control data.
15. Technical Permitting in Austin must be notified in writing prior to commencing closure of any cell. Technical Permitting in Austin must verify that acceptable constituent levels have been met. Upon notification from Technical Permitting in Austin, the landfarm berms shall be leveled to grade.
16. This permit does not authorize the use or maintenance of any pit in connection with the approved disposal site. Form H-11, Application to Maintain and Use a Pit, must be submitted before any authorization to use a pit will be granted.
17. This permit is not transferable without the consent of the Commission. Any request for permit transfer should be filed with Technical Permitting in Austin.

This authorization is granted subject to review and revocation should investigation show noncompliance with the stipulations stated herein.

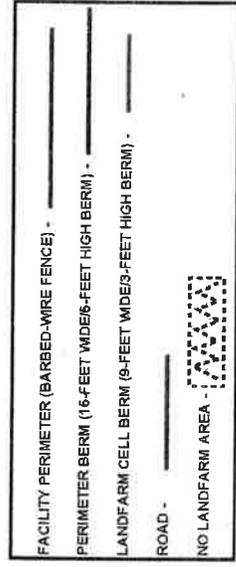
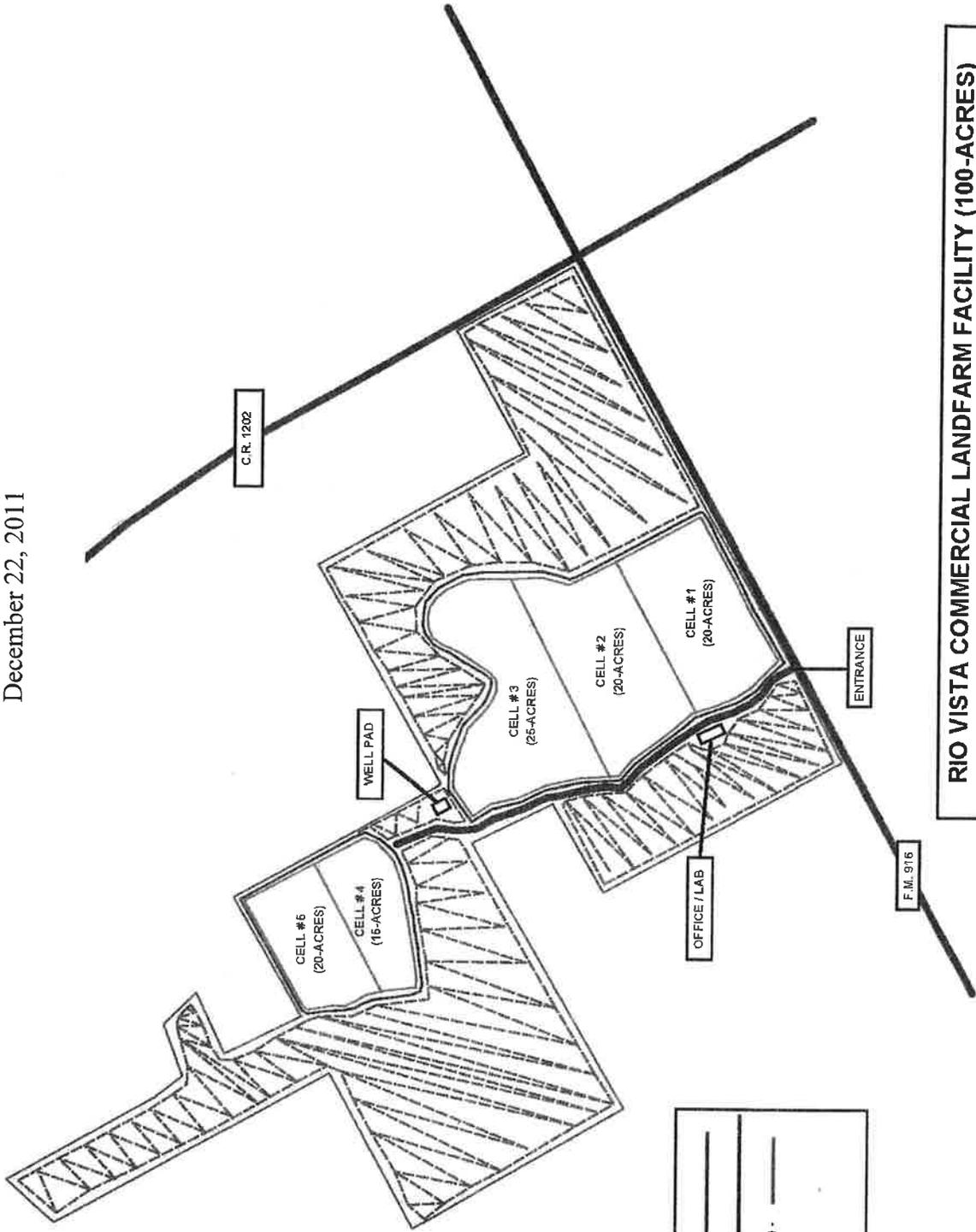
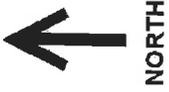


Michael Sims, P.E., Manager
Environmental Permits and Support
Technical Permitting

Note:

1. Removed previous condition requiring soils in certain cells to be tested for conductivity because the test results were received and approved.

Permit Appendix A
 Permit No. LF-0296
 Rio Vista Landfarm, LLC
 December 22, 2011



RIO VISTA COMMERCIAL LANDFARM FACILITY (100-ACRES)
RIO VISTA, JOHNSON COUNTY, TEXAS
R.R.C. PERMIT #LF-0296