



RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

December 13, 2013

JOSHUA LAND FARM LLC
BOX 2228
CLEBURNE, TX 76033

RE: **Amended** Cell Capacity for Permit Dated December 13, 2013
Joshua Landfarm No. 1 Facility – 656 acres
Johnson County, Texas
Permit No. LF- 0295

This letter is intended to clarify the amended Condition 13 of the Permit dated December 13, 2013.

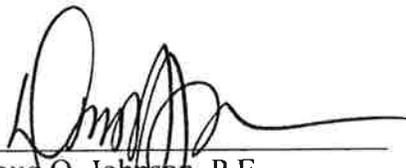
Cell 12 has been amended to receive an additional 2,000 barrels per acre.

Additional waste to be applied to a cell shall be calculated from the latest amendment issued for a particular cell. Attachment 1 indicates additional waste to be added to each cell, indicating the date of the latest Permit Amendment for each cell.

Detailed information is provided in the following attachment:

Attachment 1: Cumulative cell capacities and additional waste to be added to each cell as of the corresponding date.

If you have any questions, please contact John Tucker at (512) 463-4981.



Doug O. Johnson, P.E.
Assistant Director
Technical Permitting

Attachment 1: Cumulative cell capacities and additional waste to be added to each cell as of the corresponding date.

| Cell | Cumulative cell capacities (barrels per acre) | Additional waste to be added to each cell (barrels per acre) | Date |
|------|---|--|------------|
| 1 | 10,000 | 2,000 | 7/17/13 |
| 2 | 6,000 | 2,000 | 7/3/2012 |
| 3 | 8,000 | 2,000 | 1/15/2013 |
| 4 | 6,000 | 2,000 | 7/17/13 |
| 5 | 10,000 | 2,000 | 7/17/13 |
| 6 | 10,000 | 1,000 | 1/15/2013 |
| 7 | 8,000 | 2,000 | 7/17/13 |
| 8 | 8,000 | 2,000 | 7/17/13 |
| 9 | 8,000 | 0 | 7/3/2012 |
| 10 | 12,000 | 2,000 | 7/17/13 |
| 11 | 11,000 | 2,000 | 1/15/2013 |
| 12 | 12,000 | 1,000 | 12/13/2013 |

* Cell 12 has been amended to receive an additional 2,000 barrels per acre.



RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

Permit No. LF-0295

AMENDED

Supersedes Permit Dated July 17, 2013

JOSHUA LAND FARM LLC
BOX 2228
CLEBURNE, TX 76033

RE: Permit for Commercial Landfarming
Joshua Landfarm No. 1 Facility – 656 acres
Latitude, Longitude: 32.4551°, -97.4527° (WGS 84)
Johnson County, Texas; RRC District 05

This permit is your authority to landfarm water base drilling fluid and the associated solids on the 656-acre site in the following surveys: R.H. Barrow Survey, A-1149; B.B.B. & C. R.R. Co. Survey, A-103; W.P. King Survey, A-489; Mckinney & Williams Survey, A-631; and A.J. Tucker Survey, A-833 in Johnson County, Texas. The site is located three and six-tenth miles west of Joshua, Texas. A plat of the permitted disposal site is attached to and incorporated as **Permit Appendix-A, Amended**. Landfarming authority is based upon information provided in your amendment applications dated February 25, 2013, April 29, 2013, April 30, 2013, and September 11, 2013, 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 13, 2013.
2. This authority to landfarm drilling fluids or the associated solids upon the approved site expires on July 8, 2014, 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, Amended** 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 creeks on east and west side of landfarm 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 (40) 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/1) 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 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 October 31, January 31, April 30 and July 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 drainageway, including any drainage ditch, dry creek, flowing creek, river, or any other body of surface water.

13. Permittee shall insure that waste is dispersed in an even manner and not to exceed the following cumulative capacities of each cell:

| Cell | Capacity (barrels per acre) |
|------|-----------------------------|
| 1 | 10,000 |
| 2 | 6,000 |
| 3 | 8,000 |
| 4 | 6,000 |
| 5 | 10,000 |
| 6 | 10,000 |
| 7 | 8,000 |
| 8 | 8,000 |
| 9 | 8,000 |
| 10 | 12,000 |
| 11 | 11,000 |
| 12 | 12,000 |

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 14.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> |
|------------------|-------------------|
| Arsenic | 10.0 mg/kg |
| Barium | 10,000.0 mg/kg |
| Cadmium | 10.0 mg/kg |
| Chromium | 100.0 mg/kg |
| Lead | 200.0 mg/kg |
| Mercury | 10.0 mg/kg |
| Selenium | 10.0 mg/kg |

PARAMETER (cont.)

LIMITATION (cont.)

Silver

200.0 mg/kg

- 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:

PARAMETER

LIMITATION

pH

6 – 10 standard units

Total Petroleum Hydrocarbons

< 1 % (measure to C₄₀ 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 Falls District office within thirty (30) days of the date of sample collection:
- i. A copy of Permit Appendix A, Amended 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 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.

Note:

- 1) Cell 12 has been amended to receive an additional 2,000 barrels per acre.
- 2) Document formatting edit



Doug O. Johnson, P.E.
Assistant Director
Technical Permitting