

1R - 488

# APPROVALS

YEAR(S):

2010

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Wednesday, October 27, 2010 5:11 PM  
**To:** Hack Conder  
**Cc:** 'Pence, Britt'; 'Katie Jones'; 'Patrick B. McMahon'  
**Subject:** FW: Remediation Plan (1R488) Boring Plan Approval - Vanguard Abo SWD F-31 Site  
**Attachments:** ABO F-31 Proposed MW location and soil sample locations.jpg

**RE: "Corrective Action Plan - Preliminary Report"  
for the Vanguard Natural Resources, LLC's  
Abo SWD F-31 Site  
Unit Letter F, Section 31, T16S, R37E, NMPM, Lea County, New Mexico  
Remediation Plan (1R488) Boring Plan Approval**

Dear Mr. Pence:

The New Mexico Oil Conservation Division has reviewed the attached boring plan for the above-reference site. The Plan indicates that Vanguard Natural Resources, LLC's has met the requirements of 19.15.29 NMAC (Part 29; formerly, Rule 116) for a remediation plan. Therefore, the OCD hereby conditionally approves the Plan as proposed for above-referenced site in accordance with 19.15.29 NMAC:

Vanguard must follow the sampling and analytical protocol as outlined below.

Please be advised that OCD approval of this Plan does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

-----Original Message-----

**From:** Hack Conder [mailto:hconder@riceswd.com]  
**Sent:** Wednesday, October 27, 2010 2:04 PM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Pence, Britt; Katie Jones  
**Subject:** FW:

Mr. Hansen

Attached is the proposed locations of soil bore/ sampling points and

monitor well locations at the Vanguard Abo F-31 site per the approved CAP, Additional Delineation Required dated August 25, 2010 for your review. If you have any questions please contact me.

Hack Conder

Rice Environmental Consulting and Safety

575-631-6432

RE: "Corrective Action Plan - Preliminary Report"

for the Vanguard Natural Resources, LLC's

Abo SWD F-31 Site

Unit Letter F, Section 31, T16S, R37E, NMPM, Lea County, New Mexico

Remediation Plan (1R488) Additional Delineation Required

Dear Mr. Pence:

The New Mexico Oil Conservation Division (OCD) has received the Corrective Action Plan - Preliminary Report for the Abo SWD F-31 Site, dated June 10, 2010, and has conducted a review of the report. The report, submitted for the above-referenced site, indicates that the Vanguard Natural Resources, LLC's (Vanguard) has not completed the delineation requirements in accordance with 19.15.29 NMAC (Part 29, formerly, Rule 116). Therefore, the OCD cannot approve the proposed plan as submitted. Due to the environmental sensitivity of this site (i.e., located within the City of Lovington's drinking water well field), the OCD is requiring the following:

1. Vanguard shall install a sufficient number of groundwater monitoring well(s) at the site to further delineate the release (e.g., one upgradient of SB-10). The well location(s) shall be approved by the OCD prior to installation. (Vanguard shall submit to the OCD estimations of the capture zones of City of Lovington wells #5 and #6A prior to the installation of the upgradient monitoring well.) (Additional monitoring wells may be required to fully delineate groundwater contamination.)

2. Vanguard shall have the groundwater analyzed for chloride, TDS and BTEX. (Additional parameters may be required for future monitoring if BTEX is detected. Also, continued groundwater monitoring may be

required.)

3. Vanguard shall sample the soils during the well installation at 10-foot intervals starting at a depth of 6 to 12 inches bgs. The soil samples shall be analyzed for chloride (at least two samples shall be analyzed for chloride in a laboratory). Also, the soil shall be analyzed for TPH (EPA Methods 418.1 or 8015M extended range, C-6 through C-40) and BTEX as outlined below in item #4.

4. Vanguard shall obtain soil samples at 10-foot intervals starting at a depth of 6 to 12 inches bgs from a boring at or beyond the perimeter of the facility (i.e., the former bermed area) to the west of SB-10. The boring shall be to a total depth where three samples in which the chloride concentration decreases and the third sample has a chloride concentration of  $\leq 250$  mg/Kg; and the PID readings decrease and the third is sample has a PID reading of  $\leq 10$  ppm; or the sampling reaches the capillary fringe. Also, respective soil samples shall be analyzed for TPH (EPA Methods 418.1 or 8015M extended range, C-6 through C-40) and BTEX if a there is a detection of hydrocarbons with a PID reading of  $>10$  ppm. (Additional borings may be required if the chloride concentration of 250 mg/Kg is exceeded or the TPH concentration of 100 mg/Kg is exceeded.) The boring location shall be approved by the OCD prior to installation.

5. In addition, Vanguard shall obtain soil samples at a depth of 6 to 12 inches bgs at or beyond the perimeter of the facility to the west of SB-8 and at or beyond the perimeter of the facility to the south of SB-7. If the chloride is  $>250$  mg/Kg or the PID reading is  $>10$  ppm, then the soil sampling and analyses at those locations shall continue as outlined above in item #4.

6. Vanguard shall submit a report to the OCD with the results of the delineation within 90 days of completion of the first sampling event. The first sampling event (including the soil and groundwater samples) shall commence within 90 days.

7. Vanguard shall obtain information regarding the history of mechanical integrity of the plugged injection well to the northwest of SB-10.

8. Vanguard shall provide a summary of the site history (including any information regarding releases at the site).

9. Vanguard shall identify the closest down slope watercourse and surface water body (including former intermittent drainage features or surface water bodies that may have been in existence during the operation of this site).

10. Also, Vanguard shall provide appropriate sampling protocols.

If you have any questions regarding this matter, please contact me at 505-476-3489.

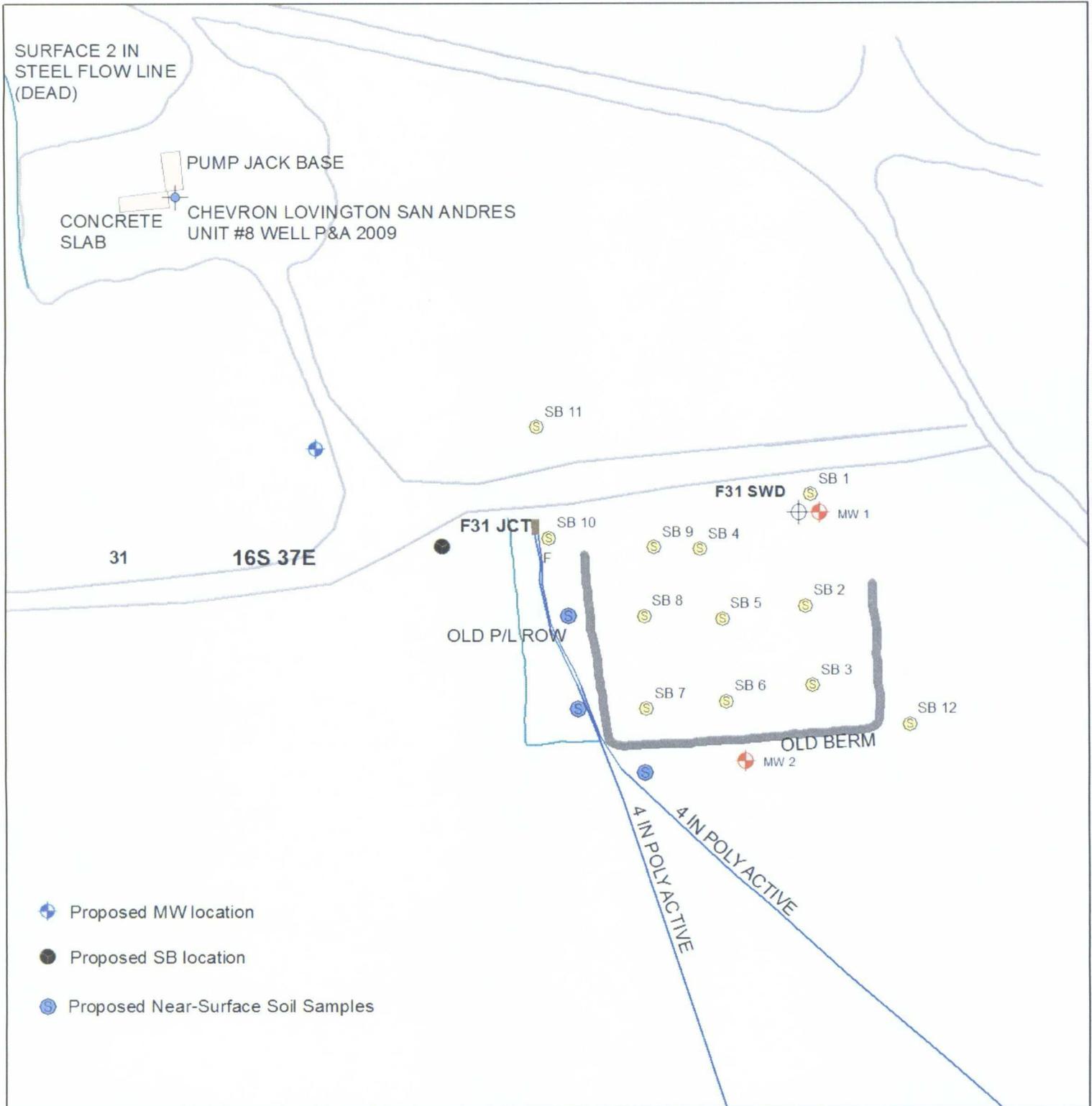
Edward J. Hansen

Hydrologist

Environmental Bureau

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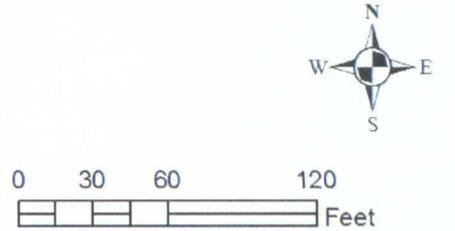
Hack Conder  
Environmental Manager  
Rice Operating Company  
575-393-9174  
fax 575-397-1471



-  Proposed MW location
-  Proposed SB location
-  Proposed Near-Surface Soil Samples



**ABO F-31 AREA**  
Legals: UL/F SEC 31  
T16S R37E



Drawing date: 10/13/10  
Drafted by: T. GRIECO and LARA WEINHEIMER

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Thursday, March 11, 2010 6:04 PM  
**To:** 'Pence, Britt'  
**Cc:** Leking, Geoffrey R, EMNRD; 'Patrick B. McMahon'  
**Subject:** Remediation Plan (1R488) - Further Delineation Plan Approved - Vanguard Abo SWD F-31 Site

**RE: "Corrective Action Plan Amendments"  
for the Vanguard Natural Resources, LLC's  
Abo SWD F-31 Site  
Unit Letter F, Section 31, T16S, R37E, NMPM, Lea County, New Mexico  
Remediation Plan (1R488) - Further Delineation Plan Approved**

Dear Mr. Pence:

The New Mexico Oil Conservation Division (OCD) has received Vanguard's Corrective Action Plan Amendments (further delineation plan) for the above-referenced site (dated, February 2, 2010). The workplan, submitted in partial fulfillment of 19.15.29 NMAC (Part 29, formally, Rule 116), indicates that Vanguard has partially met the requirements of 19.15.29 NMAC for this site. Therefore, the OCD hereby approves the further delineation plan for the Abo F-31 SWD Release Site.

Please be advised that OCD approval of this workplan does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau