

1R - 488

**GENERAL
CORRESPONDENCE**

YEAR(S):

2010

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Wednesday, August 25, 2010 5:57 PM
To: 'Pence, Britt'
Cc: Leking, Geoffrey R, EMNRD; Hack Conder; 'Patrick B. McMahon'; 'Michael Leighton'
Subject: Remediation Plan (1R488) Additional Delineation Required - Vanguard Abo SWD F-31 Site

**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 ≤ 250 mg/Kg; and the PID readings decrease and the third is sample has a PID reading of ≤ 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

TO: New Mexico Oil Conservation Division
ATTN: Edward Hansen

Via E-mail

FROM: City of Lovington
c/o Heidel, Samberson, Newell, Cox & McMahon
Post Office Drawer 1599
Lovington, New Mexico 88260

RE: NMOCD Case No. 112488-ABO F-31
Vanguard Permian, LLC
Corrective Action Plan Amendments-Preliminary Report

DATE: July 16, 2010

Please accept the following as the City of Lovington's comments regarding the Corrective Action Plan Amendments-Preliminary Report (hereinafter "Report") submitted by Vanguard Natural Resources, LLC on or about June 10, 2010.

1. Vanguard has failed to comply with the Site Assessment requirements of the Guidelines for Remediation of Leaks, Spills and Releases.
 - A. The Report fails to identify depth to groundwater as defined by the Guidelines. The Guidelines define depth to groundwater as "...the vertical distance from the lower most contaminants to the seasonal high water elevation of the groundwater."
 - B. The Report fails to determine the well head protection area as required by the Guidelines. In addition, the Report is completely void of any mention of municipal water wells and the fact that the aquifer below the site is used to supply fresh water to approximately 10,000 people in the City of Lovington. The Report should determine the well head protection area.
 - C. The Report fails to determine distance to the nearest surface water body.
2. The Report fails to properly delineate the horizontal extent of contamination at the site.
 - A. All sample points except SB 12 and MW2 contain chloride concentrations above 250ppm. The site was not properly delineated horizontally for chlorides, TPH and BTEX. The site should be horizontally delineated until background levels for the contaminants are reached.
 - B. The site was not properly delineated for TPH. The Report fails to account for TPH outside of the DRO/GRO ranges.

- C. The conclusion that petroleum hydrocarbon concentrations are below detection levels in both monitor wells is false. Chain of custody documents reflect that groundwater samples from MW-1 and from MW-2 were not analyzed for TPH.
3. The Report fails to rank the site as per the Guidelines.
- A. Based upon data presented in the Report, the site should be ranked as a 20.
 - B. Vanguard should be required to remedial action levels as follows:

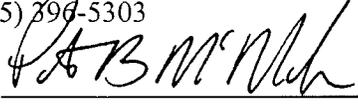
Benzene	10ppm
BTEX	50ppm
TPH	100ppm
 - C. Vanguard should be required to remediate chloride levels to 250ppm.
4. The Report fails to assess the impacts to City well field employees and to the public and to native animals and plants.
5. The Report fails to fully assess historic contamination at the site.
- A. The Report fails to assess numerous reports of tubing leaks, pressure buildup and MIT failures from July 2002 until November 2005 as found in Form C-103s on record with NMOCD.
 - B. The Report fails to assess other leaks and spills at the site.
 - C. Because of the sensitive nature of the City's municipal well field, a comprehensive analysis of historic contamination, leaks and spills and well base/casing integrity issues should be completed by Vanguard.
6. The Report is void of sampling protocols.
- A. The Report does not identify what sampling protocols were used regarding the field tests for chlorides, who performed the field tests and what training those persons possessed.
 - B. The Report does not identify what sampling protocols were used regarding the field tests for TPH, who performed the field tests, and what training those persons possessed. The Report is void of information regarding use of the PID meter or when and how it was last calibrated.
 - C. The Report is void of decontamination protocols.

7. The City objects to leaving chlorides/TPH/BTEX in place at the site above background levels.
8. The site should be remediated to background levels for chlorides, TPH and BTEX.
9. The Report fails to fully delineate impacts to groundwater at the site and to account for local gradients and cones of depression caused by the City's municipal pumping activities.
10. The Report does not address Rule 19.15.17 NMAC closure requirements.
 - A. The Report fails to address whether an investigation was conducted to determine if any pits or below grade tanks exist at the site that were not closed during the previous pit closure.

The City reserves the right to modify, withdraw or supplement these comments as additional information becomes available.

Respectfully Submitted,

HEIDEL, SAMBERSON, NEWELL, COX & MCMAHON
Post Office Drawer 1599
Lovington, New Mexico 88260
(575) 396-5303

By: 

Patrick B. McMahon

Attorneys for the City of Lovington

cc: Michael Leighton
Wyatt Duncan
Britt Pence
Carl Chavez

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Thursday, January 14, 2010 5:27 PM
To: 'Pence, Britt'
Cc: Leking, Geoffrey R, EMNRD; Patrick McMahon; 'Michael Leighton'
Subject: Remediation Plan (1R488) Further Delineation Required - Vanguard Abo SWD F-31 Site

**RE: "Investigation and Characterization Report and Corrective Action Plan"
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 Required**

Dear Mr. Pence:

The New Mexico Oil Conservation Division (OCD) has received the Investigation and Characterization Report and Corrective Action Plan for the Abo SWD F-31 Site, dated October 16, 2009, and has conducted a review of the Plan. The plan, 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 wells at the site to further delineate the release (e.g., one downgradient of SB-7 and one near SB-1). The well locations shall be approved by the OCD prior to installation. (Additional monitoring wells may be required if any WQCC standard is exceeded.)
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 installations at 10-foot intervals starting at a depth of 6 to 12 inches bgs. The soil samples shall be analyzed for chloride, TPH and BTEX.
4. Vanguard shall obtain soil samples at 10-foot intervals starting at a depth of 6 to 12 inches bgs to a total depth of 90 feet bgs from a sufficient number of additional borings at or beyond the perimeter of the facility to further delineate the release. The soil samples shall be analyzed for chloride. Also, respective soil samples shall be analyzed for TPH and BTEX if a there is a detection of hydrocarbons with a PID of 10 ppm or more. (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. 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.
6. In addition, Vanguard shall include the northern portion of the site (i.e., the closed pit area north of the ~1 acre identified in the Plan) in the ecological restoration of ground surface (once the Plan is approved).

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

Edward J. Hansen
Hydrologist
Environmental Bureau