

1R - 488

# WORKPLANS

DATE:

2-2-10

**Texerra**

**505 N Big Spring, Suite 404 Midland, Texas 79701**  
**Tel: 432-634-9257 E-mail: [lpq@texerra.com](mailto:lpq@texerra.com)**

February 2nd, 2010

Mr. Edward Hansen  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87504

2010 FEB -8 P 1: 28

**RE: Corrective Action Plan Amendments**  
Vanguard Natural Resources LLC  
**ABO F-31 SWD**  
UL F Sec 31 T 16S R 37E  
NMOCD Case Number: 1R 488

Sent via E-mail & U.S. Certified Mail w/ Return Receipt 7007 0710 0003 0305 3811

Dear Mr. Hansen:

This letter is offered in reply to your e-mail letter of January 14<sup>th</sup> of this year which addressed Texerra's Corrective Action Plan (CAP) of October 16<sup>th</sup>, 2009 submitted on behalf of Vanguard Natural Resources LLC (Vanguard) for the above-referenced facility. The following amendments are thus proposed to the CAP per your request:

1. Vanguard shall install two groundwater monitor wells per State of New Mexico standards, as shown in Figure 1. (Also see Figures 3 & 4 in the CAP).
2. Vanguard shall initially sample and analyze the monitor wells for chloride, TDS and BTEX within 90 days of monitor well installation. Subsequent sampling and analysis, if warranted, shall be determined in consultation with NMOCD.
3. Vanguard shall sample soil material from the well boring cuttings at 10 ft increments beginning at the surface (6 to 12 inches bgs) to a depth of approximately 90 ft bgs. Soil samples will be tested for chloride using field titration methods and for petroleum hydrocarbons using a calibrated PID meter. Two representative samples from each boring will be sent to a laboratory for analysis of chlorides. Additionally, any samples that test higher than 10 ppm PID reading will be sent to a laboratory for analysis of TPH and BTEX. Due to the known presence of gravels which would interfere with split-spoon sampling, soils samples shall be taken from drill bore "shovel cuts".
4. Vanguard shall sample soil material from two additional borings (again, from shovel cut samples) outside the immediate perimeter of the SWD facility (Figure 1) to better delineate the lateral extent of residual chlorides and petroleum hydrocarbons. The initial target depth for these borings will be 90 ft bgs but may be truncated if chlorides decline sufficiently (three declining samples with the

## ABO F-31 SWD CAP

bottom sample < 250 ppm) and if PID readings are less than 10 ppm. Two representative samples from each boring will be sent to a laboratory for confirmatory analysis of chlorides. Additionally, any samples that test higher than 10 ppm PID reading will be sent to a laboratory for analysis of TPH and BTEX. Due to the known presence of gravels which would interfere with split-spoon sampling, soils samples shall be taken from drill bore "shovel cuts".

5. Vanguard shall submit a report of this effort within 90 days of completion of the first monitor well sampling event. This report will include proposals for surface ecological restoration as warranted based upon the results of this work.
6. Vanguard shall also propose measures for the surface ecological restoration of the area just north of the F-31 site (the closed pit area referenced in your e-mail letter January 14<sup>th</sup>, 2010.)

We submit these items for your review and consideration. While you may contact me directly for questions of a purely technical nature please address all e-mail and other official correspondence to:

Mr. Britt Pence  
Vanguard Natural Resources LLC  
7700 San Felipe, Suite 485  
Houston, TX 77063  
Tel: 832-327-2252.  
E-mail: [bpence@vnrlc.com](mailto:bpence@vnrlc.com)

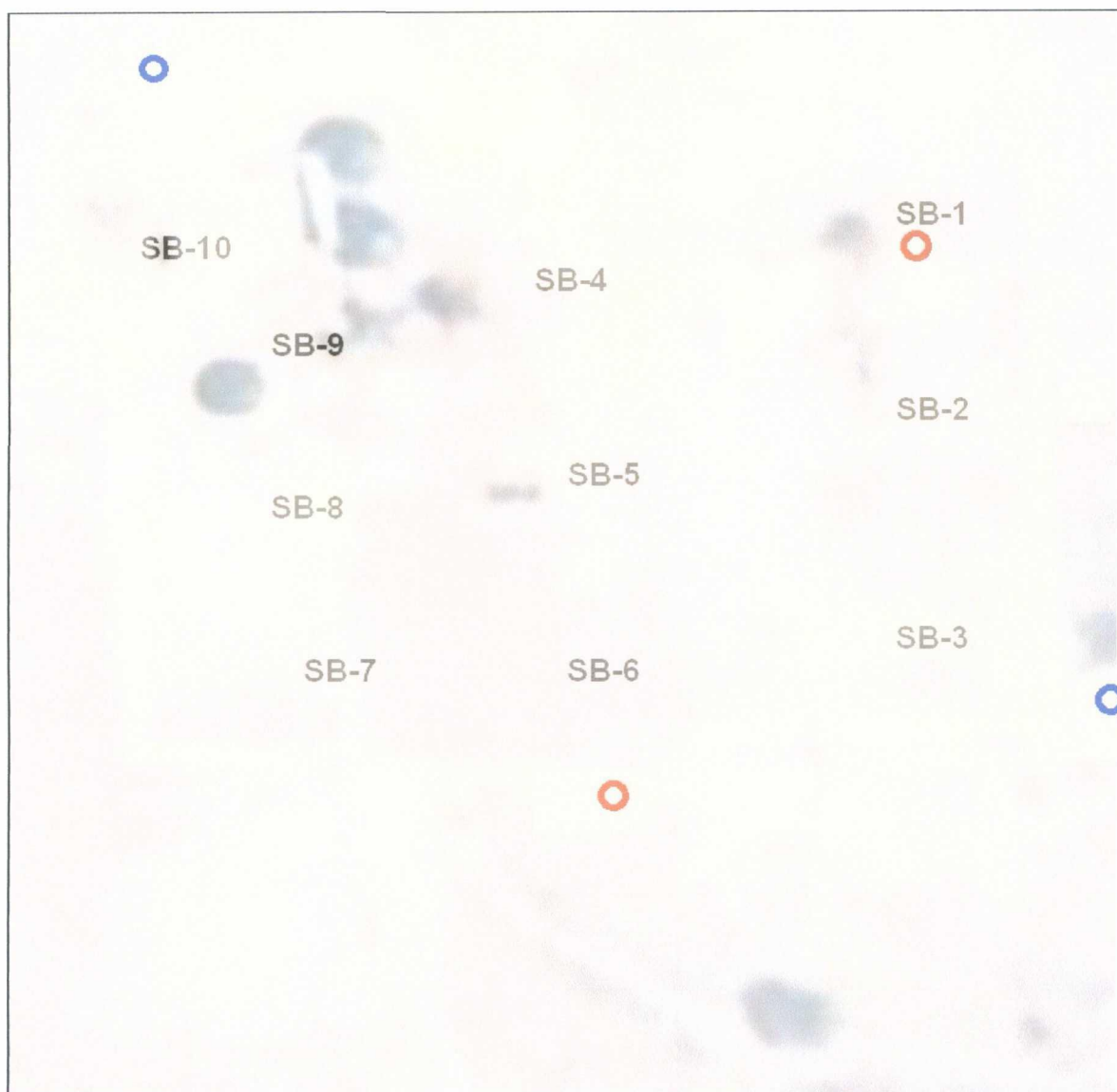
Thank you greatly for your consideration.

Sincerely,



L. Peter Galusky, Jr. Ph.D.  
Principal

Copy: Britt Pence, Vanguard Natural Resources LLC



**Figure 1** – Proposed monitor well locations (**red circles**) and soil boring locations (**blue circles**).