

R. T. HICKS CONSULTANTS, LTD.

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November 9, 2017

Olivia Yu
NMOCD District 1
1625 N. French Dr.
Hobbs, NM 88240

APPROVED

By Olivia Yu at 3:18 pm, Dec 08, 2017

NMOCD approves of the additional
sample locations for 1RP-4778.

RE: AMTEX Energy, Tomahawk SWD Facility Release, 1RP- 4778

Dear Ms. Yu:

On behalf of Amtex Energy, Hicks Consultants submits this response to OCD's September 25, 2017 questions relating to the Remediation Plan for the above referenced facility that was submitted August 24, 2017. OCD questions/comments are shown in red below with our response following.

For the benefit of Amtex and the surface owner, we wish to emphasize that the purpose of an investigative sampling is to determine if a release poses a threat to fresh water, public health or the environment. OCD Rule 29, which governs this release, provides the following criteria to determine if a corrective action is required.

19.15.29.11 CORRECTIVE ACTION: The responsible person shall complete division-approved corrective action **for releases that endanger public health or the environment.** The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.

- A. **Given the impacted area shown in Plate 1, to fully characterize the release area, representative sample locations need to be established around the release point on the SWD pad as well as the lease road.**
 - A revision to Figure 1 shows the location of two proposed shallow soil sampling hand auger holes (red circles) to address this concern of OCD.
- B. **Please be advised that a subsurface caliche layer is not consider an acceptable rationale for not completing vertical delineation.**
 - The purpose of the backhoe investigation is to cost-effectively define the chloride concentration profile of uppermost vadose zone. If additional sampling beyond the reach of the backhoe is necessary to meet the mandate of the Rules, we will propose a third investigation phase.
- C. **Additional vertical delineation via backhoe trenches is necessary at Sample 2 and 4 along with Sample 1 and Sample 5.**
 - We will conduct backhoe sampling at these four locations as requested by OCD.
- D. **Sample locations to complete horizontal delineation along the BLM lease road should not be greater than 50 ft. laterally and include probable pooling locations.**
 - We will conduct additional hand auger sampling along the BLM road to the top of caliche or 3-foot depth. We will obtain samples at 200 feet and 250 feet south of sample #4 (red circles) then use the results of field titration to determine appropriate spacing and location of additional sampling points. If

field tests suggest that deeper characterization is required, we will choose a location for backhoe trench sampling along the lease road.

- E. Laboratory analyses from all sample trenches must demonstrate at least 2 depths of permissible chloride levels of ≤ 600 mg/kg: depth obtained and depth maintained minimal 2 ft. further in depth. Suggested 10% of samples for laboratory analyses may not adequately or sufficiently complete vertical delineation.
- We will complete a sampling program to satisfy the mandates of the Rule and to allow the design of a corrective action. As indicated above, the effort may require deeper sampling using different equipment. We anticipate at least 10% of the samples will be submitted to a laboratory for EPA Method 300 evaluation of chloride.
- F. Provide all field chloride tests along with laboratory analyses in a tabulated format.
- We will do so
- G. How is the determination made regarding which two samples will be sent to the laboratory for TPH extended analyses?
- At least 25% of the samples that show discoloration or odor due to hydrocarbons (which may be zero samples) and
 - The two samples with the highest chloride concentration.

After OCD approval of this revision to the plan, we will notify the surface owner and OCD of the date of the sampling program. We hope to conduct the sampling during the last week of November.

Sincerely,

R.T. Hicks Consultants, Ltd.



Randall Hicks
Principal

Copy: Amtex Energy Inc.,
Shelly Tucker, BLM
Merchant Livestock, Clabe Pearson (cjpj@leaco.net)



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**Site Map Showing Locations of
Proposed Characterization Soil Samples**

**Amtex Energy, Inc. - Tomahawk SWD (API: 30-025-33069)
Unit L, Section 31, T21S, R33E, Lea County, New Mexico**

**Plate 1
(1RP4778)**

**September
2017**