

**From:** [Yu, Olivia, EMNRD](#)  
**To:** [Larry Davis](#)  
**Cc:** [Groves, Amber](#)  
**Subject:** RE: Remediation Proposal for RP #4359  
**Date:** Thursday, October 19, 2017 9:00:00 AM  
**Attachments:** image001.png

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Mr. Davis:

NMOCD's email server does not accept zip files. Please resend photos in original format (e.g., jpeg, jpeg, tiff). Please be advised that the incident for 1RP-4359 occurred more than a year ago in July 2016. Revegetation is not unexpected.

NMOCD still requires the release to be fully characterized, which means complete vertical and horizontal delineation.

Olivia

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**From:** Larry Davis [mailto:Larry.Davis@energyquest.us]  
**Sent:** Friday, October 13, 2017 10:31 AM  
**To:** Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>  
**Cc:** Groves, Amber <agroves@slo.state.nm.us>  
**Subject:** RE: Remediation Proposal for RP #4359

Ms. Yu, Ms. Groves:

On Thursday, October 12, efforts were made to gather required soil samples from the State AO well location. The sampling agency was Safety & Environmental Solutions, Hobbs, NM.

Per the requirements, 4 sample locations were established 50 feet from the location of each original sample site, with the 4 locations marked north, south, east, and west. A hand auger was employed in the hopes of minimal environmental disturbance. Although we attempted over half of the locations to be sampled, max depth achieved was about 1 foot; the ground proved to be too rocky for the auger. Even a shovel was not effective. To dig to the depth of 7 feet for each of 12 samples per your stipulations, a backhoe will be required, which will have a definite impact on the recovering environment. The digging is slated for Wednesday, October 18.

Although we only reached the 1 foot depth, several of the samples were field tested for contaminants; all field tests showed no measurable chlorides or hydrocarbons. I realize field testing is not as conclusive as lab testing is, but these tests reflect the same results as previous lab tests.

The area is growing vigorously; attached in the zip file are 4 photos taken Thursday morning to help illustrate how well this site has recovered on its own. I really hate to have a backhoe dig 12 holes, 7 feet deep just for samples.

Is the increased environmental impact of digging these 12 holes with a backhoe absolutely required?

Thank you,

Larry D. Davis  
Environmental Quality Manager  
  
Telephone: 281-651-5201 (direct)

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**From:** Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]  
**Sent:** Tuesday, July 25, 2017 10:52 AM  
**To:** Larry Davis <[Larry.Davis@energyquest.us](mailto:Larry.Davis@energyquest.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

Mr. Davis:

You are welcome. Not a problem. Thank you for taking the effort to understand. Please remember to include Amber Groves, NMSLO, in all communications.

Thanks,  
Olivia

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**From:** Larry Davis [<mailto:Larry.Davis@energyquest.us>]  
**Sent:** Tuesday, July 25, 2017 9:40 AM  
**To:** Yu, Olivia, EMNRD <[Olivia.Yu@state.nm.us](mailto:Olivia.Yu@state.nm.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

Thank you. I did read the directive, but missed the directions specifications. I will examine in more detail. Your responses have provided me with specific information I can use. I am sorry to be such a pain, but I am trying to learn the details as I go.

Larry

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**From:** Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]  
**Sent:** Tuesday, July 25, 2017 10:28 AM  
**To:** Larry Davis <[Larry.Davis@energyquest.us](mailto:Larry.Davis@energyquest.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

Mr. Davis:

Did you read the directive? The four cardinal directions are stated in that pdf. If you have additional questions about the directive, please direct them to Jim Griswold, NMOCD Environmental Bureau Chief.

As stated in the previous email, NMOCD determines depths and locations based on a number of parameters, primarily in regards to groundwater quality. Jurisdiction for compliance is indicated in these two specific sections:

1. NMAC 19.15.29.11
2. Page 1 of 1993 Guidelines for Remediation: "The New Mexico Oil Conservation Division (OCD) requires that corrective actions be taken for leaks, spills or releases of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property."

This release occurred on State surface, involves a fire, and depth to groundwater is approximately 59 ft. bgs. Furthermore, the reviewed initial C-141 indicated a due date for corrective actions on September 26, 2016. The first evidence of corrective actions was on January 10, 2017. Based on these factors, NMOCD Environmental Specialists have regulatory authority to stipulate any depths to ensure the Responsible Operator complies with NMAC 19.15.29 and NMAC 19.15.30.

Olivia

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**From:** Larry Davis [<mailto:Larry.Davis@energyquest.us>]  
**Sent:** Tuesday, July 25, 2017 8:29 AM  
**To:** Yu, Olivia, EMNRD <[Olivia.Yu@state.nm.us](mailto:Olivia.Yu@state.nm.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

If there are no specified depths or placements in the Administrative Code or State Regulations, what is the basis of your directive for 4 samples at each site to the depths specified? I want to be in compliance, but I also want to keep my job.

Larry

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**From:** Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]  
**Sent:** Tuesday, July 25, 2017 9:22 AM  
**To:** Larry Davis <[Larry.Davis@energyquest.us](mailto:Larry.Davis@energyquest.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

Good morning Mr. Davis:

NMOCD evaluates each release on a case-by-case basis, with a number of factors in consideration, including topography, hydrology, land use history, etc. In other words, NMOCD does not have specified depths of sampling or placement of sample locations. Nonetheless, please see the attachments that NMOCD uses as guidelines for any release. You can find the NMOCD regulations online:

<http://www.emnrd.state.nm.us/OCD/documents/SearchablePDFofOCDTitle19Chapter15-Revised10-5-16.pdf>

[http://164.64.110.239/nmac/\\_title20/T20C006.htm](http://164.64.110.239/nmac/_title20/T20C006.htm)

Olivia

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**From:** Larry Davis [<mailto:Larry.Davis@energyquest.us>]  
**Sent:** Tuesday, July 25, 2017 7:48 AM  
**To:** Yu, Olivia, EMNRD <[Olivia.Yu@state.nm.us](mailto:Olivia.Yu@state.nm.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

Ms. Yu,

Where can I find the regulations and guidelines that address the depth and location requirements for soil sampling? My boss wants a detailed explanation that I cannot give him. Everything I find about depths of sampling pertains to underground storage tanks, which is not the situation here.

Thanks,

Larry D. Davis  
Environmental Quality Manager  
  
Telephone: 281-651-5201 (direct)

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**From:** Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]  
**Sent:** Monday, July 24, 2017 1:45 PM  
**To:** Larry Davis <[Larry.Davis@energyquest.us](mailto:Larry.Davis@energyquest.us)>  
**Cc:** Groves, Amber <[agroves@slo.state.nm.us](mailto:agroves@slo.state.nm.us)>  
**Subject:** RE: Remediation Proposal for RP #4359

Dear Mr. Davis:

In response to your questions in the email dated July 6, 2017, regarding 1RP-4359:

1. Attached is a 2000m radius search of the NMOSE wells around the release site. The most accurate method to obtain this information is to convert the GPS coordinates into NAD 1983 units, which I did using the provided lat/long of the release location written on the initial C-141.
2. OK. NMOCD requires photographic documentation that the actual release area from active lines is smaller than the impacted area from the fire. The photos included in Appendix 6 do not adequately indicate this distinction.
3. Yes to a minimum of 12 samples. A couple points of clarification:
  - For each of the sample locations, there must be 5 vertical ft. of soil within permissible levels. For example, if the first depth obtained within permissible levels of 600 mg/kg chlorides is 2 ft. bgs, there must be a confirmatory laboratory sample 5 ft. further in depth (7

ft. bgs) that demonstrate permissible chloride levels are maintained.

- Horizontally, the 4 cardinal directions are necessary in order to evaluate the lateral extent of the release. Horizontal delineation is important to guide subsequent remediation procedures. The distance between sample locations is not necessarily in reference to the central point used for vertical delineation. The 50 ft. distance interval refers to the perimeter of each release area.

As for Issue 4, please be advised that concurrent NMSLO approval is required and generally like approval require a revegetation plan in a corrective action or delineation workplan before the remediation stage.

Does the above explanation clarify some confusion? Please inform if additional assistance is required.

Thanks,  
Olivia

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**From:** Larry Davis [<mailto:Larry.Davis@energyquest.us>]

**Sent:** Thursday, July 6, 2017 3:54 PM

**To:** Yu, Olivia, EMNRD <[Olivia.Yu@state.nm.us](mailto:Olivia.Yu@state.nm.us)>

**Cc:** Groves, Amber <[agroves@slo.state.nm.us](mailto:agroves@slo.state.nm.us)>

**Subject:** RE: Remediation Proposal for RP #4359

Ms. Yu,

I apologize, but I do not understand what is needed other than more samples. I am not a specialist like you, and you clearly have more information available than I was able to obtain; thus I beg your assistance in comprehending what needs to be done.

- Issue 1 – The attached report from the NMOSE database for Section 4, Township 12S, Range 33E in Lea County shows no water wells within a 2000m radius; previously submitted reports show all water wells in the immediate geographical location have been plugged and abandoned. What is needed to satisfy Issue #1?
- Issue 2 – This requires additional samples. Please be aware that the highlighted areas in the site maps represent the total surface area where poly lines were damaged and replaced, whether or not the damage resulted in a release. They do not represent the locations of impacted sites; there were only three (3) actual impacted sites, which were marked on the site maps by the sample positions and were much smaller and localized. Perhaps that's my error in the presentation. When samples are taken, I will draft new site maps to illustrate only the impacted sites.
- Issue 3 – This appears to be saying that the requirement is 4 samples at every location, each sample taken to a depth of 5 feet, with individual samples taken 50 feet away from the center at each location. Thus for the three locations, that's a total requirement of 12 additional samples. Is this correct?
- Issue 4 – not an issue. We do not intend to take any corrective action until authorization is

received.

Thank you for your assistance,

Larry D. Davis

Environmental Quality Manager

EnergyQuest

Telephone: 281-651-5201 (direct)

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**From:** Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]

**Sent:** Thursday, July 06, 2017 2:43 PM

**To:** Larry Davis <[Larry.Davis@energyquest.us](mailto:Larry.Davis@energyquest.us)>; Groves, Amber <[agroves@slo.state.nm.us](mailto:agroves@slo.state.nm.us)>

**Cc:** Jeff Teare <[jeff.teare@energyquest.us](mailto:jeff.teare@energyquest.us)>

**Subject:** RE: Remediation Proposal for RP #4359

Dear Mr. Davis:

Please address these concerns regarding the submitted documents for 1RP-4359.

1. Although the provided information from NMOSE about the history of the water wells and projected depth to groundwater is appreciated, NMOCD still uses NMOSE water well database along with other sources to estimate the average depth to groundwater. Using a radius of 2000 m, the average depth is 69 ft. bgs. Furthermore, there is a USGS monitoring well < 4 miles away indicating the water table at 31 ft. bgs in August 2016. Thus, NMOCD can reasonably determine that groundwater is less than 100 ft. bgs. Unless the water table depths of the wells within a 1 mile radius are verified, NMOCD will abide by the data presented by NMOSE and USGS.
2. Based on the dimensions of the impacted area as shown on the scaled map, more than 3 sample points are required. NMOCD requests that soil sample locations are situated such that they are representative of the impacted area: potential pooling locations and <50 ft. interval between sample locations.
3. Horizontal and vertical delineation are required. In addition to the RRALs for hydrocarbons (BTEX and TPH), permissible chloride values are 600 mg/kg. At a minimum, permissible chloride levels must be obtained and maintained vertically for 5 ft. bgs. At least 4 sample locations representing the cardinal directions are necessary for delineation of the edges of the release.
4. Please be advised that like approval from NMSLO is necessary for any corrective actions, proposed remediation, and revegetation requirements.

Please contact if clarification is required or to request a meeting at the NMOCD-Hobbs office.

Thanks,

Olivia Yu

Environmental Specialist  
NMOCD, District I  
[Olivia.yu@state.nm.us](mailto:Olivia.yu@state.nm.us)  
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

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**From:** Larry Davis [<mailto:Larry.Davis@energyquest.us>]  
**Sent:** Monday, May 1, 2017 12:21 PM  
**To:** Yu, Olivia, EMNRD <[Olivia.Yu@state.nm.us](mailto:Olivia.Yu@state.nm.us)>; Groves, Amber <[agroves@slo.state.nm.us](mailto:agroves@slo.state.nm.us)>; Keyes, Jamie, EMNRD <[Jamie.Keyes@state.nm.us](mailto:Jamie.Keyes@state.nm.us)>  
**Cc:** Jeff Teare <[jeff.teare@energyquest.us](mailto:jeff.teare@energyquest.us)>  
**Subject:** Remediation Proposal for RP #4359

The required remediation proposal related to RP #4359 has been completed. The proposal is too large for our server; therefore, I have attempted to link this through Drop-box. You should receive a separate email with the link. If the link fails, please notify me at [larry.davis@energyquest.us](mailto:larry.davis@energyquest.us).

EnergyQuest proposes the application of an approved seed mixture, over-seeding the natural growth to supplement recovery.

However, lease locations show little evidence of the grass fire of July 2016; the natural recovery of native grasses is vigorous and vibrant. Included with this proposal is photographic documentation of the natural re-vegetation. EnergyQuest believes that even this proposal to remediate the surface would disturb the natural recovery of the environment and therefore should be avoided.

We await your decision.

Larry D. Davis  
Environmental Quality Manager  
  
Telephone: 281-651-5201 (direct)