

From: [Yu, Olivia, EMNRD](#)
To: ["Lucas Middleton"](#)
Cc: [aramirez01@keyenergy.com](#); [Oberding, Tomas, EMNRD](#)
Subject: RE: Updated Work Plan Submittal for the Atha SWD (J H DAY #002 , 30-025-08816) 1RP-4547
Date: Tuesday, May 30, 2017 3:08:00 PM
Attachments: [image001.png](#)

Dear Mr. Middleton:

Given the additional information, the proposed remediation procedure for 1RP-4547 is approved with the caveat that the process is completed within 180 days. NMOCD is currently re-evaluating remediation plans utilizing natural attenuation for soil impacted with chlorides. Please confirm.

Thanks,
Olivia

From: Lucas Middleton [mailto:lucas.middleton@soudermiller.com]
Sent: Tuesday, May 30, 2017 12:00 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: aramirez01@keyenergy.com; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Subject: Fwd: Updated Work Plan Submittal for the Atha SWD (J H DAY #002 , 30-025-08816) 1RP-4547

Hello,
SMA is requesting an updated from The NMOCD on the work plan submitted. SMAs data was collected prior to the raining season. We would like to get out and start on the project before more rain occurs.

Thank you and Have a great Day

Lucas Middleton

From: Lucas Middleton <lucas.middleton@soudermiller.com>
Sent: Tuesday, May 9, 2017 9:29 AM
Subject: RE: Updated Work Plan Submittal for the Atha SWD (J H DAY #002 , 30-025-08816) 1RP-4547
To: Yu, Olivia, EMNRD <olivia.yu@state.nm.us>
Cc: Oberding, Tomas, EMNRD <tomas.oberding@state.nm.us>, Ramirez, Ana O <aramirez01@keyenergy.com>

Dear Ms. Yu,

I hope the attached information and responses to you questions provide clarification.

1. L means a discreet location. D means a discreet location as it pertains to a delineation. Generally, we start with L as a hand augured sample, but if we go back for further delineation with equipment, we change to D. In this case, it was a hollow stem rig.
2. Yes, as close as we could get with the rig.
3. Yes, you are correct, those should be D2, attached is an amended table 3.
4. Figure 2 represents all field samples taken. Data for L2, L4, and L6 is attached.
5. The labs where previously submitted, we have attach.
6. The delineation performed meets the Conditions of Approval for 1RP-4547. This document does not list "permissible chloride levels of 600 mg/kg". With Key Energy scope modification and approval, SMA could potentially continue further delineation at this location once we are mobilized.
7. SMA EC method is USDA-NRCS field 1:1 Soil EC method (Soil salinity assessment. Methods and interpretation of electrical conductivity measurements. FAO irrigation and drainage paper 57. FAO UN. Soil Survey Staff. 2010. Keys to soil taxonomy. 11th ed. USDA-NRCS. GPO, Washington, DC. U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS). National Soil Survey Handbook, title 430-VI. Available at: <http://soils.usda.gov/technical/handbook/>. (Verified January 7, 2011), correlated with EPA method 300 see attached data.
8. If SMA and its subcontractors are able to complete all dirt work in time to catch seasonal rains, the average chloride load in the impacted soils on 1RP-4547 should be at an estimated 632 ppm by September of this year. This, of course, is an estimation based on National Oceanic and Atmospheric Administration (NOAA) climate data. Key Energy LLC, as the responsible party as defined in 19.15.2 NMAC, would be bound by 19.15.29 NMAC regardless of the outcome of the submitted work plan.

Sincerely,

Lucas C. Middleton

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

Sent: Friday, April 28, 2017 3:30 PM

To: Lucas Middleton <lucas.middleton@soudermiller.com>

Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Ramirez, Ana O <aramirez01@keyenergy.com>

Subject: RE: Updated Work Plan Submittal for the Atha SWD (J H DAY #002 , 30-025-08816) 1RP-4547

Dear Mr. Middleton:

Note: NMOCD's database indicates both surface and mineral owners are BLM.

Please clarify these details regarding the delineation/remediation workplan for 1RP-4547:

1. What, if any, is the difference between Sample IDs labelled L or D? Sampling methodology?
2. Are D1 and D2 in the same locations as L1 and L2, respectively?
3. Are these typos in Table 3? D1 should be D2 for 20, 25, 30 ft. depths for samples analyzed on 2/21/2017?

4. Were soil samples taken and analyzed, either field or lab, for L2, L4, L6 as indicated on Figure 2?
5. Laboratory analytical data are missing for L3, L5, L7-10. Was a previous report sent in to NMOCD?
6. At 1 ft. bgs, L5 is above permissible chloride levels of 600 mg/kg for the depth to groundwater indicated. Additional vertical delineation is required. Obtain and maintain 600 mg/kg chloride levels for a minimum of 5 ft. more in depth.
7. Provide assumptions for calculations, spell out abbreviations, and describe the SMA EC method.
8. Provide an anticipated timeframe for the remediation process and contingency plan.

Thanks,
Olivia

From: Lucas Middleton [<mailto:lucas.middleton@soudermiller.com>]
Sent: Wednesday, March 29, 2017 2:03 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Ramirez, Ana O <aramirez01@keyenergy.com>
Subject: FW: Updated Work Plan Submittal for the Atha SWD (J H DAY #002 , 30-025-08816) 1RP-4547

Olivia Yu,
On behalf of Key Energy Souder, Miller and Associates is submitting a work plan for approval on the Atha SWD (J H DAY #002 , 30-025-08816) 1RP-4547 in Lea County, New Mexico. Attached to this email is the work plan being submitted.

If you have any question feel free to contact me my phone or email.

Lucas Middleton
Staff Scientist
(575) 689-5351 (mobile)



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