From:	Yu, Olivia, EMNRD
To:	"Lucas Middleton"; Oberding, Tomas, EMNRD; "Groves, Amber"
Cc:	Ramirez, Ana O
Subject:	RE: Updated Work Plan Submittal for State "S" Brine and Water Station 1RP-4548
Date:	Friday, March 31, 2017 7:22:00 AM
Attachments:	approvedRP4548_27Mar2017_Work Plan for Key- State S-updated.pdf

Good morning Mr. Middleton:

NMOCD approves the delineation/remediation workplan for 1RP-4548, given the provided information. Please provide NMOCD and NMSLO with witnessing opportunities. Please see attachment for your records.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

From: Lucas Middleton [mailto:lucas.middleton@soudermiller.com]
Sent: Thursday, March 30, 2017 4:45 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Ramirez, Ana O <aramirez01@keyenergy.com>
Subject: RE: Updated Work Plan Submittal for State "S" Brine and Water Station 1RP-4548

Olivia Yu,
I have addressed the questions that have been asked.
If you have questions feel to call or email with any questions.

1) Provide scientific basis/rationale for 2% slope for the sump. Is this related to retention time?

In ASTM stand for GCL is greater than 2%. This will allow for leachate to flow to the sump for recovery of the leachate.

2) What are/will be the thickness of the geosynthetic clay liner and drainage layer? Why?

A Geosynthetic Clay Liner (GCL) meets RCRA Subtitle D. The liner used on this project will be a GCL which includes :

- Surface
- 0-60 cm – Topsoil
- 40 mill plastic liner as per ASTM standard
- 60-90 cm – drainage layer (30 cm)
- Bentomat that meets ASTM D 6496

3) What is the proposed depth of the affected soil below and above the clay and 40-mil liner in Figure 3? With the assumption that the sump is at the bottom of the 3 ft. excavation depth; thus, will the excavated contaminated soil be equally divided above and below the liners?

The affected soil above the 40 mill plastic liner is 60 cm (1.96 ft) and the affected soil above the clay layer will be the will be 60 cm (1.96 ft) below ground surface.
No the contaminated soil will not be equally divided above and below the liners. All contaminated soil will be above the liners. SMA is not proposing the encapsulation of impacted soil but In-Situ remediation of the impacted soil via leaching.

4) How will the base and sidewall of backfilled soils be sampled? As written, it is ambiguous of what is meant by backfilled soils. Is this in reference to the column of materials above the sump (i.e., excavated soil above and below the layers)?

SMA personal will go to the site periodically and sample the side walls of the affected area and right above the 40 mill plastic liner to insure the In-situ remediation is working properly.
The affected soil will be excavated at this point the cap will be installed and then the same affected soil that was excavated will be backfill on top of installed cap to start the In-situ remediation.

5) Table 3 do not correspond with text in terms of the number of sample locations with soil samples taken at 2 ft. and 10 ft. Please clarify.

Location 4 was sampled to 10 feet. Corrections will be made to say we sampled to 10’ at location 4.

6) Typically, NMOCD evaluates depth to groundwater using the radius of a section around the release point on OSE’s depth to water table. The average for this release is 50 ft.

We used CP 00554 well which show average depth of 70’ and is 0.2 miles northwest of release.

7) Is the proposed revegetation plan an approved SLO method?

The revegetation plan meets or will exceed the land owners reequipments. After we addressed the noxious weeds. Which will be added to the workplan.
“I have requested that the revegetation portion of this workplan be revised to include language regarding noxious weeds. Please revise this portion for re-submittal.” Amber Groves

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

Sent: Thursday, March 30, 2017 11:04 AM
To: Lucas Middleton <lucas.middleton@soudermiller.com>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; agroves@slo.state.nm.us
Subject: RE: Updated Work Plan Submittal for State "S" Brine and Water Station 1RP-4548

Dear Mr. Middleton:

Please address these questions about the workplan for 1RP-4548. I look forward to learning more about this in situ remediation procedure.

1. Provide scientific basis/rationale for 2% slope for the sump. Is this related to retention time?
2. What are/will be the thickness of the geosynthetic clay liner and drainage layer? Why?
3. What is the proposed depth of the affected soil below and above the clay and 40-mil liner in Figure 3? With the assumption that the sump is at the bottom of the 3 ft. excavation depth; thus, will the excavated contaminated soil be equally divided above and below the liners?
4. How will the base and sidewall of backfilled soils be sampled? As written, it is ambiguous of what is meant by backfilled soils. Is this in reference to the column of materials above the sump (i.e., excavated soil above and below the layers)?
5. Table 3 do not correspond with text in terms of the number of sample locations with soil samples taken at 2 ft. and 10 ft. Please clarify.
6. Typically, NMOCD evaluates depth to groundwater using the radius of a section around the release point on OSE's depth to water table. The average for this release is 50 ft.
7. Is the proposed revegetation plan an approved SLO method?

Thanks,
Olivia