

From: [Yu, Olivia, EMNRD](#)
To: ["Alyssa Beard"](#); [Hernandez, Christina, EMNRD](#); [Mann, Ryan](#)
Subject: RE: Chalupa Update - 1RP-4632 & 4633
Date: Wednesday, November 14, 2018 8:00:00 AM

Good morning Ms. Beard:

Thank you for submitting a summary of the meeting regarding the remediation status of 1RP-4632 and 1RP-4633. The below proposed remediation plan and timeline is accepted.

Thanks,
Olivia

From: Alyssa Beard <ABeard@foundationenergy.com>
Sent: Monday, November 12, 2018 10:48 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Hernandez, Christina, EMNRD <Christina.Hernandez@state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>
Subject: [EXT] Chalupa Update - 1RP-4632 & 4633

Good morning,
Please find below a summary on our recent bench-scale testing at the Chalupa release site, as discussed on our phone call 11/6/18.
Also included is an updated timeframe for remediation activities to commence.
Thanks so much.

From: Michael Lindstrom <mlindstrom@tasman-geo.com>
Sent: Thursday, November 8, 2018 10:44 AM
To: Alyssa Beard <ABeard@foundationenergy.com>
Subject: Chalupa Update

I am providing a brief update of the remediation activities for the Foundation – Chalupa #4 Release Site. Between August and September of 2018 a bench-scale test was conducted using eight (8) Site samples (composited from 0-4 feet bgs) that were collected spatially across the two impacted areas. The bench-scale was performed to confirm water use rates and to confirm the chloride impacted soil could be successfully remediated using soil washing. The results of the test are summarized below:

- There was some variability in how quickly the soils drained and it took between 2 to 4 pore volumes of water to saturate and rinse the soil. The initial saturation volume for full-scale application will likely be approximately 30 to 35% of the soil pore space.
- Mixing hay into the soils with minimal compaction when placed in the bench-scale treatment cells enhances drainage of water through the soil column. By increasing the hay volume enhanced percolation of water (additives) through the soils it appears we were able to increase the ability of the water and additives to contact the soil particles to remove chlorides.

- Laboratory chloride (EPA 300.0) results for eleven (11) bench-scale tests was conducted. A composite soil sample for this test (Control - untreated) exhibited a chloride concentration of 3,064 mg/kg. The results for chloride reduction from the test exhibited concentrations of less than 600 mg/kg (the site clean-up standard) for all the tests except one that exhibited a chloride concentration of 744.96 mg/l.
- Soil geotechnical characterization of the soil at the site indicated that the material is generally a sandy-clay loam with some variance in which the clay content is as high as 45% (more of a clay) or the sand content is as high as 75% (more of a sandy loam).

Based on the success of the bench-scale test the project schedule has been finalized and is provided below.

- Playa Investigation/Determination – November 2018 through January 2019
- Mobilization – February 2019
- North Release Area (NRA) Excavation and Backfill – March 2019
- NRA Soil Amendment and Liner/Underdrain System - March 2019
- South Release Area (SRA) Excavation and Backfill - April 2019
- SRA Soil Amendment and Liner/Underdrain System - April 2019
- NRA and SRA Soil Washing and Confirmation Sampling – May 2019 through January 2020
- Site Reclamation/Closure Reporting – March 2020 through May 2020

Quarterly updates will be provided to the NMOCG so that remediation progress can be monitored by the agency.

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