From:	Bratcher, Mike, EMNRD
То:	"Jacob Kamplain"; Patterson, Heather, EMNRD
Cc:	"Baker, Larry"; "Hack Conder"; "Laura Flores"; "Lara Weinheimer"; "Catherine Ursanic"
Subject:	RE: Apache State SWD #3
Date:	Wednesday, April 08, 2015 12:47:00 PM

RE: Apache Corp. * Apache St SWD 3 * 30-015-38978 * E-30-17s-31e * Eddy County, NM NMOCD Tracking Number: **2RP-2923** * Date of release: 3/4/15

Greetings,

Your proposal for remediation of the above referenced release, by means of a soil washing technique, is approved subject to the following conditions of approval, and notations.

Due to the proximity of this SWD to an adjacent playa lake (less than 1000'), chloride level in soils that are to remain at the site are to be 1000 mg/kg or less. This will include material on and off of the facility pad. OCD does request confirmation/delineation samples be obtained in the area identified as PT 4, as well as an investigation, to the extent practicable, on how much of the pad may have a liner installed in the sub-surface. During a field inspection of the site, it was noted that a liner was evident in the area excavated to repair the line. This portion of that liner was breached during repair operations. Impacted areas in the facility location may require deeper excavation than the proposed 6".

In the proposal, WW 4 is referenced as being at the facility fence. The diagram shows this point to be on the south side of the scrape/excavation, away from the fence. Horizontal delineation, as well as vertical, will be required in all impacted areas.

Disposition of fluids and/or solids resulting from the soil washing operation will require OCD review and approval.

Please notify the District 2 office prior to commencement of operations.

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.

If you have any questions or concerns, and for notification, please contact me and/or Heather Patterson. <u>Heather.Patterson@state.nm.us</u>

Mike Bratcher NMOCD District 2 811 S. First Street Artesia, NM 88210 O: 575-748-1283 X108 C: 575-626-0857 F: 575-748-9720 From: Jacob Kamplain [mailto:jkamplain@rice-ecs.com]
Sent: Thursday, March 26, 2015 9:47 AM
To: Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD
Cc: 'Baker, Larry'; 'Hack Conder'; 'Laura Flores'; 'Lara Weinheimer'; 'Catherine Ursanic'
Subject: Apache State SWD #3

Apache State SWD #3 UL/E sec. 30 T17S R31E

Path Forward

Apache Corporation (Apache) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 3.9 miles east of Loco Hills, New Mexico at UL/E sec. 30 T17S R31E. The site is in an area of no known groundwater.

RECS personnel were on site beginning on March 4th, 2015, to assess the site. The release covered 24,937 square feet of lease pad and 20,289 square feet of pasture land (Figure 1). The wet material was scraped up from the battery pad and taken to a spoil pile. Six surface samples from the release were taken and field tested for chlorides and organic vapors. All samples returned elevated field chloride readings and low organic vapor readings. Four verticals were installed throughout the release to determine the depth of contamination. Vertical 1 was installed to 6 inches bgs, and the field test of the sample returned low chloride and organic vapor readings. Vertical 2 was installed to 2 ft bgs and was halted when a liner was discovered at 2.5 ft bgs. The verticals in the pasture were sampled every 6 inches until field chloride readings indicated that the bottom sample from each vertical would returned laboratory chloride readings below 250 mg/kg. The analyses returned laboratory chloride readings below 250 mg/kg (Appendix A).

The release area in the pasture to the west was scraped down to 1 ft bgs, and the pasture area to south was scraped down to 1.5 ft bgs (Figure 2). Once the scrapes were completed, wall samples and a 5 point bottom composite sample of the west area and a 3 point bottom composite of the south area were taken and field tested for chlorides and organic vapors. The samples were then taken to a commercial laboratory for analyses. All samples returned laboratory chloride reading near or below 1,000 mg/kg, except for West Wall 4 located at the battery fence, which returned a chloride value of 1,680 mg/kg.

Path Forward

A large spoil pile remains at the site. Once the scrapes in the pasture have been approval to be backfilled, the spoil pile will be washed. The contaminated water will be evaluated for use in future oilfield activities. A sample of the washed soil will be taken to a commercial laboratory to confirm that the chloride reading is near or below 1,000 mg/kg. The cleaned soil will be used to backfill the scrapes in the pasture. The remaining area in the pasture will then be scraped down to 1 ft bgs. Once the scrape is completed, bottom grab samples and wall samples from the scrape will be taken and field tested for chlorides and organic vapors. If the field data indicates that the grab samples will not achieve chloride readings below 1,000 mg/kg, the scrape will be deepened until field testing indicates that all samples from the bottom and wall samples will return chloride values below 1,000 mg/kg. The grab samples will then be taken to a commercial laboratory to confirm that the chloride readings are below 1,000 mg/kg.

The release area in the lease pad is partially located over the facility liner. In areas where the liner exists, the pad will be scraped down 6 inches. In areas where the liner does not exist, the pad will be scraped down as possible. There are known buried electrical lines in the area and scraping in this area will be completed so as not to endanger facility operations or field personnel. Once these scrapes are completed, the soil will be washed and backfilled into the scrapes.

Photo documentation of the initial release can be found in Appendix B.

Jacob Kamplain

Project Leader 419 W. Cain Hobbs, NM 88240 (575)942-8221