

From: Patterson, Heather, EMNRD
To: ["Kyle Norman"](#)
Cc: ["Baker, Larry"](#); ["Hack Conder"](#); [Bratcher, Mike, EMNRD](#); ["Lara Weinheimer"](#); ["Laura Flores"](#); [Jeffery Robertson](#)
Subject: RE: Apache Crow Federal 35H (2RP-2677) Path Forward
Date: Friday, May 01, 2015 1:15:00 PM

RE: Apache * Crow Fed #35H * 30-015-42140 * 2RP-2677

Kyle,

Your proposed path forward is approved with the following stipulations:

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.

Heather Patterson
Environmental Specialist
NMOCD District II
Office (575)748-1283 ext.101
Cell (575)703-0228

From: Kyle Norman [mailto:knorman@rice-ecs.com]
Sent: Tuesday, April 28, 2015 1:20 PM
To: Patterson, Heather, EMNRD; Jeffery Robertson
Cc: 'Baker, Larry'; 'Hack Conder'; Bratcher, Mike, EMNRD; 'Lara Weinheimer'; 'Laura Flores'
Subject: Apache Crow Federal 35H (2RP-2677) Path Forward

Apache Crow Federal 35H (2RP-2677)
UL/M sec. 3 T17S R31E
API No. 30-015-42140

Path Forward

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

The site is located approximately 5.8 miles west of Maljamar, New Mexico at UL/M of sec. 3 T17S R31E. This site is located in an area of no known groundwater. On December 14th, 2014, Apache discovered an overflowing frac tank during a well test. A total of 200 barrels of oil was released over 5,981 sq ft of lease pad and 2,781 sq ft of pasture land. Vacuum trucks were dispatched to the site and recovered 180 barrels of oil. NMOCD and BLM were notified of the release on December 14th, 2014, and an initial C-141 was sent to both agencies for approval. NMOCD approved the initial C-141 on December 19th, 2014.

On December 15th, 2014, RECS personnel were on site to begin remediation activities. The release near the frac tank was scraped down to a depth of 1 ft bgs, and the highly contaminated soil was taken to a NMOCD approved facility for disposal. The remainder of the excavated soil from the 1 ft bgs scrape was left on site. Once the scrape was completed, discrete samples from the walls and bottom of the excavation were taken and field tested for chlorides and organic vapors. The samples were then sent to a commercial laboratory for analyzes. All samples from the excavation returned chloride, TPH and BTEX readings at or near non-detectable levels. The scrape was then backfilled.

Three points in the pasture and four points on the lease pad were sampled at the surface of the release. Two points in the pasture and three points from the pad were also sampled with depth. The samples were field tested for chlorides and organic vapors. Representative samples from the pasture and pad were taken to a commercial laboratory for analyzes. Laboratory analyses showed surface chloride levels from the pasture below regulatory standards, and chloride levels at 3 inches bgs from the pad below regulatory standards. However, hydrocarbon levels were still elevated with depth at all points, except for Point 2 in the pasture.

Path Forward

The remainder of the pad will be scraped down until discrete samples from the scrape indicate that all samples from the bottom will return TPH values below 5,000 mg/kg and BTEX values below 50 mg/kg. The discrete samples will then be taken to a commercial laboratory to confirm the TPH and BTEX readings.

Around Point 1, Point 2 and Point 3 in the pasture, the area will be scraped down 1 ft bgs. Once the scrapes are completed, discrete bottom samples will be taken and field tested for organic vapors. If the field data indicates that the discrete samples will not achieve TPH readings below 5,000 mg/kg and BTEX readings below 50 mg/kg, the scrape will be deepened until field testing indicates that all samples from the bottom and walls will return TPH values below 5,000 mg/kg and BTEX values below 50 mg/kg. The discrete samples will then be taken to a commercial laboratory to confirm the TPH and BTEX readings.

The excavated soil will be washed and then discrete samples of the washed soil will be taken to confirm that the TPH readings are below 5,000 mg/kg and the BTEX reading are below 50 mg/kg. The discrete samples will be sent to commercial laboratory for confirmation of these readings. The site will be backfilled with the washed soil and contoured to the surrounding area. The disturbed

area in the pasture will be seeded with a blend of native vegetation.

The supporting documentation for this release and the path forward is attached.

Kyle Norman
Project Lead
419 W. Cain
Hobbs NM 88240
Cell # (575)942-8542
Fax # (575)393-0293