

Bratcher, Mike, EMNRD

From: Lowry, Joel <JLowry@trcsolutions.com>
Sent: Tuesday, January 16, 2018 12:19 PM
To: Bratcher, Mike, EMNRD; Price, Henryetta
Cc: Rebecca Haskell; Dakota Neel
Subject: FW: 2RP - 3669 COG's Yellowstone 3 Federal #003 - Remediation Summary and Permission to Backfill Request
Attachments: 2RP-3669 - COGs Yellowstone 3 Federal #003 - NMOCD Update - Permission to Backfill.pdf

Mike and Henryetta,

Please find attached a *Soil Chemistry Table* along with a *Site & Sample Location Map* that has been prepared for COG's Yellowstone 3 Federal #003 (2RP-3668) Release Site. The Release Site is located in Unit Letter "L", Section 03, Township 26 South, Range 25 East on land owned by the United States Department of the Interior Bureau of Land Management. The initial NMOCD Form C-141 indicated that the failure of a load line resulted in the release of approximately fifteen (15) bbls of produced water. During initial response activities, a vacuum truck was utilized to recover approximately twelve (12) bbls of free standing fluid. The release affected an area measuring approximately 2,605 square feet. A majority of the release was confined to the caliche well pad, however a small "streamer" ran off location to the southeast for approximately one hundred forty (140) ft.

On September 22, 2017, TRC Environmental, on behalf of COG, submitted a *Soil Investigation Summary and Proposed Remediation Workplan (Workplan)* to the NMOCD and BLM that proposed remediation activities designed to advance the Yellowstone 3 Federal #003 toward and NMOCD and BLM approved closure status. The *Workplan* detailed field activities and laboratory analytical results from soil samples collected during the initial investigation (5/25/2016) and subsequent delineation events (1/10/17, 3/7/17). The *Workplan* proposed the excavating the affected area on the caliche well pad to depth of approximately three (3) ft. bgs and the narrow flowpath within the affected pasture to a depth of two (2) ft. bgs. Excavated soil would be temporarily stockpiled on-site atop an impermeable liner then transported to an NMOCD-approved disposal facility. The *Workplan* was subsequently approved with the caveat that field confirmation samples be collected. Please reference the *Soil Investigation Summary and Proposed Remediation Workplan* dated September 22, 2017, for additional details.

On December 13, 2017, remediation activities commenced at the release site. As per the approved *Workplan*, impacted soil with the release margins was excavated and stockpiled on-site atop an impermeable liner, pending final disposition. The affected area on the caliche well pad was excavated to a depth of approximately three and one half (3.5') bgs. The narrow flowpath within the affected pasture was excavated to a depth of approximately four (4) ft. bgs. The sidewalls of the excavated area were advanced until field test results suggested chloride concentrations were below the NMOCD Recommended Remediation Action Level. Upon advancing the floor and sidewalls of the excavated area, TRC collected fourteen (14) soil samples (BH-1 3.5', EW-1 1.5', WW-1 1.5', NW-1 1.5', BH-2 4', EW-2 2', WW-2 2', BH-3 3', NW-3 1.5', SW-3 1.5', BH-4 3', NW-4 1.5', EW-4 1.5' and SW-4 1.5') from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from less than the applicable laboratory reporting limit (RL) in soil samples BH-1 3.5', NW-1 1.5', EW-2 2', BH-3 3' and NW-4 1.5' to 451 mg/kg in soil sample BH-2 4'. In addition, one soil sample (T-BH-2 10') was collected from a delineation trench advanced in the area characterized by soil sample BH-2 4' and submitted to the laboratory for analysis of chloride concentrations, which were determined to be 107 mg/kg.

Based on laboratory analytical results from confirmation soil samples and remediation activities conducted to date, TRC, on behalf of COG, requests NMOCD and BLM permission to backfill the excavated area with locally-source, non-impacted "like" material. Excavated soil currently stockpiled on-site will be transported to and NMOCD-approved

disposal facility. Upon completion of remediation activities, a Remediation Summary and Soil Closure Request will be prepared detailing remediation activities and laboratory analytical results from confirmation soil samples.

Joel Lowry

Senior Project Manager



2057 Commerce Drive, Midland, TX 79703
T: 432-520-7720 | F: 432-520-7701 | C: 432-466-4450

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