



January 9, 2016

Reference No. 074635

Mr. Jamie Keys
Environmental Specialist, District 1
Oil Conservation Division, EMNRD
1625 N. French Drive
Hobbs, New Mexico 88240

Dear Mr. Keys,

Re: Work Plan
Central Vacuum Unit No. 266 Injection Line Release
RP# 3948
Unit E, Section 6, Township 18-S, Range 35-E
Latitude: N 32.793453, Longitude: W 103.509696
Lovington, New Mexico

1. Project Information

The Site is located in Unit E, Section 6, Township 18 South, Range 35 East, approximately 0.65-miles southwest of Buckeye, New Mexico, in eastern Lea County. Chevron submitted an initial C-141 form to the New Mexico Oil Conservation Division (NMOCD) dated January 10, 2011, describing a release of 75 barrels (bbls) of produced water with zero (0) volume being recovered. The source of the release was recorded to have been a ruptured injection line.

Information available on the Petroleum Recovery Research Center (PRRC) Mapping Portal and the United States Geological Survey (USGS) Current Water Database for the Nation indicates:

- The depth to groundwater at the Site is greater than 100-feet bgs;
- The nearest private domestic water source is greater than 200-feet from the release site;
- The nearest public/municipal water source is greater than 1,000-feet from the release site; and
- The release site lies more than 1,000 horizontal feet from the nearest surface water body.

Consequently, the NMOCD total ranking criteria score is zero (0) for the Site. The anticipated site-specific Recommended Remediation Action Levels (RRALs) to be applied to this location by the NMOCD are 10 milligram per kilogram (mg/kg) for benzene; 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX); 5,000 mg/kg for total petroleum hydrocarbons (TPH); and a NMOCD accepted concentration of 500 mg/kg for chlorides.

A subsurface investigation was implemented at the Site. Evaluation of the analytical data obtained from soil assessment and delineation activities performed in April of 2014 and August of 2015

indicates that vertical and horizontal delineation of chloride impacts have not been achieved at the Site in proximity to SB-6 and SB-10.

On November 10, 2015, GHD and Chevron representatives met with NMOCD representatives at the NMOCD Field Office located in Hobbs, New Mexico. The meeting addressed NMOCD's request for additional delineation activities and addressing the chloride concentrations reported in soil at the Site. All parties agreed that due to numerous active utilities transecting the Site, further delineation and soil remediation was neither feasible nor practical at this time. Additionally, per a phone conversation between GHD and NMOCD on January 14, 2015, NMOCD agreed that remediation activities in the vicinity of SB-6 could be deferred until production operations ceased at the Site. The following scope was agreed upon by all parties.

2. Scope of Work

The scope of work for this project will involve placement of a polyethylene liner over the impacted area in the vicinity of SB-10 (see Figure 1). Subsequently, the liner will be covered with approximately two (2) feet of clean soil, fertilized, and seeded. The following outlines basic project details that will be completed by GHD and GHD subcontractors:

Field Program

The field program will consist of the following:

- Prior to mobilizing the heavy equipment to the Site, the impacted location will be marked and New Mexico 811 (One Call) will be contacted by the construction subcontractor to identify any subsurface hazards within the proposed area to be capped. Chevron will spot locate any underground utilities and/or pipelines within the assessment area;
- A ground penetrating radar (GPR) survey will be conducted at the Site to confirm underground utility locations;
- To determine the horizontal extent of chloride impact encompassing the impacted area at the Site in the vicinity of SB-10, surface soils will be field screened for chloride by mixing soil samples with de-ionized water. The rinsate will be analyzed using Hach chloride test strips. Field screening results indicating surface soils below regulatory levels will be used to determine the size and dimensions of the surface liner and associated soil cap;
- Confirmation laboratory surface soil samples will be collected around the perimeter of the lined and capped area. Samples will be sent to Xenco Laboratories of Odessa, Texas, and analyzed for chloride;
- A 20 mil polyethylene liner will be placed across the ground surface on the impacted area in the vicinity of SB-10. Liner seams will be overlapped a minimum of 24 inches. The liner will be placed without rips or tears; and
- The liner will be covered (capped) by approximately two (2) feet of clean top soil. The edges of the cap will be sloped and contoured to allow proper drainage. The area will be fertilized and reseeded with a Bureau of Land Management-approved seed mix (seed mix #3).

Health and Safety Considerations

Personal protective equipment, including fire-retardant clothing, steel-toed work boots, gloves, safety glasses, and hard hats will be required during all field tasks. The project health and safety plan will be maintained on Site and will be reviewed and signed by on-Site personnel, subcontractors, and authorized visitors.

Quality Assurance/ Quality Control

Confirmation surface soil sampling will be completed in accordance with our standard Quality Assurance/ Quality Control procedures designed to minimize cross-contamination between samples and to provide reliable laboratory results.

Reporting

A short letter report summarizing remediation activities will be submitted. The letter report will include a Site description, project history, description of field events, a discussion of results, and recommendations (if any).

The report will include:

- A scaled Site plan showing the locations of the two capped areas and other Site features;
- Tabulation of field screening and laboratory analytical results; and
- Geotagged photographic documentation of field activities.

3. Work Plan Approval Request

GHD is prepared to initiate the scope of work immediately. If you have any questions or comments with regards to this work plan, please do not hesitate to contact our Houston office at (713) 734-3090. Your timely response to this correspondence is appreciated.

Sincerely,

GHD



Scott Foord

Project Manager

Sf/bb/1

Encl. (1)



Bernard Bockisch, PMP

Senior Project Manager