



January 25, 2018

Mr. Mike Bratcher  
New Mexico Oil Conservation Division – District 2  
811 S. First Street  
Artesia, NM 88210

**RE: Impacted Soil Removal, Disposal, and Site Restoration  
Foster Tank Battery Facility  
Eddy County, New Mexico**

Mr. Bratcher:

WSP USA (WSP), formerly Leggette, Brashears & Graham (LBG) is pleased to submit this work plan to excavate approximately 300 cubic yards of petroleum hydrocarbon and chloride impacted soil from the Percussion Petroleum, LLC (Percussion) Dagger Draw area Foster Tank Battery (TB) oil production facility (Site) in Eddy County, New Mexico (Figure 1). The work plan includes the scope of work, project schedule and approach.

Surface soil south of the pad at the Site was impacted with produced water from a flow line leak that occurred the last week of November 2017. A follow-up soil investigation indicated that an area of approximately 150 feet by 50 feet of surface soil to a depth of approximately 1 foot below grade was impacted with benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH), above New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (Guidelines). The soils were also impacted with chlorides above the non-published NMOCD guidelines.

The concentrations of chloride observed in the soil preclude the ability to landfarm the soil on-site, or within a larger permitted landfarm off-site without some form of pre-treatment. As a result, the quickest and likely most cost-effective way to handle the soil is to excavate and dispose of the soil at an off-site landfill facility.

This work plan includes the following tasks:

- Project Coordination;
- Oversight and direction of excavation of impacted soils;
- Collection of confirmation samples to verify the impacts have been effectively removed;
- Transport and dispose the soil to an off-site landfill location;
- Import clean backfill and restore the excavation surface area to original grade and compaction and,
- Prepare a letter report summarizing the above described activities.

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The excavation, soil disposal, and restoration work will be performed by Dudley Sales & Service (Dudley) of Artesia, New Mexico. R360 Environmental Solutions (R360) will be the disposal facility accepting the soil.

## SCOPE OF WORK

The activities discussed above are organized into five primary tasks which are described in more detail below.

### **Task 1: Project Coordination and Work Plan Preparation**

This task includes WSP services to evaluate and define the project scope, coordinate contractor efforts, and provide timely updates to Percussion during the course of the field work.

### **Task 2: Soil Excavation and Site Restoration**

Based on previous soil investigation results, an impacted soil area of approximately 150 feet long by 50 feet wide exists to a depth of approximately 1 foot south of the pad area at the Site. Concentrations of BTEX and TPH in the soil exceed the NMOCD cleanup Guidelines, and the chloride concentrations in the soil exceed the non-published NMOCD guidelines.

This task includes excavation of approximately 300 cubic yards of impacted soil, load and haul the soil to the R360 facility near Hobbs, NM, provide and install clean fill, and restore the surface grade and compaction. **Task 3: Soil Confirmation Sampling**

This task includes WSP to collect soil excavation confirmation samples following excavation activities to document that the impacts have been successfully removed. The soil samples will be submitted to ALS Group USA, Corp. in Houston, Texas and will be analyzed for BTEX, TPH and chloride content. Analytical results will be summarized in a letter report documenting that the impacts have been successfully removed (See Task 5 below).

### **Task 4: Soil Disposal**

The two nearest landfills were contacted to determine their ability to accept the impacted soil. Based on the soil analytical results, Lea Land LLC indicated that they could not accept the soil due to the petroleum content. Based on its ability to accept the soil, R360 landfill was chosen for the disposal location.

### **Task 5: Final Report and Project Closeout**

A letter report summarizing the produced water release, previous investigation work, and documenting and confirming the excavation and disposal of the impacted soil will be prepared and submitted to NMOCD. The report will include a Site map showing the extent of the excavation and the location of confirmation soil samples, and a table summarizing the analytical results of the soil confirmation samples.

## PROJECT SCHEDULE

WSP can begin coordinating this project immediately after receiving the NMDOC authorization to proceed. A final report will be submitted to NMOCD.



## PROJECT APPROACH

Mr. Matthew Boyle will serve as Project Manager and will have the authority to commit whatever resources are necessary to support the project. It will be his responsibility to assure that the project needs are met in terms of scope of work and schedule. One (1) WSP employee will be dispatched to the field to oversee and direct the excavation activities, and to collect soil confirmation samples.

We look forward to receiving approval of this work plan and look forward to working with you on this project.

Sincerely,

A handwritten signature in black ink that reads "Matthew Boyle". The signature is fluid and cursive.

Matthew Boyle  
Sr. Environmental Scientist

A handwritten signature in black ink that reads "Charles D. Harlan". The signature is fluid and cursive.

Charles D. Harlan, P.G.  
Director, Business Development - Environment

CC :