March 29, 2010

Mr. Mike Bratcher
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1301 W. Grand Avenue
Artesia, New Mexico 88210

Re: Remediation Workplan,
Marks and Garner Production LTD Co., Red Twelve Federal #1
Unit Letter O (SW/4, SE/4), Section 33, Township 16 South, Range 29 East,
Eddy County, New Mexico
(Latitude: N 32.87168°, Longitude: W 104.07923°)
2RP #306

Dear Mr. Bratcher:

Marks and Garner Production LTD Co. (M&G), has retained Ocotillo Environmental, LLC (Ocotillo) to remediate impacts to soil from a leak at the Red Twelve Federal #1 tank battery. The well is located in the southwest quarter (SW/4) of the southeast quarter (SE/4), Section 33, Township 16 South, Range 29 East, Eddy County, New Mexico (Site). The date and volume of the release are unknown. A C-141 was submitted to the New Mexico Oil Conservation Division (NMOCD) on April 24, 2009. Appendix A provides a copy of the C141. Figure 1 shows the site location.

Based on published literature (1961), well records of the New Mexico State Engineer, and well records of the United States Geological Survey, groundwater occurs at approximately 65 feet bgs in the well located nearest the Site. No domestic water wells are located within 1,000 feet of the site. The NMOCD has established recommended remediation action levels (RRALs) for benzene, total BTEX and TPH resulting from spills of natural gas liquids ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"). Remediation levels for benzene, total BTEX and TPH were calculated using the following NMOCD criteria:

Criteria	Result	Ranking Score
Depth-to-Groundwater	50 - 99 Feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Horizontal Feet	0
		Total: 10

The following RRALs have been assigned based on NMOCD criteria:

Benzene	**10 mg/kg**
Total BTEX	**50 mg/kg**
TPH	**1,000 mg/kg**

OCD Case# 14393
Marks & Garner
July 22, 2010
Ex# 1

Initial Investigation

On September 10, 2009, a letter was prepared for the NMOCD by R.T. Hicks Consultants, Ltd. (Hicks), that reported results of soil samples collected at the site in order to provide horizontal delineation of the spill. Hicks also provided documentation that groundwater in the area is confined, thereby making the depth to groundwater "not relevant". Appendix B provides a copy of the "Hicks" diagram (Plate 2C) showing sample point locations and chloride concentrations, as well as a copy of the "Hicks" table of Field and Laboratory Data – Soil Samples.

Current Investigation

On March 1, 2010, Ocotillo installed six (6) soil borings (BH-1 through BH-6) at the site, using an air rotary drilling rig, in order to further assess the horizontal and vertical limits of the spill. Soil samples from the exploratory borings were collected in five foot intervals from the ground surface to a depth of approximately 31 feet below ground surface (bgs) in borings BH-1, BH-2, BH-3, BH-4 and BH-6, and to a depth of approximately 21 feet bgs in boring BH-5. The soil borings were plugged with bentonite. Figure 2 shows the locations of the soil borings. Appendix C provides copies of the Well Record and Logs provided to the Office of the State Engineer.

The soil samples from borings BH-1 through BH-6 were placed in clean glass sample jars, labeled, and delivered under chain-of-custody control to Xenco Laboratories, located in Odessa, Texas. All soil samples collected from borings BH-1 through BH-6 were analyzed for chlorides by EPA method E300. Table 1 presents a summary of the laboratory analysis of soil samples. Laboratory analysis and chain of custody documentation are included in Appendix D.

Referring to Table 1, chloride concentrations were below 250 mg/kg in samples from boring BH-1 at a depth of approximately 30-31 feet bgs (55.2 mg/kg), from boring BH-5 at a depth of approximately 10-11 feet bgs (155 mg/kg), and from background boring BH-6 at all depths except from 15-16' bgs (1,200 mg/kg). Vertical delineation was not achieved (below 250 mg/kg) in soil borings BH-2, BH-3 and BH-4, although chloride concentrations did show a decreasing trend in borings BH-2 and BH-3.

Proposed Remediation

Marks and Garner proposes to conduct excavation of the hydrocarbon impacted soil around the tank battery to a depth of approximately one (1) foot bgs, or until confirmation samples report TPH concentrations below 1,000 mg/kg. Marks and Garner further proposes to excavate chloride impacted soil west and southwest of the tank battery, in the vicinity of soil borings BH-1, BH-2, BH-3 and BH-4 to a depth of approximately five (5) feet bgs. Horizontal delineation will be determined by laboratory analysis of samples collected during excavation. All excavated soil with a chloride concentration greater than 5,000 mg/kg will be hauled to an NMOCD approved disposal facility. Excavated soil with a chloride concentration less than 5,000 mg/kg will be blended on-site with organic material, in order to reduce the chloride concentrations to less than 1,000 mg/kg. A 20 mil plastic liner will be installed at the five foot depth, and the excavated areas will be backfilled with either clean soil or blended soil with a

chloride concentration less than 1,000 mg/kg. Excess blended soil (with a chloride concentration less than 1,000 mg/kg) will be used to construct firewalls around the Marks and Garner tank batteries and / or other ancillary equipment.

If you have any questions or need additional information, please call Mr. Quinton Welborn at (575) 631-0949, or myself at (575) 441-7244. We may also be reached by email at qwelborn@valornet.com or Cindy.Crain@gmail.com.

Sincerely,
Ocotillo Environmental, LLC

Cindy K. Crain, P.G.
Environmental Manager

cc: Quinton Welborn, Marks & Garner

FIGURES

TABLE

APPENDIX A

INITIAL C141 DOCUMENTATION

APPENDIX B

R.T. HICKS INITIAL INVESTIGATION

PLATE 2C
And
TABLE OF FIELD AND LABORATORY DATA

APPENDIX D

ANALYTICAL DATA AND CHAIN OF CUSTODY DOCUMENTATION