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By OCD District 1 at 12:34 pm, Aug 05, 2015

APPROVED Conditional
By OCD District 1 at 12:34 pm, Aug 05, 2015

1. Ensure BLM approval/concurrence.

August 4, 2015 Reference No. 088210-17

Ms. Kellie Jones
Environmental Specialist, District 1
Oil Conservation Division, EMNRD
1625 N. French Dr
Hobbs, New Mexico 88240

Dear Ms. Jones,

Re: Work Plan
Red Hills North Unit 606
RP# 1RP-3744
Unit O, Section 6, Township 25-S, Range 34-E
Latitude: N 32.153312, Longitude: W 103.505175
Lea County, New Mexico

1. Project Information

The Red Hills North Unit 606 site (hereafter referred to as the "Site"), is an active water injection facility situated approximately 20 miles northwest of Jal in Lea County, New Mexico (see Figure 1). It is located in Unit O, Section 6, Township 25 South, Range 34 East. According to EOG personnel, a release of approximately 1,800 barrels (bbls) of produced water occurred when tanks in the tank battery overflowed due to a storm causing loss of power to an analog module that controlled the pumps and valves for the tank battery. The analog module was replaced and a vacuum truck was mobilized to the Site. Approximately 1,765 bbls of fluids were recovered. Approximately 35 bbls ran out an estimated 400 feet into a pasture and was not recovered. A Form C-141 was submitted to the NMOCD and remediation permit number 1RP-3744 was assigned.

Based on information available from the Petroleum Recovery Research Center Pit Rule Mapping Portal, the depth to groundwater at the Site is most likely greater than 100 feet bgs. There are no well head protection areas in the vicinity of the Site. However, there are surface water bodies within 200 to 1,000 feet of the Site. Therefore, the preliminary ranking score is 10.

Based on this score, the Site-specific Recommended Remediation Action Limits (RRALs) to be applied by the NMOCD are 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, 1,000 mg/kg for TPH, and 500 mg/kg for chloride.

GHD Services Inc.
6121 Indian School Road NE Suite 200 Albuquerque New Mexico 87110 USA
T 505 884 0672 F 505 884 4932 W www.ghd.com

2. Scope of Work

The scope of work for this project will involve the excavation of impacted soil accompanied by soil sample analysis. A Class 3 Pedestrian Survey is currently being performed in accordance with Bureau of Land Management (BLM) requirements. Archaeological clearance will be obtained prior to commencement of excavation activities. Field screening of soils will be performed in order to guide excavation activities. Subsequently, the excavation will be backfilled with clean soil, fertilized, and seeded. The following outlines basic project details that will be completed by GHD and EOG subcontractors:

Field Program

The field program will consist of the following:

- Impacted soil in the affected area will be excavated. The soil disposal facility identified for this project is Sundance/Parabo, in Eunice, New Mexico;
- Soils will be field screened for chloride during excavation by mixing soil samples with de-ionized water. The rinsate will be analyzed using Hach chloride test strips. Soils will also be field screened for organic vapors using a calibrated photoionization detector. If field screening indicates that soils are below regulatory levels, excavation would halt to minimize excavating clean soil;
- Confirmation laboratory samples will be collected at intervals to be determined during excavation. Samples will be sent to Xenco Laboratories of Odessa, Texas, and analyzed for BTEX, TPH, and chloride;
- If impacts appear to extend past four feet bgs, a 20 mil polyethylene liner will be placed in the bottom of the excavation. Liner seams will be overlapped a minimum of 24 inches. Each liner will be placed without rips or tears; and
- The excavation will be backfilled to grade using clean fill material. The disturbed area will be fertilized and reseeded with a BLM-approved seed mix.

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 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 excavation and other Site features;
- Tabulation of field screening and laboratory analytical results;
- Copies of landfill manifests; 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 Albuquerque office at (505) 884-0672. Your timely response to this correspondence is appreciated.

Sincerely,

GHD

Cale Kanack

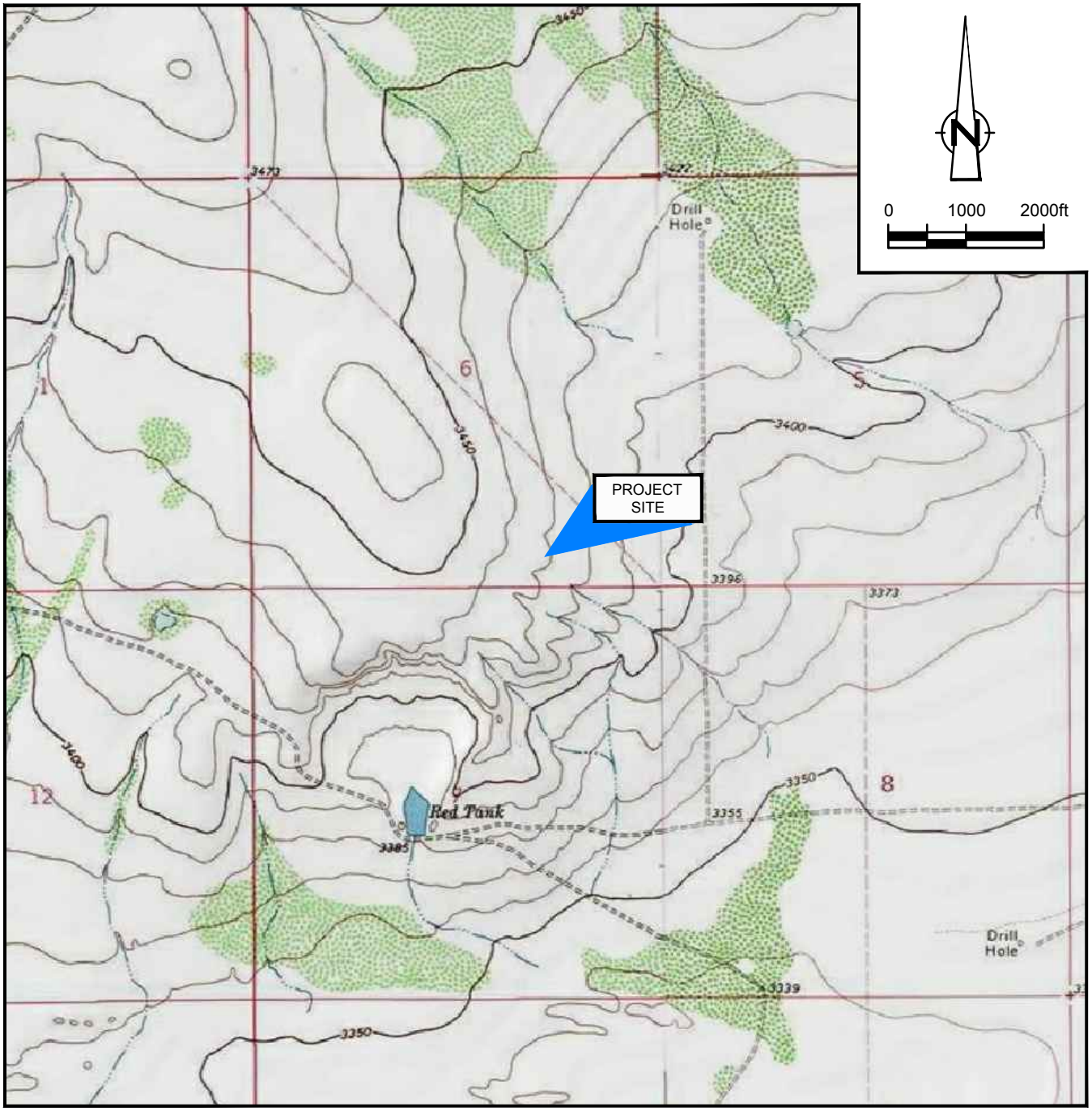
Staff Scientist

Bernard Bockisch, PMP

Senior Project Manager

CK/mc/1

Encl. (1)



SOURCE: USGS 7.5 MINUTE QUAD
"BELL LAKE AND WOODLEY FLAT, NEW MEXICO"

LAT/LONG: 32.1533° NORTH, 103.5052° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP
RED HILLS NORTH UNIT 606H
near Jal, New Mexico

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