AE Order Number Banner

Report Description

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App Number: pENV00003RP364

3RP - 364

WILLIAMS FOUR CORNERS, LLC

6/12/2017

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Email and US Mail

November 21, 2016

OIL CONS. DIV DIST. 3

NOV 22 2016

Mr. Cory Smith
Environmental Specialist
New Mexico Oil Conservation Division
1000 Rio Brazos
Aztec, NM 87410

Re: Florance Gas Com J16A – Draft Groundwater Remediation Plan, Florance Gas Com J # 16A, 30-045-21790, Section 6, Township 30N, Range 9W

Dear Mr. Smith,

In response to the letter Williams Four Corners LLC (Williams) received from the New Mexico Oil Conservation Division (OCD) dated October 6, 2016, Williams is submitting the attached Draft Groundwater Remediation Plan.

This draft work plan is subject to change based on additional information that will be obtained during the current remediation activities. Modifications to the draft work plan will be submitted to the OCD prior to commencing remediation activities.

Please contact me at (505) 632-4442 with any questions regarding this work plan.

Sincerely,

Matt Webre, PG
EH&S Supervisor

Attachment

cc: Brandon Powell, OCD
Katherina Diemer, BLM

Accepted for Record
Additional work plan
Recieved At Later Date

(8)

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Remedial Assessment Work Plan

Florance Gas Com J16A, 3RP-364

Florance Gas Com J16A, 3RP-364
San Juan County, New Mexico

Project 155624

November 21, 2016

Prepared for:

Williams Four Corners LLC

Prepared by:

CB&I Environmental & Infrastructure, Inc.

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1.0 INTRODUCTION

1.1 WORK PLAN BACKGROUND

On October 6, 2016, the State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (OCD) issued review of prior investigation information submitted by Williams Field Services LLC (Williams) and BP America Production Company (BP) along with OCD requirements for site action at the Florance Gas Com J16A site in San Juan County, New Mexico. Investigation data from both BP and Williams has indicated the presence of multiple locations of soil contamination at the site and potential that some of these locations could be sources of the groundwater impacts identified.

Williams' requirements include:

- Within 30 days, Williams will remediate both horizontally and vertically the area near SV-33, 34, the former below ground tank (BGT) location, and the former Public Service Company of New Mexico (PNM) earthen pit area;
- Within 30 days, Williams will start the recovery of Non-Aqueous Phase Liquids (NAPL) from MW-3 or within 30 days following the excavation, Williams will drill and install a replacement well in the vicinity of MW-3 and commence the recovery of NAPL, if needed; and,
- Within 45 days Williams will provide the OCD with a Draft Groundwater Remediation plan as requested in March 2016.

In response to these requirements, Williams initiated excavation actions in the SV-33, 34, and former BGT location. Excavation at the former PNM earthen pit area is pending. As a result of advancing excavation and soil remediation, the long-term viability of MW-3 has yet to be determined and NAPL recovery has not been initiated.

This work plan has been prepared to address the third OCD requirement for groundwater remediation planning.

1.2 WORK PLAN OBJECTIVES

Remedial design will advance as the data collected from the soil excavation actions continues. This Work Plan was prepared with the following objectives:

- To present the scope of work for initial NAPL recovery at MW-3; and,
- To present the scope of work for advancing the collection of groundwater data to design groundwater remedial activities.

2.0 SCOPE OF WORK

2.1 MW-3 NAPL RECOVERY

NAPL recovery will be initiated at the MW-3 location following excavation of the former PNM pit. At this time, it is not known if MW-3 will be removed during excavation or if it will remain. If it is determined appropriate to remove MW-3 for excavation purposes, a replacement well will be installed and NAPL recovery initiated, if necessary.

To facilitate NAPL recovery, a POD Model TR-610 Skimmer product recovery pump will be installed in MW-3 (or replacement well). The POD system uses a 42-inch auto compensating product-only pump that operates off compressed gas (CO2). The outlet of the pump is connected directly to a containment drum (placed within secondary containment) equipped with a magnetic shut-off control to prevent overfilling. The system includes a cycle counter to calculate the volume of product recovered (each cycle is approximately 5 ounces).

Once installed, the pumping system will be checked weekly, recording cycle counts and gas cylinder pressure. The recovery well will be gauged monthly to evaluate pump effectiveness.

2.2 GROUNDWATER REMEDIAL ASSESSMENT

Groundwater contamination has historically been detected at monitoring wells MW-2, MW-3 and MW-5 located in the central and south portions of the well pad area extending south to the Secondary Seep and Concrete Trap. The proposed scope of work includes the installation of six groundwater monitoring wells and the subsequent collection of groundwater samples from the five existing monitoring wells and six proposed monitoring wells.

The locations of the proposed wells are presented on **Figure 2-1**. Final locations will be determined in the field based upon ability to safely access the locations with drilling equipment given the complex terrain.

Specifically, the scope of work includes:

- Mark the locations for the proposed wells at the Site and perform utility location notifications;
- Install six groundwater monitoring wells to an approximate total depth of 43 feet below ground surface (bgs). Wells will be installed using best available techniques to obtain samples and observe unsaturated and saturated lithology;
- Screen the soil samples from each soil boring for VOC vapors using a PID and log the lithology;
- Collect one soil sample from each soil boring from the interval with the highest recorded PID detection and analyze the samples for BTEX using method 8260B and TPH-GRO (C6-C10), TPH-DRO (C10-C20), and TPH-ORO (C28-C40) using method 8015;
- Develop the six monitoring wells to improve the hydraulic communication between the well and the surrounding formation;
- Record the depth to groundwater in all monitoring wells;

- Collect one round of groundwater samples and analyze the samples for BTEX using method 8260B and TPH-GRO (C6-C10), TPH-DRO (C10-C20), and TPH-ORO (C28-C40) using method 8015M;
- Perform a survey of the new wells and of topographic relief from the pad to the trap area;
- Collect groundwater samples from all monitoring wells for biological process parameters. Parameters to be measured in the field include oxidation-reduction potential (ORP), pH, temperature, conductivity, dissolved oxygen (DO), and ferrous iron. Additional parameters to be included and analyzed by the laboratory include alkalinity, nitrate, sulfate, and manganese.

The proposed scope of work will be conducted under two mobilizations. The proposed monitoring wells will be installed, soil samples collected, bore holes logged, and wells developed under the first mobilization. The groundwater monitoring activities will be conducted under a second mobilization a minimum of 1 week following the well development activities to ensure the formation has time to stabilize following the well drilling and well development activities. This will ensure that the site conditions have had time to equilibrate following the disturbance and the potentiometric surface and groundwater samples are representative of the site condition.

2.3 REMEDIAL DESIGN

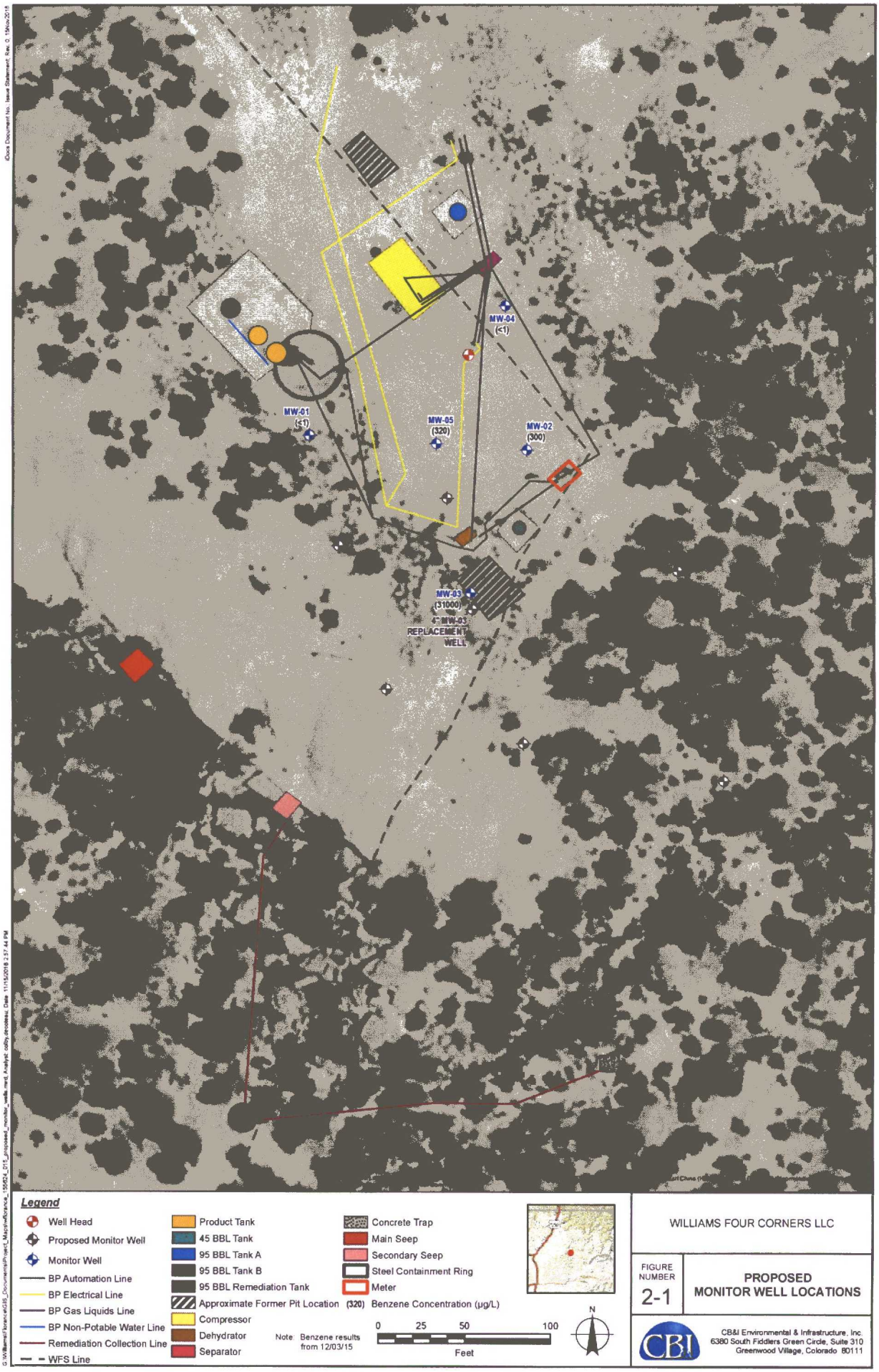
Following the data collection characteristics of groundwater flow, NAPL migration, and dissolved hydrocarbon transport will be evaluated for design of groundwater remedial measures. If necessary, plans for additional NAPL recovery will be designed and implemented.

2.4 IMPLEMENTATION SCHEDULE

The schedule is anticipated to be sequenced in the following manner upon approval:

1. Installation of POD pump – commence NAPL recovery from MW-3, if it is still in place, within 15 days of completion of Williams' excavations.
2. MW-3 Well Replacement – if required, within 30 days following completion of Williams' excavation activities.
3. Well Installation and Sampling – schedule will be dependent on approval and site access based on BP's remediation activities.
4. Remedial Design – within 30 days following well sampling.

Figures


MW-04
(<1)
MW-01
(<1)
MW-05
(320)
MW-02
(300)
MW-03
(31000)
4" MW-03
REPLACEMENT
WELL
Legend
Well Head
Proposed Monitor Well
Monitor Well
BP Automation Line
BP Electrical Line
BP Gas Liquids Line
BP Non-Potable Water Line
Remediation Collection Line
WFS Line
Product Tank
45 BBL Tank
95 BBL Tank A
95 BBL Tank B
95 BBL Remediation Tank
Approximate Former Pit Location
Compressor
Dehydrator
Separator
Concrete Trap
Main Seep
Secondary Seep
Steel Containment Ring
Meter
(320) Benzene Concentration (µg/L)
Note: Benzene results from 12/03/15
0 25 50 100
Feet
N
WILLIAMS FOUR CORNERS LLC
FIGURE NUMBER
2-1
PROPOSED
MONITOR WELL LOCATIONS
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