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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 8, 2021

John Moore
Environmental Superintendent
Western Refining, Southwest Inc., Gallup Refinery
92 Giant Crossing Road
Gallup, New Mexico 87301

**RE: APPROVAL WITH MODIFICATIONS
FRENCH DRAIN SOIL SAMPLING INVESTIGATION WORK PLAN
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-20-022**

Dear Mr. Moore:

The New Mexico Environment Department (NMED) has reviewed the *French Drain Soil Sampling Investigation Work Plan* (Work Plan), dated December 15, 2020, submitted on behalf of Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (the Permittee). NMED hereby issues this Approval with Modifications with the following comments.

Comment 1

In the Background Section, pages 5 and 6, the Permittee states, “[h]and excavations completed on the northwest sides of Tanks 569, 570, 571, and 572 showed no visible evidence of a release. Fluid levels were monitored in Tanks 570, 571, and 345 to determine if a potential leak was responsible for the release. A static level test of Tank 570 in 2019 showed a loss of product, which lead to the tank being taken out of service. There were no indications of leaks in Tanks 571 and 345.” If the locations of the hand excavations are known, identify the locations in

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Figure 3, *Proposed Soil Boring Location*, and provide a replacement figure. In addition, Figure 3 does not depict any proposed soil borings in the vicinity of Tank 570 to investigate presence or absence of contamination associated with the leaks. Provide a justification for why soil borings are not proposed in the vicinity of Tank 570 or propose to investigate potential contamination associated with the leaks and provide replacement pages. Furthermore, explain whether some of these tanks are still in use under the current idle status in a response letter.

Comment 2

In the Background Section, page 6, the Permittee states, “[o]n March 5, 2019, six deep soil borings were installed throughout the tank farm and north of STP-1: SB-FD-1, OW-61, OW-62, OW-63, OW-64, and OW-65. These locations are shown on Figure 2 of this report and boring/well logs can be found in Appendix A.” Appendix A, *Well Logs*, does not include a boring log for SB-FD-1. In addition, Figure 3 does not depict any proposed borings north of STP-1 to investigate presence or absence of contamination associated with the French Drain release. Provide a boring log for SB-FD-1 and discuss whether (1) hydrocarbons were detected at location SB-FD-1 and (2) soil investigation is warranted north of STP-1 in the response letter.

Comment 3

In the Background Section, page 6, the Permittee states, “[h]ydrocarbon impacts were identified at OW-61 at depths ranging from 10 to 26 ft bgs. Elevated photoionization detector (PID) readings were identified at OW-62 (18-20 ft bgs), OW-63 (18-24 ft bgs), OW-64 (10-24 ft bgs), and OW-65 (14-20 ft bgs) which could suggest hydrocarbon contamination in the area.” Comment 4 in NMED’s *Approval with Modifications OW-61 through OW-65 Well Installation Report*, dated January 29, 2020, states, “[t]here was no data to evaluate presence or absence of contamination above 10 feet bgs, because hydro-excavation was used during the installation of the soil boring.” Hydrocarbons are likely present at depths less than ten feet below ground surface (bgs) in the vicinity of wells OW-61 and OW-64. Provide a justification for why borings are not proposed in the vicinity of the wells or propose to investigate potential contamination from the ground surface to ten feet bgs in the vicinity of wells OW-61 and OW-64 and provide replacement pages.

Comment 4

In the Scope of Activities Section, page 7, the Permittee states, “[b]ased upon prior investigations completed by MPC, hydrocarbon impacts around the STP-1 French Drain area were observed at approximately 8 ft bgs,” and “[a]nalytical results will be screened by comparison to NMED Industrial Soil Screening Levels (SSLs).” Since industrial soil screening levels (SSLs) are applicable to the exposure of soils ranging from the ground surface to one foot bgs and the contamination is expected to be found outside the range, it is more appropriate to use residential and/or construction worker SSLs for comparison. Revise the Work Plan accordingly and provide replacement pages.

Comment 5

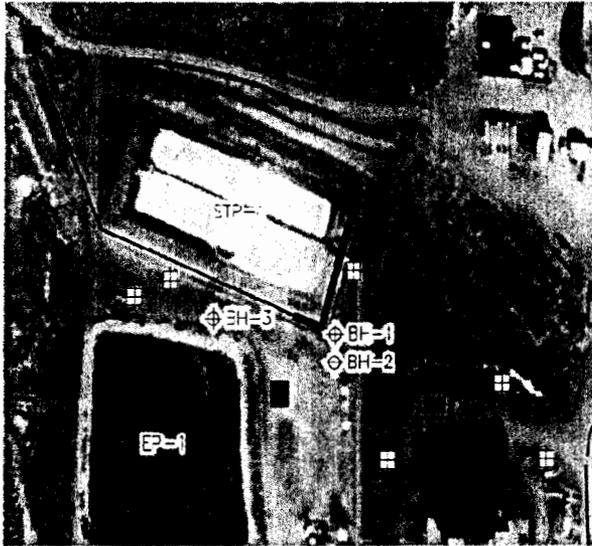
In the Scope of Activities Section, page 7, the Permittee states, “[a] Geoprobe drill rig will be used to advance soil borings and up to two discrete soil samples will be collected at each boring location,” and “[t]o delineate vertical distribution, soil borings will be advanced to at least 5 ft below the deepest detected contamination based on PID field screening and field observation results.” Comment 3 in the NMED’s *Approval with Modifications OW-61 through OW-65 Well Installation Report*, dated January 29, 2020, states, “[a] minimum of three soil samples should have been collected from each boring at the vadose zone with the highest PID reading, at the water table, and the boring termination depth.” If the borings are advanced below the water table, collect soil samples from the vadose zone from the depth with the highest PID reading, at the water table, and from the boring termination depth; otherwise, collect soil samples at the vadose zone with the highest PID reading and the boring termination depth. Revise the Work Plan accordingly and provide replacement pages.

Comment 6

In the Scope of Activities Section, page 7, the Permittee states, “[s]oil samples will be analyzed for hydrocarbon impacts via Method 8270 (semi-volatile organic compounds [SVOCS]), Method 8260 (volatile organic compounds [VOCs]), and Method 8015M (total petroleum hydrocarbons [TPH] gasoline range organics [GRO] and diesel range organics [DRO]).” Provide an explanation for why soil samples are not proposed to be analyzed for TPH motor oil range organics (MRO) in the response letter or propose to include TPH-MRO analysis in the revised Work Plan and provide replacement pages.

Comment 7

In the Investigation Methods Section, page 7, the Permittee states, “[t]he proposed sampling locations are shown on Figure 3. The proposed locations include six boreholes around the STP-1 French Drain area.” The proposed sampling locations shown on Figure 3 are anticipated to delineate the extent of hydrocarbon contamination detected at BH-1, BH-2, and Excavation #9; however, do not appear adequate to delineate the extent of hydrocarbon contamination detected at BH-3 and potential hydrocarbon contamination northwest of the French Drain. Two additional soil borings as shown in the figure below must be proposed in the revised Work Plan. The suggested boring locations below may be adjusted based on the accessibility of the site. Revise the figure accordingly.



■ Suggested Additional Boring Locations

Comment 8

In the Investigation Methods Section, *Sample Frequency*, page 8, the Permittee states, “[s]oil sample collection will be taken at a frequency in accordance with the RCRA Post-Closure Permit Section IV.J.2.d.ii (Soil and Rock Sampling) and will include the following applicable intervals and depths:

- At the surface of the proposed boring locations;
- At 2.5-ft intervals;
- At the maximum depth of each boring; and
- At intervals suspected of being source or contaminated zones.”

The Scope of Activities Section, page 7, states, “[a] Geoprobe drill rig will be used to advance soil borings and up to two discrete soil samples will be collected at each boring location.” Resolve the discrepancy in the revised Work Plan and provide replacement pages. The sampling frequency must follow the direction provided by Comment 5 above. In addition, if exceedances are detected in confirmation samples, additional step-out borings must be installed five feet from the original locations. Include the provision in the revised Work Plan and provide replacement pages.

Comment 9

In Appendix B, *Standard Operating Procedure – Soil Sampling*, Section 3, *Preparation*, page 1, states, “[f]or Soil sampling, the only field monitoring equipment used will be the Photoionization detection (PID) meter.” However, Section 4, *Equipment*, page 2, lists Flame Ionization detection meter (FID) as an equipment to be used rather than PID meter. Resolve the discrepancy in the revised Work Plan and provide replacement pages.

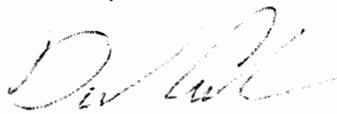
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The Permittee must address all comments above and submit a response letter, replacement pages, and an electronic version of the revised Work Plan no later than **May 31, 2021**.

This approval is based on the information presented in the document as it relates to the objectives of the work identified by NMED at the time of review. Approval of this document does not constitute agreement with all information or every statement presented in the document.

If you have questions regarding this Approval with Modifications, please contact Michiya Suzuki of my staff at 505-476-6046.

Sincerely,



Dave Cobrain
Program Manager
Hazardous Waste Bureau

cc: M. Suzuki, NMED HWB
C. Chavez, OCD
L. King, EPA Region 6 (6LCRRC)

File: Reading File and WRG 2021 File