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Certified Mail - Return Receipt Requested

August 17, 2021

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

**RE: APPROVAL WITH MODIFICATIONS
BORROW PIT INTERCEPTOR SUMPS INSTALLATION SUMMARY LETTER
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-21-010**

Dear Mr. Moore:

The New Mexico Environment Department (NMED) is in receipt of the Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (Permittee) *Borrow Pit Interceptor Sumps Installation Summary Letter* (Letter), dated July 8, 2021. NMED has reviewed the Letter, and hereby issues this Approval with Modifications with the following comments.

Comment 1

The Permittee is reminded that Comment 37 of the NMED's *Disapproval Marketing Tank Farm Laser-induced Fluorescence/Hydraulic Profiling Investigation Report*, dated June 2, 2021, required the Permittee to, "[s]ubmit an interim measures report that summarizes the monitoring data collected and effectiveness of the remediation system no later than **December 31, 2021.**" The Letter only addresses separate phase hydrocarbon (SPH) in the Borrow Pit area but does not address the presence of gasoline between borings MKTF-LIF-77 and MKTF-LIF-90, as required by Comment 37. The interim measures report must address both SPH occurrences in the Borrow Pit area and area between borings MKTF-LIF-77 and MKTF-LIF-90 to meet the requirements of the June 2, 2021 Disapproval. Provide a discussion regarding how the gasoline occurrence in the area between borings MKTF-LIF-77 and MKTF-LIF-90 was or will be addressed in a response letter.

Comment 2

In the *Description of Interim Measures Implemented* Section, page 2, paragraph 1, the

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Permittee states, “[t]he upper 2-5 ft bgs zone comprise the primary permeability (silty-sand) for the observed separate-phase hydrocarbon (SPH) and groundwater. Strong gasoline odors were detected in the borings for sumps S-1, S-2, and S-3.” According to Figure 1, *Sump and Piezometer Locations Borrow Pit Seep Area*, sump S-1 is the northernmost sump in the Borrow Pit area, followed by sumps S-2, S-3, S-4, and S-5, which is the southernmost sump. According to Figure 2, *Borrow Pit Interim Measure Separate Phase Hydrocarbon Sump Data*, the thickness of the SPH is greatest in sump S-1, followed by sumps S-2 and S-3. SPH was not detected in sumps S-4 and S-5. Accordingly, SPH may potentially be present north of sump S-1. Although boring MKTF-LIF-71 was advanced approximately 150 feet northwest of sump S-1 and SPH was not detected, the distance between boring MKTF-LIF-71 and sump S-1 may be too far to delineate the northern extent of the SPH plume. Install a boring approximately 40 feet north of sump S-1 to evaluate for the presence/absence of SPH. If SPH is present, convert the boring into a sump and repeat this procedure until SPH is absent. In the response letter, describe the implementation procedures for the installation of the boring(s) and conversion into the sump(s), as necessary.

Comment 3

In the *Description of Interim Measures Implemented* Section, page 2, paragraph 1, the Permittee states, “[d]ue to prior historical excavation in the Borrow Pit area, the ground surface within the Borrow Pit is lower than the surrounding undisturbed topography. Although wet conditions were observed in the past, the seep area was observed to be dry during drilling activities.” Survey data was not included with the Letter. Provide a table summarizing the survey data for the sumps and piezometers with the response letter. In addition, rainwater may accumulate in the pit area and interfere with the interim measure activities. Provide a measure (e.g., dewatering pump) to effectively remove the accumulated water from the pit area, as appropriate.

Comment 4

In the *Summary of Results* Section, page 2, paragraph 3, the Permittee states, “[s]umps S-4 and S-5 and piezometers PZ-1 and PZ-2 have been dry and have had no SPH detected since installation.” Table 1, *Summary of Borrow Pit Interim Measure Data*, indicates that groundwater has been consistently detected in sumps S-4 and S-5 and piezometers PZ-1 and PZ-2. Although SPH has not always been detected in these sumps and piezometers, the statement is not correct since the current monitoring event is the only monitoring event where SPH has not been detected in sumps S-4 and S-5 and piezometers PZ-1 and PZ-2. Correct the statement for accuracy and provide a replacement page.

Comment 5

In the *Summary of Results* Section, page 2, paragraph 3, the Permittee states, “total fluids (SPH and groundwater) were removed from the sumps using a vac truck,” and “[a]s of the date of this report, approximately 540 gallons of SPH have been recovered.” Provide a description about how the recovered volume of SPH was measured in the response letter.

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Comment 6

In the *Summary of Results* Section, page 2, paragraph 3, the Permittee states, “[g]roundwater and SPH are stored in a frac tank equipped with carbon filters.” Explain the purpose of the carbon filters in the frac tank in the response letter.

Comment 7

In the *Summary of Interim Measure Effectiveness* Section, page 2, paragraph 5, the Permittee states, “SPH thickness in these sumps has been decreasing, as shown on Table 1 and in Figure 2. Marathon will continue operation of the IM and will evaluate data for effectiveness in a quarterly report for this IM.” According to Figure 2, the thickness of SPH increased from June 3 to June 7, 2021. While the recovery events were conducted on a daily basis before June 3, 2021, four days of “rest time” were allowed at the time. Consequently, the recovered SPH volume increased from 29.8 to 36.0 gallons on June 7, 2021. When the thickness of SPH decreases in the future, continue to use this “pulse recovery” method to increase recovery volumes, as necessary.

Furthermore, since Comment 5 of NMED’s June 2, 2021 *Disapproval* requires the Permittee to report the monitoring results in the future quarterly hydrocarbon seep interim measures status reports, the quarterly reports are not required.

Comment 8

Table 1 indicates that SPH still remains in the Borrow Pit area as of June 9, 2021. Although the interim measures may contain and minimize expansion of SPH, it is unlikely to fully eliminate SPH below residual saturation level. Alternative remedial strategies to eliminate SPH must be evaluated and discussed in the interim measures report, as required by Comment 1 above. No response required.

The Permittee must address all comments in this Approval with Modifications and submit the required response letter and replacement pages to NMED no later than **November 5, 2020**.

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.

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If you have questions regarding this letter, please contact Michiya Suzuki of my staff at 505-690-6930.

Sincerely,



Dave Cobrain
Program Manager
Hazardous Waste Bureau

cc: L. Tsinnajinnie, NMED HWB
M. Suzuki, NMED HWB
T. McDill, OCD
L. King, EPA Region 6 (6LCRRC)

File: Reading File and WRG 2021 file