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Certified Mail - Return Receipt Requested



November 9, 2021

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

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

Dear Mr. Moore:

The New Mexico Environment Department (NMED) has received Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (the Permittee) *Response to Approval with Modifications French Drain Soil Sampling Investigation Work Plan* (Response), dated September 30, 2021 and received September 24, 2021. NMED has determined that the Permittee did not address or incorporate all of NMED's requirements from the Response. Therefore, NMED is requiring that the Permittee resubmits a revised Work Plan to address and incorporate the following comments.

Comment 1

In the response to NMED's Approval with Modifications Comment 1, the Permittee states, "[t]anks 569, 570, 571, 572, and 354 are drained and out of service due to the indefinite idle of the Refinery." Figure 3 (Proposed Soil Boring Locations) and Permit Attachment J (Plant Layout) designate the referenced tank as 345 rather than 354. Correct the typographical error in the revised Work Plan.

Comment 2

In the response to NMED's Approval with Modifications Comment 2, the Permittee states, "Figure 3, Proposed Soil Boring Location, does not depict any proposed soil borings north of

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STP-1 because the area was included in Sitewide LIF Investigation, completed during the week of May 10, 2021." The results obtained from the referenced LIF investigation have not been reviewed or approved by NMED. The results obtained from the Sitewide LIF Investigation may only be used for screening purposes for the French Drain Soil Sampling Investigation. In addition, the results obtained from the LIF investigation do not provide information regarding presence/absence of a concentration exceedance for each contaminant of concern (COC). Therefore, the Permittee is required to include the collection of soil samples north or northwest of STP-1, as directed by NMED's Approval with Modifications Comment 7. Propose to collect soil samples required by Comment 7 in the revised Work Plan or provide a separate work plan for collecting soil samples north/northwest of STP-1.

Comment 3

In the response to NMED's Approval with Modifications Comment 3, the Permittee states, "Figure 3, Proposed Soil Boring Location, does not depict any proposed soil borings in the vicinity of the well OW-61 because the area was included in Sitewide LIF Investigation, completed during the week of May 10, 2021. The Sitewide LIF location figure is provided in Attachment C. V-trenches installed during the Sitewide LIF Investigation allowed data collection in the 0 to 10 ft bgs interval that would be absent due to hydro-excavation. LIF logs for EB-LIF 34 and EB-LIF-27 (Attachment C) show less than 10% RE in the 0 to 10 ft bgs interval, indicating no to low SPH impact in the shallow zone." According to the UVOST logs included in Attachment C, elevated % RE (272.2% RE at EB-LIF-27 at 14.46 feet bgs and 43.4% RE at EB-LIF-34) were observed in the vicinity of well OW-61. However, % RE appears to be negligible at depths shallower than ten feet below ground surface (bgs) at the locations; therefore, it is likely that the Separate Phase Hydrocarbon (SPH) detected in the French Drain did not originate from the vicinity of well OW-61 (e.g., Tank 572) and the elevated % RE detected in the vicinity of well OW-61 is not related to the French Drain Soil Sampling Investigation. Therefore, soil sampling is not required in the vicinity of well OW-61 as part of this investigation. The residual contamination detected in the vicinity of well OW-61 must be addressed separately. NMED received additional LIF investigation results on October 28, 2021. NMED will evaluate the LIF investigation results to determine if it is necessary for the Permittee to submit a separate work plan to investigate the residual contamination detected in the vicinity of well OW-61.

Comment 4

In the response to NMED's Approval with Modifications Comment 3, the Permittee states, "[b]orings are also not proposed near the location of OW-64. Well OW-64 is located adjacent to the February 2018 excavation #4 (Figure 3) conducted to investigate a hydrocarbon release from the drain line of the STP-1 French Drain. Borehole depths were not recorded but are estimated to reach 6 to 8 ft bgs. Excavation #4 showed no visible sign of SPH impact." Although the data suggests that soil contamination remains at depths deeper than 10 feet bgs in the vicinity of well OW-64, it is likely that the SPH detected in the French Drain did not originate from the vicinity of well OW-64 (e.g., Tank 338) and the residual contamination in the vicinity of well OW-64 is unrelated to the French Drain. Therefore, soil sampling is not required in the

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vicinity of well OW-64 as part of this investigation. The residual contamination detected in the vicinity of well OW-64 may need to be addressed in a separate investigation depending on the NMED's review of the additional LIF investigation results (see Comment 3).

Comment 5

In the response to NMED's Approval with Modifications Comment 5, the Permittee states, "[t]he May 2021 LIF borings show the following % RE:

- EB-LIF-98: Diesel-type SPH 150% RE
- WB-LIF-100: Gas/Diesel-type SPH 20% RE
- WB-LIF-110: No LIF response
- WB-LIF-116: No LIF response
- WB-LIF-117: No LIF response
- WB-LIF-118: No LIF response
- WB-LIF-119: Gas/Diesel-type SPH 350% RE

MPC will collect three (3) soil samples from borings located near EB-LIF-98 and WB-LIF-119, i.e., those with the highest response. Soil samples will be collected at the water-table from the remainder boring locations." As stated in Comment 2 above, the LIF investigation results may only be used for screening purposes (e.g., selection of sampling locations) and must not be used for compliance purposes (e.g., demonstration of compliance, omission of sample locations) because the Sitewide LIF Investigation report has not been reviewed or approved by NMED. In addition, according to the UVOST logs included in Attachment C, an elevated % RE (15.4% RE at 7.38 feet bgs) is also recorded in boring WB-LIF-116. Propose to collect three additional soil samples from the borings proposed near WB-LIF-100 and WB-LIF-116 in the same manner described for the borings proposed to be advanced near EB-LIF-98 and WB-LIF-119. The Permittee must also propose to collect three additional soil samples from the remainder of the proposed boring locations near WB-LIF-110, WB-LIF-117, and WB-LIF-118 in the same manner described for the borings to be advanced near EB-LIF-98 and WB-LIF-119. Even if an LIF response was not observed from these locations, the COCs may exceed the applicable screening levels. Furthermore, the results obtained from LIF Investigation do not provide information regarding the presence/absence of a concentration exceedance for each COC. Revise the Work Plan to include the additional soil samples.

Comment 6

In the response to NMED's Approval with Modifications Comment 7, the Permittee states, "Figure 3, Proposed Soil Boring Location, does not depict any proposed soil borings in the vicinity of BH-3 and potential impacts north west of the French Drain because the area was included in Sitewide LIF Investigation, completed during the week of May 10, 2021. The Sitewide LIF location figure is provided in Attachment C. The Sitewide LIF investigation provided adequate coverage of the area." Address the following:

- a. The Permittee is reminded that the results obtained from the referenced LIF investigation have not been reviewed or approved by NMED; therefore, it is not appropriate to propose to omit the requirement for the sample collection based on such data (see Comments 2, 3, 4 and 5).
- b. Figure 3 (Proposed Soil Boring Locations) depicts six proposed boring locations; however, some of the proposed locations do not appear to be consistent with the boring locations proposed in the response to NMED's Approval with Modifications Comment 5 (e.g., borings to be installed near EB-LIF-98, WB-LIF-100, -110, -116, -117, -118, and -119). Revise Figure 3 to include the seven boring locations proposed in the response to NMED's Approval with Modifications Comment 5.
- c. NMED's Approval with Modifications Comment 7 requires the Permittee to install two additional soil borings: one east of Evaporation Pond 1 and one northwest of STP-1 where the French Drain merges with the stormwater drainage system. The Sitewide LIF investigation results cannot be substituted for the required investigation for the reasons stated above. Although the proposed boring near WB-LIF-117 (which is already included in the scope of the Work Plan) is representative of the required boring east of Evaporation Pond 1, the Permittee must propose to install an additional soil boring near EB-LIF-137 where the French Drain merges with the stormwater drainage system to address Comment 7. Include these soil boring locations in the revised Work Plan.

Comment 7

In the response to NMED's Approval with Modifications Comment 8, the Permittee states, "[i]f exceedances are detected in confirmation samples, additional step-out borings will be installed 25 ft from the original boring location." NMED's Approval with Modifications Comment 8 states, "if exceedances are detected in confirmation samples, additional step-out borings must be installed five feet from the original locations." To clarify, this direction only applies to those cases where exceedances are detected in samples collected at the termination depth of the boring. The proposed investigation method (i.e., installation of additional step-out borings 25 feet from the original boring location) is acceptable to delineate the lateral extent of contamination; however, it does not apply for the delineation of the vertical extent of contamination. Therefore, if exceedances are detected in the samples collected from the termination depth of the borings, additional step-out borings must be installed within five feet from the original locations and the Permittee must collect a soil sample from a depth five feet deeper than the termination depth of the original boring. This procedure may need to be repeated until the vertical extent of contamination is delineated or the boring depth reaches at the Chinle/Alluvial interface. Include the provision in the revised Work Plan.


The Permittee must submit a revised Work Plan that addresses and incorporates all of the comments contained in this letter and the January 8, 2021 Approval with Modifications. Two hard copies and an electronic version on a CD/DVD of the revised Work Plan must be submitted

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to the NMED. The Permittee must also include a redline-strikeout version in electronic format showing where all revisions to the Work Plan have been made. The revised Work Plan must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The revised Work Plan must be submitted to NMED no later than **March 31, 2022**.

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
L. Barr, EMNRD OCD
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H. Jones, Trihydro

File: Reading File and WRG 2021 file