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NEW MEXICO
ENVIRONMENT DEPARTMENT

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 4, 2021

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

RE: APPROVAL WITH MODIFICATIONS
RESPONSE TO DISAPPROVAL INVESTIGATION REPORT SOLID WASTE MANAGEMENT UNIT NO. 10 SLUDGE PITS
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-16-001

Dear Mr. Moore:

The New Mexico Environment Department (NMED) has reviewed the *Response to Disapproval Investigation Report Solid Waste Management Unit No. 10 Sludge Pits* (Response), dated August 30, 2019, 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

The response to NMED's *Disapproval* Comment 8 states, "the wastewater treatment system is capable of removing metals..." and "[h]eavier solids (e.g., metals) that do not float settle into a sludge chamber located at the bottom of the unit [(Dissolved Air Floatation system)] where

these metals are removed." Comment 6 in the NMED's *Disapproval*, dated June 14, 2018, states, "[s]ince the concentrations of metals exceed the screening levels in many groundwater samples according to Table 8, the groundwater must not be disposed to the wastewater treatment system unless it is capable of removing metals." Table 8, *SWMU 10 Groundwater Analytical Results Summary*, indicates the dissolved arsenic, barium, iron, manganese, and nickel concentrations in the groundwater samples exceed the applicable screening levels. Some dissolved metals may be precipitated by a slower oxidation process (e.g., arsenic). In a response letter, discuss whether the retention time for the Dissolved Air Floatation (DAF) system is properly designed to allow sufficient time for precipitation of dissolved metals or propose to collect influent and effluent samples in order to demonstrate that the system can effectively remove dissolved metals.

Comment 2

The response to NMED's *Disapproval* Comment 9 references Comment 8 in the NMED's August 10, 2018 *Disapproval* that states, "[t]he [NAPIS] repairs were satisfactory and NMED hereby approves the practice; however, the Permittee must continue to monitor all leak detection units (LDUs) in accordance with the monitoring schedule in the 2018 Facility Wide Ground Water Monitoring Work Plan, dated March 31, 2018 and further evaluate the effectiveness of the repairs in the future." However, water continues to be detected in the East and West LDUs. Both the east and west bays appear to be leaking through the secondary containment wall. The repairs conducted in 2018 apparently did not resolve the issue associated with the leak.

Comment 6 in the NMED's *Disapproval Annual Groundwater Monitoring Report Gallup Refinery – 2019,* dated November 23, 2020, states, "[a]lthough some parts of the NAPIS were repaired in 2018, the NAPIS must be repaired or replaced. The Permittee previously informed NMED of a plan to upgrade the wastewater treatment system, including the NAPIS. However, it is not clear whether the plan will still be implemented or whether the NAPIS will be utilized under the current idling status. Clarify whether the NAPIS will still be upgraded or utilized in the future. Unless the NAPIS is upgraded as planned, repair the leaks from the NAPIS or propose to install recovery wells adjacent to the NAPIS where wastewater is leaking (e.g., downgradient of the East and West LDUs) to capture the fluids leaking from the NAPIS." This comment must be addressed in the response to NMED's *Disapproval Annual Groundwater Monitoring Report Gallup Refinery – 2019*. No revision required.

Comment 3

The response to NMED's *Disapproval* Comment 10 states, "[w]e provided your comment to the laboratory (Hall Environmental) that conducts the subject chemical analyses. Their explanation is provided below and if this is not adequate, then possibly we could arrange a conference call to allow you to discuss this directly with the laboratory experts." Note that it is the Permittee's responsibility to explore resolution of the issue associated with high DRO dilution factors and provide defensible laboratory data in future reports. The reported MRO data (e.g., < 4,776

mg/mg) are not defensible and the reporting limits must be lower than applicable screening levels. In the response letter, discuss possible measures that analytical methods can be modified to lower MRO reporting limits when samples contain high DRO concentrations (e.g., using different columns/higher temperatures to report DRO/MRO separately).

Comment 4

The response to NMED's *Disapproval* Comment 13 states, "[b]ased on the addition of the new TPH screening levels, there are numerous exceedances of the TPH screening levels, as shown for soil in Table 7 and groundwater in Table 8." Section 7.1, *Conclusions* states that the northern extent of TPH exceedances was not defined. Section 7.2, *Recommendations* states, "[a]n Investigation Work Plan for the SMW-2 and GWM-1 Areas was submitted in mid August 2019 and it includes a new monitoring well west of GWM-1, which will place the well a short distance north of SWMU No. 10 (DiSorbo, 2019). The collection of soil and groundwater samples from this location could provide additional information on the northern boundary of SWMU No. 10." NMED agrees with the Permittee's recommendation. NMED issued an *Approval Response to Disapproval Investigation Work Plan SMW-2 and GWM-1* and approved an installation of the referenced well in July 1, 2020. NMED's *Approval* required the SMW-2 and GWM-1 investigation report no later than **July 31, 2021**. The results of the SMW-2 and GWM-1 investigation may be incorporated as part of the SWMU 10 investigation; however, the discussion pertaining to the SWMU 10 investigation must not be included in the SMW-2 and GWM-1 investigation report; a separate report that focuses on the SWMU 10 investigation must be submitted no later than **October 1, 2021**.

The Permittee must address all comments in this letter and submit a response letter, replacement pages, and an electronic version of the revised Report no later than **April 30, 2021**. The investigation report required by Comment 4 must be submitted to NMED no later than **October 1, 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