Western Refining Southwest LLC
A subsidiary of Marathon Petroleum Corporation
I-40 Exit 39
Jamestown, NM 87347

April 30, 2021

Mr. Kevin Pierard, Chief
New Mexico Environmental Department
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, NM 87SOS-6303

RE: Response to Approval with Modifications
Solid Waste Management Unit 1 Revised Investigation Report
Marathon Petroleum Company LP, Gallup Refinery
(dba Western Refining Southwest LLC)
EPA ID# NMD000333211
HWB-WRG-20-010

Dear Mr. Pierard:

Attached please find the response to comments contained in the New Mexico Environment Department (NMED) Approval with Modifications letter dated January 26, 2021. Marathon Petroleum Company (MPC) submitted a scope of work describing a test pit and yield test investigation at Solid Waste Management Unit (SWMU) 1 to NMED on March 9, 2021. The data collected from this investigation will be used to prepare the SWMU 1 closure work plan, requested in NMED's "Disapproval SWMU-1 Investigation Report" issued August 31, 2020. MPC will submit the closure work plan within 90 days of NMED approval of the SWMU 1 test pit and yield test evaluation summary memorandum.

If you have any questions or comments regarding the information contained herein, please do not hesitate to contact Mr. John Moore at 505-879-7643.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,
Western Refining Southwest LLC, Gallup Refinery

Robert S. Hanks
Refinery General Manager

Enclosure

cc: D. Cobrain, NMED HWB
C. Chavez, NMOCD
G. McCartney, Marathon Petroleum Company
K. Luka, Marathon Petroleum Company
H. Jones, Trihydro Corporation
M. Suzuki, NMED HWB
T. McDill, NMOCD
A. Kitchen, Marathon Petroleum Company
J. Moore, Marathon Gallup Refinery

New Mexico Environment Department to Marathon Petroleum Company Comment Letter "Approval with Modifications, Solid Waste Management Unit 1 Revised Investigation Report" (January 26, 2021)

New Mexico Environment Department (NMED) Comment	Marathon Petroleum Company (MPC) Response
Comment 1:	**Response 1:**
In the response to NMED's *Disapproval* Comment 2, the Permittee states, "[e]xcavation will be followed by laboratory confirmation sampling of excavation vertical and horizontal extent." A detailed method for post-excavation confirmation sampling and the anticipated horizontal and vertical extent of excavation for each aeration lagoon and Evaporation Pond 1 must be described in the work plan required by NMED's *Disapproval* Comment 14. In addition, the work plan must include a provision to remove additional soils where contaminant concentrations exceed the applicable screening levels in the confirmation samples and the collection of additional confirmation samples from the areas where additional excavation was conducted. Furthermore, a contingency measure addressing contaminated groundwater below the water table, where applicable, must be developed and included in the work plan. For example, chemical oxidants or biological amendments may be placed on the excavation floors, where groundwater is detected. Amendments may also migrate with groundwater flow and aid in degrading contaminants. Additionally, sheet(s) of impermeable liner (e.g., high density polyethylene (HDPE) liner) may be placed above the excavation floor to eliminate potential seepage of groundwater into the backfill.	The work plan required by NMED's *Disapproval* Comment 14 (work plan) will provide details on the removal of soil and sludges from the aeration lagoons (AL-1 and AL-2) and Evaporation Pond 1. The work plan will provide information on the estimated horizontal and vertical extent of the excavation, describe post-excavation confirmation sample collection and analysis, and include provisions for additional excavation and confirmation sampling in areas where soil constituent concentrations exceed applicable screening levels. The work plan will also develop contingency measures to address impacted groundwater below the water table.

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Comment 2:	**Response 2:**
In the response to NMED's *Disapproval* Comment 3, the Permittee states, "[w]hile equipment blanks were not collected, MPC does not believe the integrity of the samples was compromised." The Permittee must propose to collect equipment blanks at a frequency of ten percent of the samples collected in the future. No revision required.	Comment noted.
Comment 3:	**Response 3:**
In the response to NMED's *Disapproval* Comment 4, the Permittee states, "[a]lthough the mercury soil analyses exceeded the holding times for the EPA Method 7471, this analysis was not proposed in the approved investigation work plan and was requested later to provide additional information on mercury concentrations across the ponds." The Permittee's response does not justify the acceptability of analytical data acquired outside the holding time. The analysis should have been conducted within the holding time. However, the Permittee also states, "[t]he TCLP mercury samples, which were proposed in the approved investigation work plan, were analyzed within the holding time," and "TCLP mercury results for all samples (berm and pond) were several orders of magnitude below the Code of Federal Regulations (CFR) TCLP screening level of 0.2 milligram per liter (mg/L)." The results of the TCLP mercury analysis indicate that the mercury exceedance in the soil samples is not likely. Accordingly, the Permittee is not required to recollect soil samples for mercury analysis. No revision required.	Comment noted.

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Comment 4:	Response 4:
In the responses to NMED's *Disapproval* Comments 6 and 10, the Permittee states, "[a]n FID is designed to detect a broader range of compounds such as long-chained hydrocarbons, also known as SVOCs, in addition to the VOCs. Because both AL-1 and AL-2 are aeration lagoons, most of the lighter VOCs had volatilized or degraded during aeration leaving the heavier SVOCs in the sludge and hydrocarbon that infiltrated the underlying clay liner," and "an additional functional FID unit will be kept on-site." However, the FID instrument did not work properly because FID flame did not stay lit. The problem may be caused by high moisture content in the samples and may recur. A combustible gas indicator (e.g., Bacharach TLV Sniffer), while less sensitive at low concentrations, is known to be more effective in screening soils that contain high moisture content. Evaluate an applicability of the use of a combustible gas indicator as a backup soil screening tool for future sampling events in SWMU 1 and provide a discussion in the work plan required by NMED's *Disapproval* Comment 14.	MPC will evaluate using a combustible gas indicator as a backup soil screening tool for future solid waste management unit (SWMU) 1 sampling events. The evaluation will be provided in the work plan.

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Comment 5:	Response 5:
In the response to NMED's *Disapproval* Comment 7, the Permittee states, "[b]ased on the berm sampling results shown in Table 7, shallow berm soils can likely be segregated in the field during excavation and composite sampled to determine suitability as backfill." The TPH-DRO concentrations in the samples collected from locations SWMU 1-19 (berm) (2.5 ft), SWMU 1-22 (berm) (2.5 ft), SWMU 1-15 (berm) (2.5 ft), and SWMU 1-16 (berm) (2.5 ft) are recorded as 6,300 mg/kg, 2,100 mg/kg, 20,000 mg/kg, and 32,000 mg/kg, respectively, and exceed the applicable soil screening levels (SSLs) according to Table 7, *SWMU-1 Berm Sample Results.* The berm soils excavated at depths more than 2.5 feet below ground surface (bgs) must not be used as a backfill. However, the berm soils excavated at depths less than 1.5 feet bgs can be segregated and composite samples may be collected to evaluate a suitability for backfill use. Include the provision in the work plan required by NMED's *Disapproval* Comment 14.	MPC will discuss segregating berm soil excavated from depths less than 1.5 feet bgs and collecting composite samples to evaluate berm soil suitability for backfill in the required work plan. The evaluation criteria will be provided in the work plan.

New Mexico Environment Department to Marathon Petroleum Company Comment Letter "Approval with Modifications, Solid Waste Management Unit 1 Revised Investigation Report" (January 26, 2021)

Comment 6:	Response 6:
In the responses to NMED's *Disapproval* Comments 9 and 13, the Permittee states, "[t]his standing water is likely from precipitation, with a possible contribution from shallow groundwater seepage (< 6 ft in depth)," and [p]onded water observed in AL-1 and AL-2 is likely perched water trapped by the clay layer which underlies the ponds and results from precipitation and possible shallow groundwater seepage from the east and south." The water observed in the ponds likely originates from groundwater since wastewater discharge was discontinued in 2013 and the precipitation is minimal at the site; yet water persists in the ponds. The clay liner may have been contaminated with the groundwater beneath the ponds. Similarly, the sludge and hydrocarbons accumulated above the liner may have seeped into the groundwater through the liner. Accordingly, it is appropriate to completely remove the clay liner and excavate soils to a depth below the historic water table for ponds AL-1 and AL-2. Include the provision in the work plan required by NMED's *Disapproval* Comment 14.	Soil will be excavated to an appropriate depth based on confirmation sampling results. A contingency will be added to the work plan to address the scenario of if confirmation sampling indicates that soil below the historical water table is impacted with constituent concentrations exceeding applicable screening levels. In addition, MPC is installing a shallow dewatering system to depress the water table in the area to allow for deeper excavation. Provisions for this additional excavation and sampling will be provided in the work plan.

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Comment 7:	Response 7:
In the response to NMED's *Disapproval* Comment 14, the Permittee states, "MPC will revise the report to state that a separate work plan will be submitted for future remedial excavation of the SWMU." NMED's *Disapproval* Comment 14 states, "NMED will establish a due date for the work plan upon approval of this Report." NMED hereby issues this Approval with Modifications. The Permittee must submit a separate work plan that describes all proposed activities related to removal of the Aeration Lagoons and Evaporation Pond 1 that includes a schedule for implementation of the approved work plan for NMED's review no later than **April 30, 2021.**	To allow for completion of the SWMU 1 test pit and yield test evaluation, MPC requests to submit the work plan describing removal of Aeration Lagoons 1 and 2 and Evaporation Pond 1 within 90 days of NMED approval of the SWMU 1 test pit and yield test evaluation summary memorandum.

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Energy, Minerals and Natural Resources
Oil Conservation Division
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CONDITIONS

Action 25544

CONDITIONS

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 25544
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
scwells	Accepted for Record Retention Purposes-Only	11/21/2022