

**Western Refining Southwest LLC**

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39

Jamestown, NM 87347

April 16, 2024

Mr. Ricardo Maestas, Acting Chief
New Mexico Environment Department, Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, NM 87505-6313

**RE: Response to Approval with Modifications
[REVISED] SWMU-1 Corrective Measures Implementation Work Plan
Western Refining Southwest LLC, Gallup Refinery
McKinley County, Gallup, New Mexico
EPA ID# NMD000333211
HWB-WRG-21-016**

Dear Mr. Maestas:

Please find enclosed the response to comments from the New Mexico Environment Department (NMED) Approval with Modifications letter dated April 4, 2024, for the SWMU-1 Corrective Measures Implementation Work Plan.

If you have any questions or comments regarding the information contained herein, please do not hesitate to contact Ms. Kateri Luka at (714) 713-1218.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or 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, Marathon Gallup Refinery

Timothy J. Peterkoski
Director of Environment and Climate Strategy
Marathon Petroleum Company LP

Enclosures

cc: L. Andress, NMED HWB
M. Suzuki, NMED
J. Moore, MPC

L. Tsinnajinnie, NMED
K. Luka, MPC
H. Jones, Trihydro Corporation

ATTACHMENT A
RESPONSE TO COMMENTS

**New Mexico Environment Department (NMED) To Western Refining Southwest LLC (D/B/A Marathon Gallup Refinery [Refinery])
Approval with Modifications Letter "SWMU-1 Corrective Measures Investigation Work Plan" (April 4, 2024)**

NMED Comment	Western Response
Comment 1:	Response 1:
<p>The Permittee's response to the Disapproval Comment 1b, bullet 2, states, "[e]xcavation stockpile staging areas [are discussed in]: Text located in Section 5.2.2 (Auxiliary Site Preparation); Plan Set Sheet 2 (location) and Sheet 4 Detail 4 (details)." Address the following issues:</p> <p>a) Section 5.2.2 states, "[a] discussion of the analytical data results is provided in Section 5.6." Section 5.6 (Excavation Backfill) states, "[f]ollowing excavation and confirmation sampling of each aerobic lagoon, NMED will be provided with analytical data and will have the opportunity to review the results prior to beginning placement of backfill. To facilitate the excavation process, Western is requesting a one-week review and approval time for evaluation of confirmation samples." It is anticipated that the quantity of the confirmation sampling data will be substantial. It can take a long time to review the raw laboratory reports. In order for NMED to meet the Permittee's request, the Permittee must prepare and submit tables summarizing all analytical results with figures depicting the corresponding sampling locations at the time the data is submitted. The tables summarizing the analytical results must present all applicable screening levels and if any exceedances are present, they must be identified with bold font. The figures depicting the sampling locations must identify depths where the samples are collected. The figures must also indicate that the required sampling frequency is met at the sampling locations. NMED will be able to expedite its review of the data if the appropriate information necessary to facilitate its review is provided.</p>	<p>a) The Refinery acknowledges this comment and will prepare the data as requested for expedited review of the confirmation samples.</p> <p>b) The Refinery acknowledges this comment.</p> <p> i. The Refinery acknowledges this provision and will demonstrate how the provision was incorporated in the completion report. The Refinery will only use the existing borrow pit location soils for stabilization activities and disposal.</p> <p> ii. The Refinery acknowledges this comment and will perform an investigation to determine the suitability of the alternate borrow source. The Refinery will present the suitability investigation in the remedy completion report. It is acknowledged that the backfill material must not exceed the respective residential soil screening levels.</p> <p>c) The Refinery acknowledges this comment and will collect one surface sample every 400 square feet at a minimum to demonstrate that no additional contamination has been caused by the stockpile area.</p> <p>d) The Refinery acknowledges that NMED has this concern and will stay 5 feet above the existing groundwater table.</p>

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NMED Comment	Western Response
<p>b) Section 5.2.2 states, "[a]s refinery impacts have been documented below the floor of the borrow area, no borrow soil will be removed from the floor of the borrow pit. It is anticipated that borrow material will be removed from the unexcavated northern face of the borrow pit above the impacted soil," and "[t]he analytical data and a figure illustrating the boring locations is provided in Appendix C." Figure 1 (Borrow Pit North Berm Sample Locations) included in Appendix C (Borrow Area Sampling Laboratory Analyses) depicts the boring locations in the northern face of the borrow pit and the corresponding TPH-GRO concentrations. The TPH-GRO concentrations did not exceed the Industrial/Construction Worker Exposure soil screening level of 500 mg/kg but exceeded the Residential soil screening level of 100 mg/kg. Address the following:</p> <p>i. NMED's February 8, 2024 <i>Approval with Modifications Hydrocarbon Seep Interim Measures 2023 Third Quarter Status Report</i> states, "[t]he thickness of separate phase hydrocarbon (SPH) in sump BPS-7, which is located farthest north of the Borrow Pit area, is recorded as 7.01 feet on September 23, 2023. Although the SPH plume likely extends farther north of sump BPS-7 and it may be expanding farther north of the Borrow Pit area, there are no groundwater monitoring wells that define the extent of the SPH plume." The distance between the sump and boring BPI-15, where TPH-GRO was not detected at the time of investigation, is only approximately 80 feet. Since the SPH plume is not stationary, it may eventually intersect the proposed location of the borrow area in the future. In addition, borrowing operations may cause the soil column above the water table to be thinner. NMED is concerned because the thinner soil column may likely increase the</p>	

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<p>amount of rainwater that seeps into the aquifer and the SPH plume may expand faster by the steeper groundwater gradient. Therefore, the Permittee must leave at least five feet of soil column above the depth of the water table at the time of excavation. Acknowledge this provision in the response letter and demonstrate that this provision is incorporated during the borrowing operations in the remedy completion report. Furthermore, the Permittee may only use this soil for the purpose of waste stabilization and disposal off-site. The soil must not be used as backfill material. Acknowledge this provision in the response letter.</p> <p>ii. Plan Set Sheet 2 (Project Map) depicts the proposed location of the alternative borrow areas northwest of the facility infrastructure. The soil from the alternative borrow areas may be suitable for acquiring backfill material; however, according to the 2022 <i>Groundwater Monitoring Report</i>, SPH was detected in well BW-2A, which is located downgradient of the alternative borrow areas. Investigate/evaluate the usability of the soil in the alternative borrow areas prior to commencing the field activity. The result of the investigation/evaluation of the usability of the soil must be presented in the remedy completion report if it is found usable. Note that the soil concentrations in the samples collected from the alternative borrow areas must not exceed the respective Residential soil screening levels if the soil is used as backfill material. If the soil is found to be contaminated in the proposed alternative borrow areas, an upgradient location, southeast or south of the Refinery, may be ideal alternative borrow areas to acquire clean backfill material. Regardless, if the Permittee is unable to acquire any clean fill material that meets the Residential soil screening levels</p>	

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<p>anywhere on site, clean fill must be imported from off-site. Acknowledge this provision in the response letter.</p> <p>c) Plan Set Sheet 2 (Project Map) depicts the locations of the two primary stockpile areas. Demonstrate that no contamination remains after the stockpiles are removed from the stockpile areas in the remedy completion report. NMED recommends that one surface sample for every 400 square feet be collected, at a minimum, to make the demonstration. Acknowledge this provision in the response letter.</p> <p>d) Plan Set Sheet 4 (Details) depicts the stockpile area section. The surface of the stockpile area will be covered with a 20-mil HDPE liner. The Permittee must demonstrate that a concerted effort was made to prevent the liner from being damaged by trucks or excavators while moving the soil in/out of the area, as practicable. Such a provision must be documented in the remedy completion report.</p> <p>The Permittee must acknowledge the provisions from Comment 1a through 1d in the response letter.</p>	
Comment 2:	Response 2:
<p>The Permittee's response to the Disapproval Comment 4b states, "[t]he berms will be treated the same as the rest of the excavation walls and will have confirmation sampling completed at the extents of the excavation." Ensure that the berms surrounding the lagoons will not be used as backfill material. Acknowledge this provision in the response letter.</p>	<p>The Refinery acknowledges this provision and will not use the berms at SWMU-1 as backfill.</p>

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NMED Comment	Western Response
Comment 3:	Response 3:
<p>The Permittee's response to the Disapproval Comment 4c states, "[b]ackfill material that is observed to have impacts and an FID reading above 20 parts per million will be returned to the excavation location and excavation operations will be adjusted to an area that does not contain potentially impacted material." The response does not fully address the Disapproval Comment 4c. Comment 4c states, "[t]he Permittee must ensure that soil taken from the on-site borrow area meets Residential Screening Levels (RSLs) before it is transferred to SWMU-1 to be used as backfill material." According to Figure 1 of Appendix C, the TPH-GRO concentrations in multiple samples (e.g., samples collected at borings BPI-1, 2, 3, 5, 10, and 11) exceeded the Residential soil screening level of 100 mg/kg. The Permittee must not use the soil in the vicinity of the borrow area as backfill material because of the exceedances of TPH-GRO and must acknowledge this provision in the response letter and document it in the remedy completion report (see also Comment 1b.i).</p>	<p>The Refinery acknowledges this provision and will not use the existing borrow pit material for backfilling.</p>
Comment 4:	Response 4:
<p>The Permittee's response to the Disapproval Comment 4d states, "[s]amples will be taken and analyzed to ensure residential standards are met prior to use of any of the alternative borrow source locations, if additional backfill soil is needed. Field screening methods as detailed in Section 5.6.2 will also be used to verify suitability during excavation of the backfill material." The Permittee must demonstrate that the soil from the alternative borrow source locations is suitable as backfill material and present the information in the remedy completion report; otherwise, the soil from the alternative borrow locations must not be used as</p>	<p>The Refinery acknowledges this provision and will investigate and report suitability of the alternate borrow source.</p>

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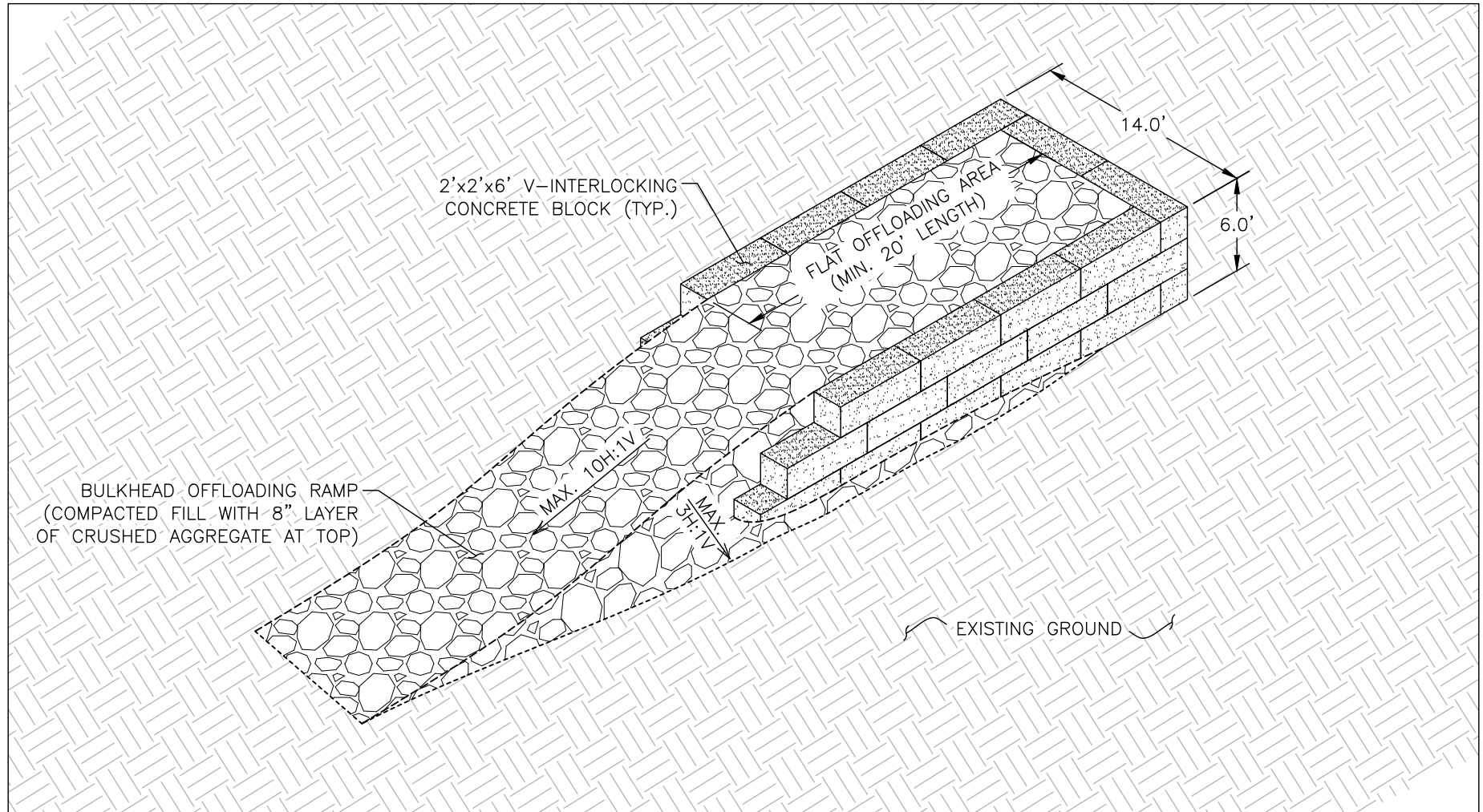
NMED Comment	Western Response
backfill material (see also Comment 1b.ii). Acknowledge this provision in the response letter.	
Comment 5:	Response 5:
The Permittee's response to the Disapproval Comment 4d states, "[t]he geotechnical data for these borrow sources is included in Appendix F." According to the soil boring logs included in Appendix F (Alternative Borrow Source), both coarse (e.g., silty sand) and fine (clay) materials are present in the alternative borrow sources. Demonstrate that that the backfill material can effectively be compacted to prevent differential settlement of the soil so that the proposed storm water controls can function as intended in the remedy completion report.	The Refinery acknowledges this comment.
Comment 6:	Response 6:
Section 4.2.1 (Stabilizing Using Onsite Borrow Soil) of the Waste Stabilization and Excavation Plan & Transportation Plan included in Appendix G (Contractor Submittals), page 8 of 12, states, "[t]he [borrowed] soil will be mixed with the waste until it becomes soil-like and a compactible material. The initial stabilization will be concentrated in one area so that an area can be cleaned out to allow stockpiling of the stabilized material prior to loadout." The excavation floor may be entirely wet and sludge-like. Explain how the borrowed soil and the waste will be physically mixed in the response letter and remedy completion report. In addition, the initial stabilization described in Section 4.2.1 must be designated and identified in a figure in the remedy completion report, as applicable.	The Refinery acknowledges this comment. The plan is to mix in place with a long reach excavator cleaning up one area and moving out from there. Borrow soils will be added and mixed with the excavator bucket until the material becomes soil like and then it will be loaded into haul trucks using a separate excavator. A pilot test will be conducted within SWMU-1 (in place) to determine an approximate amount of borrow material needed to meet acceptance criteria for disposal at the regional landfill. As outlined in the Corrective Measures Implementation Work Plan, water management will be conducted throughout the process to manage any precipitation or groundwater infiltration into the excavation area.


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NMED Comment	Western Response
Comment 7: Section 4.3 (Waste Excavation, Loading and Stockpiling) of the Waste Stabilization and Excavation Plan & Transportation Plan included in Appendix G, page 8 of 12, states, "[a] bulkhead, approximately six feet high will be constructed using concrete blocks. A ramp will be constructed that leads to the bulkhead approximately four feet high. The ramp will be constructed so that the truck is level from front to back during the dumping of the waste. The truck will back up to the bulkhead and dump the waste. This will prevent the tires of the truck from contacting waste material. A concrete pad will be constructed in front of the bulkhead to allow the loader to pick up the waste for transfer to a stockpile. This will eliminate damage to the sacrificial cover and easy removal of all the waste." It is difficult to understand the loading process from the text. Provide the schematics for the bulkhead with the response letter and the remedy completion report. The schematics need not to be scaled. This comment is intended to facilitate understanding of the process only, rather than to evaluate engineering design	Response 7: A schematic of the bulkhead is included in Attachment B. The bulkhead is intended to keep the haul trucks off the staging area liner to prevent damage to the liner.

ATTACHMENT B
BULKHEAD OFFLOADING RAMP DETAIL

M:\TON\MARATHON\CADD\GALLUP\SOLIDWASTEMANAGEMENT\UNIT SWMU-1_AERATIONBASIN\FIGURES\697-G-SWMU1AB_BULKOFFLOAD



 Trihydro CORPORATION 1252 Commerce Drive Laramie, Wyoming 82070 www.trihydro.com (P) 307/745.7474 (F) 307/745.7729	FIGURE 1			
	CONCEPTUAL BULKHEAD OFFLOADING RAMP DETAIL			
	SWMU-1 CMI WORK PLAN MARATHON GALLUP REFINERY GALLUP, NEW MEXICO			
Drawn By: RJ	Checked By: JR	Scale: NONE	Date: 4/10/24	File: 697-G-SWMU1AB_BULKOFFLOAD

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 334192

CONDITIONS

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 334192
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
joel.stone	Approved for OCD record retention purposes.	7/25/2024