# **GW - 032 SWMU 10 Sludge Pits** 2021



# Western Refining Southwest LLC

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39 Jamestown, NM 87347

May 17, 2021

Mr. Kevin Pierard, Chief New Mexico Environment Department Hazardous Waste Bureau 2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505

RE: Response to Comments Approval with Modifications Investigation Report Solid Waste Management Unit No. 10 Sludge Pits Marathon Petroleum Company LP, Gallup Refinery (dba Western Refining Southwest LLC) EPA ID# NMD000333211 HWB-WRG-16-001

Dear Mr. Pierard:

Marathon Petroleum Company LP (dba Western Refining Southwest LLC) Gallup Refinery is submitting this *Response to Comments Approval with Modifications, Response to Disapproval Investigation Report Solid Waste Management Unit No. 10 Sludge Pits,* dated March 4, 2021. A timeline of the reports and investigations for the sludge pits is provided below.

- Investigation Work Plan, submitted September 16, 2014
- Approval with Modifications, received March 2, 2015
- Investigation Report, submitted March 4, 2016
- Withdrawal of Investigation Report, submitted June 10, 2016
- Revised Investigation Report, submitted December 20, 2016
- Disapproval, received June 14, 2018
- Response to Disapproval, submitted October 12, 2018
- Disapproval, received June 10, 2019
- Response to Disapproval, submitted August 30, 2019
- Approval with Modifications, received March 4, 2021

If there are any questions, please call 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 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, Marathon Petroleum Company LP, Gallup Refinery

Robert S. Hanks

Robert S. Hanks Refinery General Manager

#### Enclosure

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

**Attachment A: Response to Comment** 

New Mexico Environment Department (NMED) Comment	Marathon Petroleum Company (MPC) Response
Comment 1:	Response 1:
The response to NMED's Disapproval Comment 8 states, "the	MPC owns and operates a dissolved gas flotation (DGF) clarifier at
wastewater treatment system is capable of removing metals"	their existing wastewater treatment plant. DGF units are being utilized
and "[h]eavier soils (e.g., metals) that do not float settle into	more to remove metals from industrial wastewaters. Dissolved metals
sludge chamber located at the bottom of the unit [(Dissolved Air	can be precipitated out of the waste stream through the addition of
Floatation system)] where these metals are removed." Comment	coagulants and flocculants. MPC has utilized the addition of
6 in NMED's Disapproval, dated June 14, 2018, states, "[s]ince	coagulants and flocculants since the commissioning of the DGF unit.
the concentrations of metals exceed the screening levels in many	These coagulants and flocculants are used to precipitate dissolved
groundwater samples according to Table 8, the groundwater must	metals to increase the DGF's removal efficiency. A study on the
not be disposed to the groundwater treatment system unless it is	effectiveness of dissolved metal removal was conducted on an acid
capable of removing metals." Table 8, SWMU 10 Groundwater	mine drainage utilizing a DGF system prior to their National Pollutant
Analytical Results Summary, indicates the dissolved arsenic,	Discharge Elimination System (NPDES) discharge (Foy et. al 2012).
barium, iron, manganese, and nickel concentrations in the	The results of the study resulted in iron, manganese, and aluminum
groundwater samples exceed the applicable screening levels.	removals greater than 86%. MPC will continue utilizing the DGF as
Some dissolved metals may be precipitated by slower oxidation	part of the onsite wastewater treatment.
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	Foy, B., Stover, E.L., Ross, C.C., & Valentine, G.E. (2012). Floating
dissolved metals or propose to collect influent and effluent	on air: Dissolved gas flotation in the industrial wastewater market.
samples in order to demonstrate that the system can effectively	Water & Wastes Digest, 30-31. January.
remove dissolved metals.	

Comment 2:	Response 2:
The response to NMED's Disapproval Comment 9 references Comment 8 in	This comment is acknowledged.
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:	Response 3:
The response to NMED's Disapproval Comment 10 states, "[w]e	MPC has reached out to several laboratories in regards to meeting
provided your comment to the laboratory (Hall Environmental) that	screening levels with lower reporting limits. The current screening
conducts the subject chemical analyses. Their explanation is provided	levels of 0.0167 mg/L for TPH DRO and 0.0858 mg/L for TPH MRO
below and if this is not adequate, then possibly we could arrange a	are not attainable by the laboratories that were contacted. In addition,
conference call to allow you to discuss this directly with the laboratory	Hall Environmental reached out to other laboratories to determine if
experts." Note that it is the Permittee's responsibility to explore	they could meet the TPH DRO and TPH MRO screening levels and
resolution of the issue associated with high DRO dilution factors and	they indicated they could not meet the lower reporting limits either.
provide defensible laboratory data in future reports. The reported	
MRO data (e.g., < 4,776 mg/mg) are not defensible and the reporting	The current limitation is that the method blank results are considered
limits must be lower than applicable screening levels. In the response	when calculating the reporting limit. In order to produce a lower
letter, discuss possible measures that analytical methods can be	reporting limit, more sample solution is used which in turn increases
modified to lower MRO reporting limits when samples contain high	the blank concentration, thus resulting in a higher reporting limit.
DRO concentrations (e.g., using different columns/higher	
temperatures to report DRO/MRO separately).	With current analytical methods and laboratory instrumentation the
	lowest reporting limit that Hall Environmental can meet is
	0.0745 mg/L for TPH DRO and 0.6 mg/L for TPH MRO.

Comment 4:	Response 4:
"The response to NMED's Disapproval Comment 13 states, "[b]ased	The well installation referenced in the SMW-2 and GWM-1 Areas is
on the addition of the new TPH screening levels, there are numerous	scheduled to be completed by July 2021. MPC requests an extension
exceedances of the TPH screening levels, as shown for soil in Table 7	of the SWM-2 and GWM-1 investigation report to September 30,
and groundwater in Table 8." Section 7.1, Conclusions states that the	2021 rather than July 31, 2021. The Investigation Report for SWMU
northern extent of TPH exceedances was not defined. Section 7.2,	No. 10 will be completed and submitted no later than October 1,
Recommendations states, "[a]n Investigation Work Plan for the SMW-	2021.
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	
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# Western Refining Southwest LLC

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39 Jamestown, NM 87347

May 14, 2021

Mr. Kevin Pierard, Chief New Mexico Environment Department Hazardous Waste Bureau 2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505

RE: Response to Comments Approval with Modifications Investigation Report Solid Waste Management Unit No. 10 Sludge Pits Marathon Petroleum Company LP, Gallup Refinery (dba Western Refining Southwest LLC) EPA ID# NMD000333211 HWB-WRG-16-001

Dear Mr. Pierard:

Marathon Petroleum Company LP (dba Western Refining Southwest LLC) Gallup Refinery is submitting this *Response to Comments Approval with Modifications, Response to Disapproval Investigation Report Solid Waste Management Unit No. 10 Sludge Pits,* dated March 4, 2021. A timeline of the reports and investigations for the sludge pits is provided below.

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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, Marathon Petroleum Company LP, Gallup Refinery

Robert S. Hanks

Robert S. Hanks Refinery General Manager

#### Enclosure

cc: D. Cobrain, NMED HWB
M. Suzuki, NMED HWB
T. McDill, NMOCD
G. McCartney, Marathon Petroleum Corporation
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**Attachment A: Response to Comment** 

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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	
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SWMU 10 investigation must be submitted no later than October 1,	
2021."	

# 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 Environment Department Hazardous Waste Bureau 2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505

RE: Request for Extension of Time Response to Comments Approval with Modifications Investigation Report Solid Waste Management Unit No. 10 Sludge Pits Marathon Petroleum Company LP, Gallup Refinery (dba Western Refining Southwest LLC) EPA ID# NMD000333211 HWB-WRG-16-001

Dear Mr. Pierard:

Marathon Petroleum Company LP (dba Western Refining Southwest LLC) Gallup Refinery (MPC) is requesting an extension for the *Response to Comments Approval with Modifications, Response to Disapproval Investigation Report Solid Waste Management Unit No. 10 Sludge Pits,* dated March 4, 2021. A timeline of the reports for the sludge pits is provided below.

- Investigation Work Plan, submitted September 16, 2014
- Approval with Modifications, received March 2, 2015
- Investigation Report, submitted March 4, 2016
- Withdrawal of Investigation Report, submitted June 10, 2016
- Revised Investigation Report, submitted December 20, 2016
- Disapproval, received June 14, 2018
- Response to Disapproval, submitted October 12, 2018
- Disapproval, received June 10, 2019
- Response to Disapproval, submitted August 30, 2019
- Approval with Modifications, received March 4, 2021

MPC is currently investigating the New API (American Petroleum Institute) Separator to determine the source of water in the Leak Detection Units and determine if repairs are necessary in the New API Separator. MPC would like to complete the investigation and determine next steps before submitting the aforementioned response to Approval with Modifications. If there are any questions, please call 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 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, Marathon Petroleum Company LP, Gallup Refinery

Robert S. Hanks

Robert S. Hanks Refinery General Manager

Enclosure

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



Michelle Lujan Grisham Governor

> Howie C. Morales Lt. Governor

#### NEW MEXICO ENVIRONMENT DEPARTMENT

#### Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6313 Phone (505) 476-6000 Fax (505) 476-6030 <u>www.env.nm.gov</u>

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED** 

# N MENT DEPRES

James C. Kenney Cabinet Secretary

Jennifer J. Pruett Deputy Secretary

April 30, 2021

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

RE: DISAPPROVAL REQUEST FOR EXTENSION OF TIME RESPONSE TO COMMENTS APPROVAL WITH MODIFICATIONS 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) is in receipt of the Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (Permittee) *Request for Extension of Time Response to Comments Approval with Modifications Investigation Report Solid Waste Management Unit No. 10 Sludge Pits* (Request), dated April 30, 2021, and received April 26, 2021.

The Request states, "MPC is currently investigating the New API (American Petroleum Institute) Separator to determine the source of water in the Leak Detection Units and determine if repairs are necessary in the New API Separator. MPC would like to complete the investigation and determine next steps before submitting the aforementioned response to Approval with Modifications." Mr. Moore April 30, 2021 Page 2

Comment 2 of the NMED's Approval with Modifications, dated March 4, 2021, identifies the issues associated with the NAPIS; however, it states, "[t]his comment must be addressed in the response to NMED's Disapproval Annual Groundwater Monitoring Report Gallup Refinery – 2019. No revision required."

The Permittee is not required to include further discussion regarding the issues in the relevant response letter; therefore, an extension is not necessary. Since NMED did not respond to the Request until the due date, the Permittee must submit a response letter, replacement pages, and an electronic version of the revised Report no later than **May 14, 2021**.

Should you have any questions, 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 T. McDill, OCD L. King, EPA Region 6 (6LCRRC)

File: Reading File and WRG 2021 File