



MICHELLE LUJAN GRISHAM  
GOVERNOR

JAMES C. KENNEY  
CABINET SECRETARY

Certified Mail - Return Receipt Requested



June 30, 2022

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

**RE: APPROVAL WITH MODIFICATIONS  
HYDROCARBON SEEP INTERIM MEASURES 2021 FOURTH QUARTER STATUS REPORT  
WESTERN REFINING SOUTHWEST LLC, GALLUP REFINERY  
MCKINLEY COUNTY, GALLUP, NEW MEXICO  
EPA ID # NMD000333211  
HWB-WRG-22-002**

Dear Mr. Moore:

The New Mexico Environment Department (NMED) has completed its review of the Marathon Petroleum Company dba Western Refining Southwest LLC, Gallup Refinery (Permittee) *Hydrocarbon Seep Interim Measures 2021 Fourth Quarter Status Report* (Report), dated March 2, 2022 and received on March 7, 2022. NMED has reviewed the Report, and hereby issues this Approval with Modifications with the following comments.

**Comment 1**

In the Cover Letter, paragraph 1, the Permittee states that they also included their response to comments from New Mexico Environment Department's (NMED), *Approval with Modifications Hydrocarbon Seep Interim Measures 2021 Third Quarter Status Report*, dated January 24, 2022 as Attachment A in this submittal. However, there appears to be a typographical error because Attachment A also contains the Permittee's response to Comments 4 and 5 of the NMED's September 14, 2021 *Approval with Modifications Hydrocarbon Seep Interim Measures 2021 Second Quarter Status Report*. These same responses were provided in the October 27, 2021 *Hydrocarbon Seep Interim Measures 2021 Third Quarter Status Report*. Verify that the inclusion of the Permittee's response to Comments 4 and 5 was a typographical error or explain the purpose for their inclusion in Attachment A. The Permittee must only include responses relevant to the Report to avoid confusion. Provide replacement pages for Attachment A, as necessary, with the response letter.

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Hazardous Waste Bureau - 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505-6313  
Telephone (505) 476-6000 - [www.env.nm.gov](http://www.env.nm.gov)

**Comment 2**

In the *Hydrocarbon Seep Source Control* section, page 2 of 100, paragraph 3, the Permittee states, "MKTF-02R was recently installed and it is expected that the significant change in fluid level is due to it achieving stability since installation. Fluid levels in MKTF-02R have been increasing since installation on August 31, 2021 (Table 2A)." The fluid level in well MKTF-02R increased 5.92 feet between August 31 and December 15, 2021 (16.10 feet to 10.18 feet, respectively). Wells MKTF-01R, -04R, -17R, and -18R were also recently installed; however, the significant change in fluid level as seen in well MKTF-02R was not observed in wells MKTF-01R, -04R, -17R, and -18R. Therefore, it appears that there may be another potential cause of fluid level increase in well MKTF-02R. Evaluate the potential cause of the significant fluid level increase in well MKTF-02R and provide a discussion in the upcoming 2022 quarterly status report.

**Comment 3**

In the *Fluids Recovery* section, page 2 of 100, paragraph 5, the Permittee states, "[f]luid recovery in MKTF wells upgradient of the Hydrocarbon Seep Area, with recoverable SPH, continued during the 4th Quarter of 2021 using a vacuum truck." According to the separate phase hydrocarbon (SPH) extraction data presented in Tables 3A through 3F, some wells (e.g., MKTF-14, -17R, 20) did not contain any SPH prior to fluid recovery events being conducted. It is important to identify wells that historically contain SPH prior to conducting fluid recovery events. Evaluate fluid level measurement data presented in Tables 2A and 2B to select wells where fluid recovery may be effective. Identify all wells where fluid recovery events are conducted within this Report and provide a justification for its selection in the upcoming 2022 quarterly status report.

**Comment 4**

In the *Borrow Pit Activities* section, page 3 of 100, paragraph 2, the Permittee states, "[d]uring the 4th quarter, volume measurements from the totes indicate a daily extraction average of SPH-recovered to be 13 gals (from 11/23/2021 to 12/22/2021) versus 31 gals estimated by fluid levels (between 10/4/2021 and 11/22/2021) (Table 4)." Although the new estimation method provides accuracy for the recovered SPH volumes, the data collected prior to November 2021 is not usable because the method was not implemented until November 22, 2021. Remove the data collected prior to November 2021 from future submittals.

**Comment 5**

In the *Sanitary Lagoon Investigation* section, page 4 of 100, paragraph 3, the Permittee states, "[t]he investigation report will be complete and submitted to NMED during the 1st quarter 2022." NMED acknowledges that an electronic copy of the complete report was submitted and received on March 11, 2022.

**Comment 6**

Table 2A (Fluid Level Measurements for Wells MKTF-1 through MKTF-50) contains multiple

Mr. Moore  
June 30, 2022  
Page 3

typographical errors. For example, depth to water (DTW) readings collected from well MKTF-02R on August 31 and September 17, 2021 are recorded as 16.10 feet and 16.58 feet, respectively, and the corresponding groundwater elevations are recorded as 6,906.83 and 6,900.87 feet. However, the differences in DTW readings and groundwater elevations between August 31 and September 17, 2021 are calculated as -0.48 feet and +5.96 feet, respectively. The differences between the DTW readings and groundwater elevations should match one another; correct the typographical error on Table 2A in the upcoming 2022 quarterly status report. In addition, in order to verify the accuracy of the groundwater elevations, include ground surface elevation data for each well location on Table 2A in the upcoming 2022 quarterly status report. Furthermore, the last date reported for the fluid level measurement for well MKTF-03 is recorded as 12/15/22, which appears to be another typographical error. Correct the typographical error on Table 2A in the upcoming 2022 quarterly status report. Ensure that all data reported in Table 2A are accurate in future status reports.

**Comment 7**

Tables 2A and 2B present the readings of depth to SPH, total well depth, DTW, and screened interval depth top to bottom in units of ft (feet). However, it is not clear whether the depth readings are reported as feet below top of casing or ground surface. All data associated with depth measurement must be reported in units of feet below ground surface (bgs) on a revised Tables 2A and 2B in the upcoming 2022 quarterly status report and all future status reports.

The Permittee has fulfilled its obligation to implement source control measures to the extent practicable and to submit quarterly reports to NMED. The Permittee must continue to implement source control measures at the site and continue to submit quarterly status reports. All of the comments included in this letter must be addressed in the upcoming 2022 quarterly status report.

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 letter, please contact Michiya Suzuki of my staff at 505-690-6930.

Sincerely,

**Rick Shean**  
Digitally signed by Rick Shean  
Date: 2022.06.30 14:04:56  
-06'00'

Rick Shean  
Chief  
Hazardous Waste Bureau

Mr. Moore  
June 30, 2022  
Page 4

cc: D. Cobrain, NMED HWB  
L. Tsinnajinnie, NMED HWB  
M. Suzuki, NMED HWB  
H. Jones, Trihydro  
L. Barr, EMNRD OCD  
L. King, EPA Region 6 (6LCRRC)

File: Reading File and WRG 2022 file