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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 29, 2019

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

**RE: DISAPPROVAL
RESPONSE TO APPROVAL WITH MODIFICATIONS
INTERIM GROUNDWATER RECOVERY SYSTEM WORK PLAN
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-19-006**

Dear Mr. Moore:

The New Mexico Environment Department (NMED) has reviewed the *Response to Approval with Modifications Interim Groundwater Recovery System Work Plan* (Response), dated May 8, 2019, submitted on behalf of Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (the Permittee). The Response did not adequately address NMED's comments in the May 1, 2019 Approval with Modifications. NMED hereby issues this Disapproval. The Permittee must address the following comments.

Comment 1

On the cover letter, the task number is incorrectly referenced as HWB-WRG-18-006. The correct task number for this correspondence is HWB-WRG-19-006. Correct the task number in future correspondence.

Comment 2

The Permittee's response to NMED Comment 1 states, "[w]hile it is true that the primary purpose of the groundwater recovery system is to mitigate the migration of both dissolved phase

and non-aqueous phase contaminants, a secondary and serendipitous benefit of the system will be to address the rising groundwater levels in the area immediately surrounding the groundwater recovery pumps.” The Permittee must also address the issue of leaking systems at the facility to counter the rise in groundwater. The Permittee reported in the 2019 *First Quarter Hydrocarbon Seep Status Report* that the Reverse Osmosis (RO) Reject water system was leaking and is now offline and rerouted. This may affect groundwater levels and affect the pumping rates for the recovery wells. No response required.

Comment 3

The Permittee’s response to NMED’s Comment 2 states, “MPC requests that the pumps be allowed to extract water from bottom of the screened interval which will have a greater impact on both dissolved phase and free product.” Well RW-1 is screened from 25 to 40 feet below ground surface (bgs). The depths to separate phase hydrocarbon (SPH) were approximately 26 feet bgs and SPH column thickness ranged from one to 3.5 feet in well RW-1 in 2017 according to the *2017 Annual Groundwater Report*. For wells such as RW-1 that contain measurable free product, the Permittee must not install a pump at the bottom of the screen. Pumps must be installed so that the pump intakes should be located within four feet of the groundwater-free product interface to increase the potential for free product recovery. For the proposed recovery wells (e.g., OW-55) that do not contain free product, extraction from the bottom of the screen is acceptable. Provide a table with a list of proposed extraction wells, well-screened intervals, depths to water, depths to free product, and the proposed pump intake depths in a response letter.

Comment 4

The Permittee’s response to NMED’s Comment 2 states, “[i]t is also noted that the previous pumps that were installed in the recovery wells were also set at the bottom of the existing recovery wells.” This practice must be discontinued (see comments). Identify the recovery wells where groundwater was extracted from bottom of the screen and state whether SPH was present in the wells in the response letter.

Comment 5

The Permittee’s response to NMED Comment 2 states, “[w]hile it is true that not all wells have free product in them, the dissolved phase extends to areas far beyond that occupied by free product. To limit the pumping interval of a recovery system is to continue to allow dissolved phase constituents to migrate unabated.” NMED’s concern regarding the placement of pumps at the bottom of the screened interval in wells that contain free product (e.g., OW-58) is that the free product recovery will be limited. See Comment 3, above.

Comment 6

The Permittee’s response to NMED’s Comment 4 states, “[w]ells OW-14, OW-58, OW-30 and OW-55 are situated in a more easterly location that is closer to the property boundary of the refinery to minimize the opportunity for offsite migration. Additionally, the concentration[s] of constituents are lower in OW-57 than in the proposed wells. The overriding factor in well

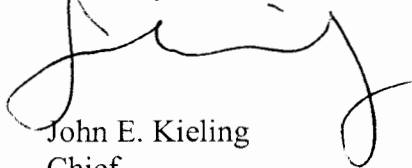
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selection for these wells was boundary control.” OW-55 is not close to the eastern boundary of the facility. There are other wells (e.g., OW-29) that are closer to the eastern boundary. Well OW-29 must also be considered as an extraction well; well OW-29 contains increasing MTBE concentrations.

The Permittee must address all comments in this Disapproval and submit a response letter and a table required by Comment 3. The response letter and table must be submitted to NMED no later than **July 15, 2019**. The Permittee must postpone field work associated with the groundwater recovery system until the response letter is submitted and approved by NMED.

If you have questions regarding this Disapproval, please contact Michiya Suzuki of my staff at 505-476-6059.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: K. Van Horn, NMED HWB
D. Cobrain, NMED HWB
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B. Moore, WRG

File: Reading File and WRG 2019 File
HWB-WRG-19-006