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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 29, 2019

Gregory J. McCartney
Western Refining Southwest, Inc.
Bloomfield Terminal
#50 County Road 4490
Bloomfield, New Mexico 87413

**RE: APPROVAL WITH MODIFICATIONS
RIVER TERRACE ANNUAL REPORT
VOLUNTARY BIOVENTING / AIR SPARGING SYSTEM
(JANUARY – DECEMBER 2017), REVISED JULY 2018
WESTERN REFINING SOUTHWEST, INC. - BLOOMFIELD TERMINAL
EPA ID# NMD089416416
HWB-WRB-18-001**

Dear Mr. McCartney:

The New Mexico Environment Department (NMED) has received the Western Refining Southwest, Inc., Bloomfield Terminal (Western) *River Terrace Annual Report Voluntary Bioventing/Air Sparging System (January – December 2017)* (Report), revised on July 2018. NMED has reviewed the Report and hereby issues this Approval with Modifications with the following comments.

Comment 1

Western’s response to NMED’s *Disapproval Comment 2* states that “upon further review, it was noted that none of these locations were designed and installed as bioventing wells and thus collection of “soil gas” from these locations may not be entirely possible. For example, the collection gallery is a long-perforated pipe placed below the water table with riser on the end to allow placement of a pump to recover groundwater, thus there is no entrance point for soil gas into the collection gallery.” It should be noted that NMED’s *Comment 2* directs Western to

collect soil gas samples from all wells (e.g., TP, BV, DW and MW) at the site, rather than the collection gallery. Regardless, it is not clear why collection of soil gas is not possible from these wells unless the wells are not equipped to allow soil gas samples to be collected. Explain why collection of soil gas is not possible in the response letter.

Comment 2

Western's response to NMED's *Disapproval* Comment 8 states, "[t]he requested information along with the screened interval as measured from the ground surface has been added to Table 1 of the revised report for DW-1, DW-2, DW-3, and MW-49." Table 1 did not include the information regarding the depths of well-screen intervals. Provide this information in a separate table (see Comment 3) for all of the wells at the site, separating the analytical data from the measured groundwater levels and water quality measurements.

Comment 3

Western's response to NMED's *Disapproval* Comment 8 states, "[i]t is not clear how NMED compared the screen interval in TP-5 to the water level elevation without the land surface elevation. Perhaps the land surface elevation was presented in a historical document that is not reflected in Table 1 of the FWGWMP. If NMED can provide the source of the land surface elevation for the TP locations, then we will update Table 1." NMED did not use the land surface elevation to compare the depths of groundwater and screened interval in TP-5 because the information was not available. The screened interval elevation was calculated with information available in Table 1 and the Facility-wide Groundwater Monitoring Plan (FWGMP). According to Table 1, the depth to water (DTW) in TP-5 was recorded as 4.91 feet in the week of April 26, 2017 which was measured from the top of casing (TOC). The depth of screened interval relative to the TOC was calculated by adding the stickup length to the reported depth of screened interval in Table 1 (Well Summary) from the 2016 FWGMP. Then, the depth of screened interval relative to TOC in TP-5 was calculated as 3.83 – 8.83 feet, assuming a five-foot screen. Comparing the DTW and the calculated depth of screened interval below TOC in TP-5, NMED determined that the screened interval was not submerged. Comment 8 stating that the screen interval in TP-5 was submerged is not correct based on the available information. Western must evaluate whether the screened intervals of monitoring wells, temporary piezometers and dewatering wells are appropriate for SPH measurement at the River Terrace. Include the three most recent monitoring events that summarize the DTW data and depths of screened intervals in all of the wells at the River Terrace area in the table required by Comment 2 and evaluate whether each well-screen interval intersects the water table.

Comment 4

Western's response to NMED's *Disapproval* Comment 10 states, "[t]he requested information [elevation, DTW, and total well depth data] has been added to Table 1 of the revised report." The DTW and total well depth data were added for TP-3, TP-10, TP-11, TP-12 and TP-13;

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however, the groundwater elevation data was not included in Table 1. NMED's *Disapproval* Comment 10 directs Western to include the elevation data. Since the TOC elevation data after 2006 is available (except TP-11), the groundwater elevation data can be calculated and added to the table using the information from Table 1 (Well Summary) of the 2016 FWGMP. Include the groundwater elevation data in the table required by Comment 2.

Comment 5

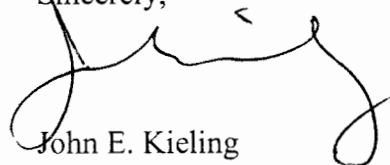
Western's response to NMED's *Disapproval* Comment 17 states, "[w]e were not able to locate as-built drawings [for sheet piling and slurry wall]." If the barrier wall was not installed to the Nacimiento Formation, groundwater would flow beneath the wall. Western must explain how the wall was appropriately installed to the impermeable layer without evaluating as-built drawings in the response letter.

Western must address all comments in this Approval with Modifications in a response letter cross-referencing NMED's numbered comments. The response letter and the tables required by Comments 2, 3, and 4 must be submitted no later than **July 31, 2019**.

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 Approval with Modifications, please contact Michiya Suzuki of my staff at 505-476-6059.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
K. Van Horn, NMED HWB
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