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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 1, 2009

Mr. Randy Schmaltz
Environmental Manager
Western Refining Company
P.O. Box 159
Bloomfield, New Mexico 87413

**RE: APPROVAL WITH DIRECTION
2008 GROUNDWATER REMEDIATION AND MONITORING
ANNUAL REPORT
WESTERN REFINING COMPANY, BLOOMFIELD REFINERY
EPA ID# NMD089416416
HWB-GRCB-09-003**

Dear Mr. Schmaltz:

The New Mexico Environment Department (NMED) has reviewed Western Refining Bloomfield Refinery's (Western) *2008 Groundwater Remediation and Monitoring Annual Report* (Report), dated April 2009. Western must address the following comments.

Comment 1

In Section 3.0 (Scope of Activities), page 2, paragraph 3 under "Seep /Sump Wells." Western states "[d]uring the week of August 11, 2008, samples were collected from Seep 1, 3, and 6 and as required by the *Facility-Wide Groundwater Monitoring Plan (Revised May2008)* were analyzed for BTEX and MTBE (EPA 8260), SVOCs (EPA 8270), and general chemistry (EPA 300.0 and SM2320B). Results can be found in Section 9.0, Tab 9.0."

Samples collected from Seep 1, 3, and 6 were required to be analyzed for total dissolved solids (TDS), carbon dioxide, and specific conductance in accordance with Table 3 (Facility-Wide Monitoring Program) of the December 2007 Facility-Wide Groundwater Monitoring Plan

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(FWGMP). The analyses for these constituents were not mentioned in the text or in Section 9.0 (Tables), Tab 9.0, with the exception of carbon dioxide. In the response letter, Western must explain why TDS and specific conductance were not analyzed. Western must ensure that TDS and specific conductance are included in the analyses at Seeps 1, 3, and 6 during the next annual groundwater monitoring event. In addition, the text of future annual groundwater monitoring reports must discuss all constituents that were analyzed or include an explanation as to why a specific analysis was not conducted.

Comment 2

In Section 3.0 (Scope of Activities), page 2, paragraph 2 under **Groundwater Monitoring**, Western states “[t]he facility-wide semi-annual monitoring event occurred during the week of April 7, 2008. Guidelines from the *Facility-Wide Groundwater Monitoring Plan (Revised December 2007)* were followed. East Outfall #2 and East Outfall #3 were sampled and analyzed for BTEX/MTBE (EPA 8260), Dissolved metals (EPA 6010B), Total Metals (EPA 6010B & 7470), Anions (EPA 300.0), and Alkalinity (SM 2320B). Field measurements of E.C., pH, and temperature were also read.”

According to Table 3 of the FWGMP, samples collected from East Outfall #2 and East Outfall #3 should have also been analyzed for carbon dioxide. The analysis of carbon dioxide was not mentioned in the text, but the results were included in the Table “Groundwater Analysis – General Chemistry” found in Section 9.0 (Tables), Tab 9. In the next annual groundwater monitoring report, the text must identify all constituents included in the sample analyses.

Comment 3

In Section 3.0 (Scope of Services), page 2, paragraph 2, under “**Seeps/Sump Wells**,” Western references the *Facility-Wide Groundwater Monitoring Plan (Revised May 2008)* and in the same section under **Groundwater Monitoring**. Western references *Facility-Wide Groundwater Monitoring Plan (revised December 2007)*. Western provides two revision dates; however, the approved FWGMP document is dated as the “revised December 2007” document. In future annual groundwater monitoring reports, Western must reference documents consistently and apply the correct revision date.

Comment 4

In Section 3.0 (Scope of Services), Western lists the constituents and analytical methods utilized during the semi-annual and annual sampling events. Western left out the analysis of total dissolved solids; however, the results for these analyses were identified in the tables. In future groundwater monitoring reports, Western must identify in the text all analyses conducted during the monitoring event or explain any deviations from the FWGMP.

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Comment 5

In the next annual groundwater monitoring report Western must include the following changes to Section 4.0 (Regulatory Criteria/Groundwater Cleanup Standards/State of New Mexico Soil Screening Levels):

- a. On page 1, Western applies the Water Quality Commission Control (WQCC) standard for lead (0.05 mg/l). Western must replace this with the MCL which has a lower standard (0.015 mg/l).
- b. Western must reference the Regional Screening Levels (RSLs) which have replaced the USEPA Region VI Human Health Medium-Screening level and the Federal Maximum Contaminant Levels. The RSLs can be located at http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm.
- c. Western must revise the title of this section to remove the reference to the "State of New Mexico Soil Screening Levels" since these standards are not applied in this Report.

Comment 6

Table 3 of the FWGMP segregated the wells located at the facility into four groups; these groups and the associated wells are listed in the text of Section 8.0 (Summary – Conclusions and Recommendations). Western must revise Section 8.0 in the next annual groundwater monitoring report to include MW-31 to the cross-gradient group and include MW-31 and MW-40 to the refinery wells group. These wells were not identified in the Report but are listed in Table 3 of the FWGMP.

Comment 7

In Section 9.0 (Tables), Tab 3, Western provides Sump Well Fluids Monitoring data for June 2008. The Separate Phase Hydrocarbon Thickness Column for SW5-0206, SW6-0206, and SW7-0206 show negative numbers. Western must provide an explanation for the negative numbers or provide the correct data in the response letter and make all necessary corrections to the next annual groundwater monitoring report.

Comment 8

In Section 9.0 (Tables), Tab 5, page 3, the table "Background Wells, Groundwater Analysis – Total Metals" identifies monitoring well (MW) 3. The August 06 results for this well are listed as "NS¹" (which is notated as "Well is Dry or Not Enough Water to Sample-No Sample") for all metals except chromium and lead. If a sample was not collected, it is not clear why results are reported for chromium and lead. Western must provide an explanation for the analytical results in the response letter and make any necessary correction(s) to the next annual groundwater monitoring report.

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Comment 9

In Section 9.0 (Tables), Western applied NMED's Total Petroleum Hydrocarbon Screening Guidelines, diesel #2/crankcase oil (1.72 mg/kg) for diesel range organics (DRO). Western must apply the "unknown oil" screening guideline of 0.2 mg/l to future annual groundwater monitoring reports. If Western can confirm that DRO at the facility is diesel #2/crankcase oil, then the 1.72 mg/kg may be applied, but the basis for using diesel #2/crankcase oil must be included.

Comment 10

In Section 3.0 (Scope of Activities), page 4, Western states "[a]t least three well volumes were purged from each well prior to sampling. Electrical conductance, pH, and temperature were monitored during purging using an Ultrameter 6P." In Section 12 (Field Methods), page 1, Western states under Water Quality/Groundwater Sampling that "[w]ater quality parameters are measured using an Ultrameter 6P by the Myron L Company. Electrical conductance, oxidation-reduction potential (ORP), pH, and temperature are monitored during purging."

The FWGMP states in Section 4.1.3 (Well Purging), page 4-1 that "[t]otal purge volume will be determined by monitoring groundwater, pH, specific conductance, dissolved oxygen (DO) concentrations, oxidation-reduction potential (ORP) and temperature after every two gallons or each well volume, whichever is less, has been purged from the well." The collection of dissolved oxygen (DO) was not mentioned in the Report nor was ORP mentioned in Section 3.0. In addition, the DO and ORP data were not reported in the tables found in Section 9, Tab 4 (Water Quality Measurements). Western must explain why this data was not collected. If the data was collected, this information must be included in the response to this letter. Western must ensure that the DO and ORP data are collected and reported in the next annual groundwater monitoring report.

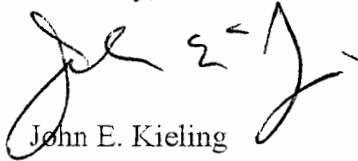
Comment 11

In Section 13 (Waste Disposition), the "Containers, Type" column has the following notations "DM, DF, CM, DT, CF, and TT" which are not defined. In the next annual groundwater monitoring report, Western must define these notations.

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Western must submit a response letter that addresses all comments requiring a response. The response letter must be submitted to NMED on or before October 26, 2009. If you have questions regarding this letter please contact Hope Monzeglio of my staff at 505-476-6045.

Sincerely,



John E. Kieling
Program Manager
Permits Management Program
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
H. Monzeglio, NMED HWB
C. Chavez, OCD
A. Hains, Western-El Paso
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HWB-GRCB-09-003