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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 13, 2013

Randy Schmaltz
Environmental Manager
Western Refining, Southwest, Inc.
Bloomfield Refinery
P.O. Box 159
Bloomfield, New Mexico 87413

**RE: APPROVAL WITH MODIFICATIONS
2011 GROUNDWATER REMEDIATION AND MONITORING
ANNUAL REPORT (JANUARY – DECEMBER 2011)
WESTERN REFINING SOUTHWEST INC., BLOOMFIELD REFINERY
EPA ID# NMD089416416
HWB-WRB-12-002**

Dear Mr. Schmaltz:

The New Mexico Environment Department (NMED) has received Western Refining Southwest, Inc., Bloomfield Refinery's (Western) *2011 Groundwater Remediation and Monitoring Annual Report, January – December 2011* (Report) dated April 2012. NMED has reviewed the Report and hereby issues this approval with the following modifications.

1. Section 2.0 (Scope of Activities), pages 7-14:

NMED's Comment: Western indicated several times throughout Section 2.0 and Section 3.0 (Results Summary) that samples collected at some wells were "inadvertently not analyzed" for certain analytes or chemical parameters. Western must follow the currently approved Facility-

Wide Groundwater Monitoring Plan (FWGMP) and ensure all analytes and chemical parameters are analyzed for each sampling event and reported in all future reports. In addition, Western must indicate the sampling event(s) for the omitted analyses in future reports.

2. Section 2.0 (Scope of Analysis) and 3.0 (Results Summary), pages 7 - 25:

NMED'S Comment: Western defined several acronyms in Section 2.1.2 (Groundwater Field Parameters), and then redefined them in Section 3.1.2 (Groundwater Field Measurements). In addition, separate-phase hydrocarbons (SPH) was not defined on page 8, but was subsequently defined on page 15. Define all acronyms at first use in the text and avoid redefining them in later sections in all future reports.

3. Section 3.1.3 (Refinery Complex Sampling), page 16:

NMED's Comment: Western did not include mercury and sulfate in the appropriate sections discussing detections of analytes at concentrations greater than cleanup levels for each monitoring well. Results for wells MW-8 and RW-18, exceeded the NMED Water Quality Control Commission (WQCC) standard for mercury of 0.002 mg/L for August 2011 at 0.074 mg/L and 0.0059 mg/L, respectively and the MW-62 result, 3700 mg/L exceeded the sulfate WQCC standard of 600 mg/L. In future reports, review the discussion and analytical data tables to ensure that all results are addressed in the appropriate sections of the Report.

4. Section 3.2 (Total Fluids Recovery Systems), page 24:

NMED's Comment: There are several typographical errors in Section 3.2. For example, in Section 3.2.1 (Groundwater Recovery Systems), Western states that "[t]he wells used for total fluids recovery were RW-1, RW-2, RW-9, RW-14, RW-15, RW-16, RW-16, RW-17, RW-18, RW-22, RW-23, RW-28, RW-42, and RW-43. The estimated total gallons pumped (SPH and groundwater) from the recover wells in 2011 are approximately 1,222,992 gallons." RW-16 is listed twice in the first sentence and "recovery" is misspelled in the second sentence. In addition, in Section 3.2.2 (North Boundary Barrier Wall Collection System), Western states that "[i]n comparing the thickness of between the collection wells and corresponding observation wells, on average the groundwater surface was over four feet lower on the river-side of the North Boundary Barrier Wall compared to the corresponding groundwater elevation on the refinery-side of the wall." Western does not complete the reference for the comparison. Provide a replacement page with the response letter and review all future reports for typographical errors.

5. Section 4.1 (Groundwater Monitoring), page 26:

NMED's Comment: Western states that it "has in-place a Facility-Wide Groundwater Monitoring program that is up-dated annually as required under the 2077 Consent Order issued

by NMED-HWB.” The Consent Order’s issue date is July 27, 2007, the year stated in the Report is incorrect. Review all future reports for typographical errors.

6. Table 1 (Fluid Level Measurements Summary):

NMED’s Comment: Table 1 depicts several wells, MW-41, MW-45, MW-47, MW-56, MW-58, RW-14, RW-16, RW-28, and OW3+85, that present separate phase hydrocarbons (SPH) for the first time, demonstrate increases in SPH thickness, or display seasonal presence of SPH within the refinery. Western did not explain these observations in the appropriate sections of the Report. Provide a separate letter discussing the historical presence of SPH at the wells, provide an explanation for the observation of SPH for the first time, and describe the seasonal presence of SPH and increases of SPH thickness at the wells. In addition, Western must discuss proposed methods to determine the source(s) of the SPH and what course of action will be taken after the source(s) is identified. In future Annual Reports, provide a discussion about the observations of SPH presence in the refinery and any changes that have occurred throughout the sampling and monitoring year.

7. Table 2 (Groundwater Field Parameter Summary), page 5 of 6:

NMED’ Comment: In the column labeled “Dissolved Oxygen (mg/l)” under the August 2010 sampling event for RW-43, Western reports the dissolved oxygen (DO) concentration of 130.0 mg/L. It appears that this value may have been reported in error. Provide an explanation for the high reading in the response letter and include a footnote summarizing the explanation in future reports that include this information.

8. Tables 3 (Refinery Wells Analytical Summary) through 10 (San Juan River Terrace: San Juan River Analytical Summary):

NMED’s Comment: There are inconsistencies between the footnote section and the symbols in the tables. For example, “--” indicates “No screening level or analytical result available” but in the screening levels column of the tables “-” indicates no screening level and “---” indicates no analytical result. In addition, the yellow highlighted bolded results are assumed to be those results that exceeded the screening levels. All symbols on tables must be defined and the footnote symbols must match the symbols in the table in all future reports.

9. Table 3 (Refinery Wells Analytical Summary), page 3 of 9:

NMED’s Comment: Western did not highlight the mercury analytical results for MW-8 and RW-18 which exceeded the NMED WQCC standard of 0.02 mg/L (*see* also Comment 3). Review all analytical data tables to ensure the all exceedances are highlighted in each table in future reports. Provide a replacement page (page 3 of 9) highlighting the WQCC exceedances.

10. Table 6 (RCRA Wells Analytical Summary), page 3 of 6:

NMED's Comment: There are several typographical errors on page 3 of Table 6.

- a. The analytical data result for manganese reported for MW-62 is incorrect. Western reported 1.62 mg/L in Table 6 but is 1.2 mg/L in the analytical laboratory report.
- b. The footnote reference for the sulfate screening level is incorrect. There is no footnote 6 on Table 6. It is assumed that the reference should be (3) for the NMED WQCC standards. This typographical error is carried out for all data tables.
- c. Western bolded the August 2010 and 2011 sulfate results for well MW-51 but did not explain why these values were highlighted.
- d. The August 2010 dissolved iron (8.9 mg/L), ethylbenzene (2.6 mg/L), and sulfate (5100 mg/L) exceedances for wells MW-58, MW-55, and MW-62, respectively, and the August 2011 sulfate (3700 mg/L) exceedance for well MW-62 were not highlighted in Table 6.

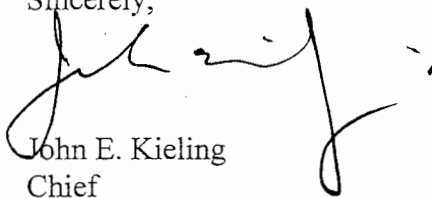
Revise page 3 for Table 6 by reporting the correct screening level reference and analytical result for MW-62 and explain why the sulfate results for MW-51 were highlighted or remove the bold format from Table 6. Include on the replacement page highlights for the iron, ethylbenzene, and sulfate exceedances for wells MW-55, MW-58, and MW-62. Review all analytical data tables to ensure the correct information is presented, highlighted and included in the discussion of the results in future reports.

R. Schmaltz
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Western must address all comments where a response is required by this Approval with Modifications. In addition, the letter from Comment 6 must be submitted to NMED by **April 5, 2013** and the response letter must be submitted to NMED by **May 31, 2013**.

If you have any questions regarding this letter, please contact Leona Tsinnajinnie of my staff at (505) 476-6057.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
L. Tsinnajinnie, NMED HWB
C. Chavez, OCD
A. Hains, Western Refining Company, El Paso, Texas
K. Robinson, Western Refining Company, Bloomfield, New Mexico

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