

March 7, 2012

John E. Kieling, Acting Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505



Certified Mail #: 7009 0820 0000 0482 9078

Re: Response to NMED Comments dated October 21, 2011
GROUP 9 (SWMU NO. 12 API SEPARATOR, SWMU NO. 13 PROCESS
AREA, and SWMU NO. 14 TANKS 3, 4, and 5), and SWMU NO. 27
WASTEWATER COLLECTION SYSTEM
WESTERN REFINING SOUTHWEST, INC., BLOOMFIELD REFINERY
EPA ID# NMD089416416
HWB-WRB-11-004

Dear Mr. Kieling:

Western Refining Southwest, Inc., Bloomfield Refinery has prepared the following responses to your comments received on the referenced investigation work plan.

NMED Comment No. 1: Section 2 (Background), pages 3-8

Section 2 describes the historical information for each SWMU in Group 9. List possible constituents of concern (COCs) identified during previous investigations in the response letter.

Western Response No. 1: As noted in the investigation work plan, there have not been any previous investigations of soils, so the possible COCs identified during previous investigations are identified for groundwater. The historical groundwater analyses are presented in Table 1 of the investigation work plan. The detected contaminants, which could be considered "possible constituents of concern", are as follows; benzene, ethylbenzene, toluene, xylene, diesel range organics, gasoline range organics, methyl tertiary butyl ether, arsenic, barium, cadmium, chromium, iron, lead, manganese, mercury, zinc, fluoride, chloride, nitrite, nitrate, and sulfate.

NMED Comment No. 2: Section 2 (Background), SWMU No. 13 (Process Area), page 5

Western's Statement: "[t]he FCC Gas Concentration Unit fractionates the products from the FCC reactor into fuel gas, cat gas (which is a gasoline blendstock), LCO (which is blended diesel), and #6 burner fuel."

NMED's Comment: In future reports, be consistent with spelling out acronyms and provide a list of acronyms at the beginning of all work plans and reports.

Western Response No. 2: A new list of acronyms and revised the Table of Contents is enclosed.

NMED Comment No. 3: Section 5.2 (Soil Sampling), pages 13-15

Western must propose to drill all soil borings to the water table. Western must collect soil samples at 2.5 foot intervals from the ground surface to the water table and at the water table and all soil samples submitted to the laboratory for analysis must be analyzed for those constituents in Comment 6. One additional soil boring location has been added south of the Crude Oil Tanks 8 and 9 and the API Separator (see attached figure).

In addition, NMED has selected five soil boring locations to be completed as monitoring wells since refinery operations have ceased and the Process Area can now be accessed (see attached figure). In the proposed areas, the depth to groundwater is approximately 19 feet. Western does not need to sample groundwater encountered during the drilling activities unless a monitoring well is completed in the boring. If product is encountered, Western must collect a sample and conduct a fingerprint analysis to characterize the product. The groundwater samples collected from the newly installed monitoring wells must be analyzed for all constituents listed in Comment 6. Revise the Work Plan accordingly.

Western Response No. 3: Sections 4.1, 5.1, and 5.2 have been revised to specify that all soil borings will be drilled to the water table, with borings to be completed as monitoring wells drilled to the top of the Nacimiento Formation. The additional soil borings have been added to the discussion in Section 5.2 and on Figure 9. Five of the soil borings will now be completed at permanent monitoring wells as discussed in Sections 5.2 and 5.3 and indicated on Figure 9. Pursuant to discussions with your staff, product samples will not be collected for fingerprint analysis.

NMED Comment No. 4: Section 5.2 (Soil Sampling), page 15

Section 5.2 lists the depths of sample collection. The Permittee must clarify that the first sample listed in bullet 1 (0-6 inches) will be collected from the native soil immediately below the gravel fill in the revised Work Plan.

Western Response No. 4: The text in Section 5.2 has been revised to clarify that the first soil sample will be collected from native soil and not gravel fill material. The sample collection interval for the second sample (6-24") has also been revised to address the concern over the potential presence of gravel fill material.

NMED Comment No. 5: Section 5.3 (Ground Water Monitoring), page 16

*Western's Statement: "no groundwater samples are proposed under this Scope of Work."
NMED's Comment: Historically, SWMU No. 13 (Process Area) has been inaccessible because of refinery operations. Because refinery operations have ceased, Western must install monitoring wells to characterize the contaminants within this area. In the revised Work Plan, the Permittee must discuss well installation and development and propose to complete the soil borings marked in the attached figure as monitoring wells (see also Comment 3).*

Western Response No. 5: The work plan has been revised to include additional subsections under Section 5.3 to discuss measurement of fluid levels (5.3.1), groundwater and vadose zone vapor sampling (5.3.2), well purging (5.3.3), and groundwater sample collection (5.3.4). Well installation has been added to Section 5.1 Drilling Activities.

NMED Comment No. 6: Section 5.8 (Chemical Analyses), page 19

Section 5.8 discusses the proposed analyses for the soil samples. The Permittee proposes volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO), the Skinner List Metals, and cyanide. The Permittee states that only soil samples collected at the former tetraethyl lead (TEL) storage buildings will be analyzed for total lead and those samples collected near the cooling towers will be analyzed for total chromium. The Skinner List Metals includes both lead and chromium and the Permittee must propose to analyze all soil samples accordingly. In addition, groundwater sample analysis must be included in this section. Groundwater samples obtained from the newly installed monitoring wells must be analyzed for VOCs, SVOCs, GRO, DRO, MRO, Skinner List Metals, cyanide, iron, manganese, and general chemistry parameters. Include these analytical parameters for groundwater samples in the revised Work Plan.

Western Response No. 6: The discussion in Section 5.8 pertaining to soil analyses actually states, "Only the soil samples collected at the former tetraethyl lead storage buildings will be analyzed for tetraethyl lead in addition to total lead and only the soil samples collected near the cooling towers will be analyzed for chromium VI in addition to total chromium." All soil samples will be analyzed for the full Skinner list of metals. Additional analyses for tetraethyl lead and chromium VI are specified for locations where these constituents may have been handled.

Groundwater analyses have been included in Section 5.8 as directed. In addition, the water sample collected from the new well installed near the former tetraethyl lead storage building will also be analyzed for tetraethyl lead and the water sample collected from the new well installed near the cooling towers will also be analyzed for chromium VI.

A new Table 2 has been added that provides historical data on water quality purge parameters.

NMED Comment No. 7: Figure 3 (Separate Phase Hydrocarbon Thickness Map)

Figure 3 depicts a dark blue line east of Tank 45 and west of MW-5 that is not defined in the legend. Define this line or remove it from Figure 3 in the revised Work Plan.

Western Response No. 7: The subject blue line has been removed from the figure.

NMED Comment No. 8: Figures 5 (Cross Section A-A'), 6 (Cross Section B-B'), and 7 (Cross Section C-C')

Figures 5, 6, and 7 contain the cross sections of selected monitoring and recovery wells at the facility, but the figures do not show all information for all the wells (e.g., screened intervals). Figure 5 does not depict the screened intervals for wells MW-3, MW-40, MW-41, MW-44, and RW-42. Figure 6 does not include the screened intervals for MW-1, MW-3, MW-5, and MW-52. Figure 7 does not include the screened intervals for MW-6 and MW-44. Identify the screened intervals for all of the wells depicted in the figures of the revised Work Plan.

Western Response No. 8: The information on the screen intervals is not available for the listed wells. The figures have been revised to include a note in the legend to explain why the screen intervals are not shown on these wells.

NMED Comment No. 9: General Comment regarding submittals

NMED only received one copy of the Investigation Work Plan for Group 9. In accordance with Section X.A (General), paragraph 1, of the July 27, 2007 Order (Order), "[a]ll work plans and reports shall be submitted to [NMED] in the form of two paper copies and an electronic copy." In the future, Western must submit two paper copies and an electronic copy of work plans and reports unless otherwise specified by NMED.

Western Response No. 9: Western apologizes for this omission and will include two paper copies and an electronic copy of all future submittals unless directed otherwise by NMED.

You will please find enclosed the following revised replacement pages and figures and a new Table 2, which have been prepared to address your comments:

- Revised Table of Contents;
- Executive Summary;
- Section 4.1 Anticipated Activities;
- Section 4.4 Surveys;
- Section 5 Investigation Methods;
- Figures 3, 5, 6, 7, and 9; and
- Table 2.

In addition, an electronic version of the revised work plan is enclosed that identifies where all changes have been made in redline strikeout format. If you have questions regarding the above responses or the enclosures, please contact me at (505) 632-4171.

Sincerely,



James R. Schmaltz
Health, Safety, Environmental, and Regulatory Director
Western Refining Southwest, Inc., Bloomfield Refinery

cc: Dave Cobrain – NMED HWB
Leona Tsinnajinnie – NMED HWB
Carl Chavez - NMOCD
Allen Hains – Western Refining El Paso
Kelly Robinson – Western Refining Bloomfield