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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 1, 2010

Mr. Ed Riege
Environmental Manager
Western Refining, Southwest Inc., Gallup Refinery
Route 3, Box 7
Gallup, New Mexico 87301

**RE: SECOND NOTICE OF DISAPPROVAL
FACILITY WIDE GROUNDWATER MONITORING WORK PLAN
WESTERN REFINING COMPANY SOUTHWEST, INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-GRCC-09-001**

Dear Mr. Riege:

The New Mexico Environment Department (NMED) has completed its review of the *Facility Wide Groundwater Monitoring Work Plan* (Work Plan), dated May 11, 2009, submitted on behalf of Western Refining Company Southwest Inc., Gallup Refinery (Permittee) and hereby issues this second Notice of Disapproval (NOD). The Permittee must address the following comments.

Comment 1

The Permittee does not provide sufficient detail regarding proposed field activities. In NMED's December 19, 2009 *Notice Of Disapproval Facility Wide Groundwater Monitoring Work Plan*, the Permittee was directed to revise the Work Plan to simplify and describe the actual proposed sample collection methods and procedures and remove repetitive information. Unfortunately, the Permittee oversimplified the descriptions. The expectation of a work plan is that readers must be able to ascertain from the Work Plan the operations that will be conducted in the field. As a guideline, the text must include a brief description of all activities to be performed during the monitoring event to include, but not be limited to, groundwater well sampling (including well purging and waste disposal) and surface water sampling. Then, in an appendix, the Permittee

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must discuss details of those activities including, but not limited to, the methods used in the field (i.e., methods of measuring groundwater elevation, SPH thickness, water quality parameters, and collection of groundwater and surface water samples), well purging techniques and sample handling procedures, and investigation derived waste management and disposal methods. The text must be written in present tense (i.e., "will" instead of "should") and be prescriptive. NMED provided an example of a work plan from Fort Wingate Depot Activity in the March 10, 2009 letter and the Permittee should also have access to work plans from Bloomfield refinery as well. See Attachment 1 for an additional example.

Comment 2

The details of Section 4.2.3 (Sample Handling) and Section 4.4 (Documentation of Field Activities) must be moved to an appendix. A general discussion of sample handling and documentation and field activities is appropriate for the text; however, the specific details of the sample handling, such as the shipping procedures and information about blanks, field duplicates, reporting limits and holding times are more appropriate for an appendix as discussed in Comment 1. The Permittee must revise the Work Plan to generally discuss sample handling and documentation of field activities in the text and discuss the specifics of those activities in an appendix.

Comment 3

In Section 4.2.7 (Collection of surface water samples), page 36, the Permittee is not specific enough in the description of collection of grab samples. The Permittee states "[a]t the evaporation ponds, samples will be collected near the inlets, and will be a grab sample at the pond edge near the inlet. This location will be noted in the field notebooks. For outfalls, a grab sample will be collected at the pipe end, and recorded." There is no expansion of this description in Appendix B (Gallup Field Sampling Collection and Handling Standard Procedures). NMED's December 2009 NOD directed the Permittee in Comment 31 to either remove the Guidelines for Sampling Ponds section or revise the section to explain how the Evaporation Pond samples will be collected. The Permittee revised the Work Plan; however, the Permittee removed relevant details. The description of sampling methods and procedures must be more detailed. For example, the Permittee must describe the type of instruments that will be used for sample collection (e.g., the sample bottle will be dipped into the water or a bailer will be used and the sample will be transferred to a sample bottle). The description of grab samples in the original Work Plan was much more thorough and descriptive; however, the Permittee must edit the methods and procedures to fit the anticipated methods and procedures the field technicians at Gallup will actually utilize in the field. The Permittee must also describe in more detail the locations where the samples will be collected (i.e., which outfalls and if the outfalls are not included in Table 1, revise Table 1 to include them).

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The Permittee must revise the Work Plan sections regarding surface water sample collection to be more detailed and descriptive.

Comment 4

The Work Plan still contains some repetitive information. For example, on page 10, the Permittee repeats information stated on page 7 about the regulatory identification, the permit, and the location of the Refinery. Also, on page 10, the Permittee repeats information (also on page 10) about the crude oil pipelines. The Permittee must revise the Work Plan to remove repetitive facts.

Comment 5

Figures 3 and 5 are of too small a scale to read in the 8x11 format. The Permittee must provide a larger scale map (11x17), so that the text is legible and the figures are discernable as representative of the fold out maps provided.

Comment 6

There are several issues regarding Figure 5 (Map of groundwater flow FEBRUARY 2010). The Permittee appeared to use three data points to draw the groundwater contours (there are three wells with what are assumed to be groundwater elevation data next to them). Three data points are not sufficient to create an accurate groundwater map. Comparing the groundwater elevation contours on the map to the data that was included in the May 11, 2009 Facility Wide Groundwater Monitoring Work Plan, Appendix E, the contours of the groundwater map do not fit with the groundwater data collected in the field. In Section 3.5.3 (Presence and flow direction of groundwater), page 20, the Permittee states that a subsurface ridge was discovered in the northeast section of the Refinery; however, this is not represented on the map and if accurate, the groundwater flow arrow pointing in the opposite direction of flow is inconsistent with the presence of a ridge and does not make sense. The Permittees must revise the map to show the groundwater level data for all wells (the Permittee may need to provide multiple groundwater maps accounting for seasonal fluctuation, shallow and deep groundwater in order to provide a more comprehensive picture of the groundwater flow), the contour lines must be revised to represent the groundwater level data accurately, and the groundwater flow lines must be redrawn to be based on the new contour lines.

Comment 7

NMED's February 2009 letter *Facility-Wide Groundwater Monitoring Work Plan*, required the Permittee to provide "a section or table to include, but not limited to, a description of all existing monitoring wells, recovery wells, and any other required sampling locations specifying their

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exact location, date the wells were installed including ground elevation, top of casing elevation, well casing stick up length, well depth, well casing diameter, screened interval, screen length, and stratigraphic unit(s) intersected by the well screen." In the original Work Plan, these data were presented in Appendix E (Groundwater elevations and well descriptions), but was removed from the revised Work Plan. The Permittee must provide this information and revise the Work Plan to include it.

Comment 8

The Table of Contents (TOC) is still not complete. The TOC must include all subsections of the Work Plan; it is missing Sections 4.5.6.1 through 4.5.6.4 and Sections 4.5.7.1 and 4.5.7.2. The Permittees must revise the Work Plan to ensure all of the subsections are included in the TOC.

Comment 9

In Section 4.1 (Groundwater elevation surveys), page 22, the Permittee states that "[t]he depth to groundwater and SPH thickness will be recorded relative to the surveyed well casing rim or other surveyed datum." The Permittee must ensure that all of the wells are surveyed relative to the same datum and that water/product levels are measured from the top of the well casing in each well. The Permittee must revise the Work Plan to make it clear that the wells have been surveyed relative to the same datum.

Comment 10

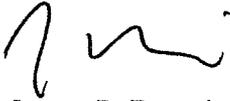
The list of sampling locations for the East side and West side sampling areas on page 42 through 43 is inaccurate. The Permittee must ensure that the list of sampling locations corresponds to the locations listed in Table 1; some of the locations are missing from the list. Additionally, some of the wells are repeated in the list (e.g., BW-2A and BW-3A). The Permittee must revise the Work Plan to list the all of the sampling locations included in Table 1.

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The Permittee must address all comments contained in this NOD and submit a revised Work Plan to NMED and OCD on or before May 10, 2010. The revised Work Plan must be accompanied by a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. In addition, the Permittees must submit a redline-strikeout version that includes all changes and edits to the Report (electronic copy) with the response to this NOD.

If you have questions regarding this NOD please contact Kristen Van Horn of my staff at 505-476-6046.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB
D. Cobrain NMED HWB
H. Monzeglio NMED HWB
K. Van Horn NMED HWB
C. Chavez, OCD
R. Gaurav, Gallup
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