



August 25, 2011

John Kieling, Acting Chief  
New Mexico Environment Department  
Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Bldg 1  
Santa Fe, NM 87505-6303

**Certified Mail #: 7010 3090 0001 3450 2623**

Re: Response to APPROVAL WITH MODIFICATION  
2010 Groundwater Remediation and Monitoring Annual Report  
Western Refining Southwest, Inc., Bloomfield Refinery  
EPA ID# NMD089416416  
HWB-WRB-11-003

Dear Mr. Kieling:

Western Refining Southwest, Inc. – Bloomfield Refinery (Western) has prepared the following response to your comment letter (dated June 29, 2011) on the referenced Annual Report.

**NMED Comment**

*Western must submit a response that explains how the volume of SPH and water from the recovery system was estimated.*

**Western Response**

Currently all the active recovery wells are equipped with pneumatic submersible pumps, with the exception of recovery well RW-1 which is equipped with an electric submersible pump. The pneumatic recovery pumps operate on a timer-cycle which allows the groundwater to recover in the well during off cycles so as to ensure the pumps do not run dry. The recovery well equipped with an electric pump runs continuously (no cycling).

The recovery wells are not equipped with in-line flow meters; therefore Western personnel collect field measurements to estimate the pumping rate of each well. These measurements are collected on three separate occasions throughout each year. The yearly average flowrate of each pump is extrapolated to estimate the total volume pumped in one year. The summation of total fluids pumped from each well is the value reported in the Annual Report.

The field measurements collected and calculations performed to determine total fluids pumped per calendar year are summarized below:

**Step 1:** Each recovery well is equipped with a sample port. For pneumatic pumps, discharge of total fluids is diverted to a graduated container during an active pumping cycle to estimate the total volume of fluids pumped during one pumping cycle. This step is repeated three times to develop an average volume pumped per cycle.

For the electric pump, the time required to fill the graduated container is measured using a stopwatch or equivalent. The collected volume of fluid divided by the time required to collect the fluids equates to an estimated flowrate.

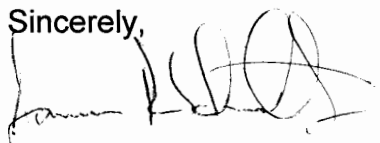
**Step 2:** For the pneumatic pumps, Western personnel then verify in the field the number of pumping cycles per minute.

**Final Calculations:** For the pneumatic pumps, the estimated total volume pumped per well is calculated using the average volume of total fluids pumped per cycle times the number of cycles per minute. This total volume per minute is extrapolated over one year to estimate the total volume pumped per year. For the electric pump, the average flowrate is extrapolated over a year to estimate the total volume pumped over one year. The summation of total volume pumped per year for each recovery well is the value reported in each annual report.

An explanation of how much total fluids are recovered each year will be included in subsequent Groundwater Remediation and Monitoring Annual Reports.

If you have any additional questions or request additional clarification, please contact me at (505) 632-4171.

Sincerely,



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

cc: D. Cobrain – NMED HWB  
L. Tsinnajinnie – NMED HWB  
C. Chavez – NMOCD  
A. Hains – Western Refining