AP - 111

Hydrocarbon Seep Interim Measures (SWMU No.12)

2018

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 25, 2018

Jessica L. O'Brien
Environmental Supervisor
Western Refining, Southwest Inc., Gallup Refinery
92 Giant Crossing Road
Gallup, New Mexico 87301

RE: APPROVAL WITH MODIFICATIONS
HYDROCARBON SEEP INTERIM MEASURES 2016 3rd, 2017 3rd AND 2018 1ST QUARTERS STATUS REPORTS
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-16-007
HWB-WRG-17-009
HWB-WRG-18-003

Dear Ms. O'Brien:

The New Mexico Environment Department (NMED) has reviewed the *Hydrocarbon Seep Interim Measures 2016 3rd Quarter Status Report* (2016 Report), dated October 24, 2016, the *2017 3rd Quarter Status Report* (2017 Report), dated October 24, 2017 and the *2018 1st Quarter Status Report* (2018 Report), dated May 1, 2018, submitted on behalf of Western Refining Southwest Inc., Gallup Refinery (the Permittee). NMED hereby issues this Approval with Modifications.

This Approval with Modifications addresses the quarterly status reports submitted for the 2016 3rd Quarter, 2017 3rd Quarter and 2018 1st Quarter monitoring and updates on the hydrocarbon seep interim measures. Many of the comments apply to all of the Reports; therefore, NMED is providing comments for the Reports simultaneously. The Permittee must make all required changes presented in this letter to all future reports.

In addition, the Permittee has not yet provided a response letter to address comments in the *Approval with Modifications letter for Hydrocarbon Seep Interim Measures 2017 4th Quarter Status Report*, dated March 2, 2018. Therefore, Comments 1 and 4 in the March 2, 2018 letter carry over and apply to all future reports as well. The Permittee must address the following comments.

Comment 1

Comment 22 of the April 26, 2016 *Disapproval* letter states, "[b]ecause the investigation is not yet complete, the Permittee must revise the Report to propose providing quarterly status reports regarding product recovery, planned additional measures and efforts to address leaking pipes or tanks at the Main Truck Loading Racks." The status reports were not submitted for the first and second quarters of 2017. The Permittee must submit a quarterly status report for NMED's review within 30 days after the end of each quarter. Acknowledge the requirement in a response letter.

Comment 2

In *Stand Pipes Recovery Records*, the volume of recovered hydrocarbons from the recovery stand pipes is tabulated. The volume of recovered hydrocarbons recorded was notably higher between July 6, 2016 to May 24, 2017 in comparison to the recorded volumes before July 6, 2016 and after May 24, 2017. The Permittee explained that the cause of the increase was due to a change in vacuum truck operators in the 2016 Report. Provide a more detailed explanation regarding the variance in the techniques utilized by the operators in the response letter. Also confirm that the recovered volumes have been accurately recorded by the operators.

Comment 3

In the 2016 Report, the Permittee states, "[t]he volume of soils removed was 38.36 tons and the waste manifests are attached." However, the waste manifests were not attached to the 2016 Report. Provide a reference to the waste manifests, if they have already been submitted to NMED; otherwise, provide copies of the manifests. In addition, the Permittee transported the soils to a Class D landfill (Waste Management's Painted Desert Landfill). The soils may have contained listed hazardous waste based on the waste streams conveyed in the sewer system. Provide the results of the waste characterization for the soils in the response letter.

Comment 4

In the 2016 Report, the Permittee states, "[a]dditional sumps will be installed in the excavation that was completed along the drainage pathway to the north of the original six sumps. The construction will be similar to the original sumps, using 6-inch well screen set to the bottom of the excavation and backfilled with coarse gravel to facilitate recovery of SPH and groundwater." In the 2017 Report, recovery volumes from the retention ditch are tabulated since April 1, 2016; clarify whether the reference to the installation of additional sumps is equivalent to the installation of the retention ditch; otherwise, provide a reason for the variance in construction between additional sumps or a retention ditch, and state whether the retention ditch is an open ditch. Provide information pertaining to the additional sumps in the response letter. In addition, explain the benefits of additional sumps relative to other oil recovery technologies that may be used at the site in the response letter.

Comment 5
In the 2018 Report, the Permittee states, "[i]t appears that the recovery volumes have returned to similar volumes observed from May 2017 through July 2017." The volumes of separate phase hydrocarbon (SPH) recovered from stand pipes from May 2017 through July 2017 was 1,464 gallons and first quarter 2018 was 153 gallons. The recovery volumes are not similar between the time periods. Therefore, the statement is not correct. A reduction in the SPH recovery volumes during the first quarter of 2018 is apparent in both stand pipes and retention ditch compared to the recovery volumes in the fourth quarter 2017. Ensure that all future status reports include accurate statements.

Comment 6
In the 2018 Report, the Permittee states, "[t]here is no clear evidence to relate the possibly temporary increase to the March 2017 Sour Naphtha release, which occurred to the southeast, but that is the only known release in the area around the same time." Less than five barrels of Sour Naphtha release was initially reported in March 2017. Therefore, the release likely did not significantly affect the recovery volumes. Releases that occurred prior to 2017 may be the cause of the increase. Provide a table showing all relevant releases that took place in 2016. Include details of the releases (e.g., date, location, volume of releases) in the table. If a relevant release is not found, unidentified sewer leaks may be a source. In this case, SPH recovery may repeatedly increase from time to time without any specific known cause. When the fraction of SPH in the sewer stream increases, the SPH recovery volume also may increase. As stated in Comment 4 in the March 2, 2018 letter, all potential on-going leaks and potential sources of releases to the environment must be investigated in a timely manner. Whenever an increase in SPH recovery volume is observed in the future, collect a SPH sample for fingerprint analysis to investigate whether the release can be traced to a specific source.

Comment 7
In the 2018 Report, the Permittee states, "Western is evaluating the reliance upon dye tests instead of more camera surveys, as earlier camera surveys were not as useful tracer tests in locating leaks from subsurface pipelines." If dye test is selected for the investigation of on-going leaks within the sewer system, the Permittee must submit a work plan that provides more detail regarding the proposed method no less than 90 days prior to conducting the test. Previous dye tests were deficient as addressed in the comments from the February 1, 2018 letter. Ensure that NMED's comments are addressed in any future work plan. Comment 4 in the March 2, 2018 letter states, "[i]f the [dye tracer] test can be conducted, the Permittee must include a proposal for the dye test in any future 2018 reports. If not, the Permittee must provide a more detailed explanation why the test cannot be conducted from other release location in a response letter." Comment 4 only requires an investigation for the possibility of releasing dye tracer from alternative locations other than the immediate sump area; it does not refer to a work plan for dye tracer testing itself. A separate work plan for any future dye tracer testing is required.

The Permittee must address all comments in this Approval with Modifications, and submit a response letter, cross-referencing NMED's numbered comments by **October 30, 2018.** The work plan for dye tracer testing must be submitted by **September 30, 2018.**

If you have questions regarding this Approval with Modifications, please contact Michiya Suzuki of my staff at 505-476-6059.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: K. Van Horn NMED HWB
M. Suzuki NMED HWB
C. Chavez OCD
L. King EPA Region 6

File: Reading File and WRG 2018 File
HWB-WRG-16-007
HWB-WRG-17-009
HWB-WRG-18-003