



DEPARTMENT OF THE ARMY
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Environmental Division

DEC 18 2019



Mr. John Kieling
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Dear Mr. Kieling,

Enclosed for your review is WSMR's response to the October 2, 2019 Approval with Modifications (HWB-WSMR-19-001) for the High Energy Laser System Test Facility Technical Support Area Gasoline Spill Site Revised Final Interim Measures Report, SWMU 197.

The attached table was prepared in response to the approval with modifications letter and addresses NMED's comments contained therein.

If you have any questions regarding this matter, please contact Mr. Benito Avalos of our Environmental Compliance Branch at (575) 678-2225.

I am forwarding a copy of this letter to Ms. Kristen Van Horn, NMED-HWB; Mr. Dave Cobrain, NMED-HWB; Mr. Walter Migdal, EA Engineering; and Mr. Robert Rowden, AEC.

Sincerely,

Brian D. Knight
Chief, Environmental Division

Enclosure

Response to NMED Approval with Modifications Dated October 2, 2019, for the Revised Final Interim Measures Report SWMU 197 HELSTF TSA Gasoline Spill Site dated August 2019
 SWMU 197 HELSTF TSA Gasoline Spill Site, White Sands Missile Range, New Mexico
 EPA ID# NM 2750211235, HWB-WSMR-19-001

NMED COMMENTS	WSMR RESPONSE	RESPONSE IN SECTION/PAGE/PARAGRAPH
<p><u>Comment 1</u></p> <p>In the response to NMED's Disapproval Comment 14, the Permittee states, "[t]he bridging mentioned was in the auger flights, which were cleared when they were moved (up 2 ft) and bentonite was placed within the borehole." The statement is confusing. Explain the bentonite bridging within the auger flights and its resolution in more detail in a response letter.</p>	<p>The bentonite (3/4 inch uncoated bentonite chips) became stuck (bridged) within the auger flights (between the auger flight and the well pipe) as it was being placed (poured) into the well. Bridging likely occurred due to the angularity and size of the bentonite chips becoming stuck together in the confined space between the well pipe and the auger flight potentially causing a gap in the seal material. As a remedy, the auger was lifted 2 feet. The movement of the auger flight resulted in displacement and breakup of the bentonite bridge within the borehole causing the bentonite chips to fall to their proper placement in the well. Following the successful remedy, additional bentonite was added to complete the well seal. While this did not affect the integrity of the well, a different type of bentonite (1/4 inch coated bentonite pellets) was used in future wells to help avoid this issue in the regional wells.</p>	<p>NA</p>
<p><u>Comment 2</u></p> <p>NMED's Disapproval Comment 30 states that the Permittee must provide a discussion of the cause of increases in benzene, toluene, ethylbenzene and xylenes (BTEX) in the perched wells while the SVE</p>	<p>Section 5.1.3, Page 5-2, Paragraph 3 of the Revised Final IM Report had several items regarding the increase in contaminant levels.</p> <p>The explanations are restated here.</p>	<p>NA</p>

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<p>system was in operation. The Permittee's response states that additional corrective action has been recommended in the report. The discussion of the cause of the increases in BTEX is not presented in the Report. Include the discussion in the response letter.</p>	<p>“The source of the spill was removed in March 2000. There are no other sources of gasoline in the area. Dissolved constituent concentrations in the vadose zone water increased by several orders of magnitude for benzene between 2016 and 2017 sampling events in wells HMW-67, HMW-69, HMW-70, and HMW-71. The levels in HMW-68 increased from 770 µg/L to 1,100 µg/L. The increases do not indicate a preferential pathway (i.e., upgradient or downgradient) from the site; rather they suggest an expansion in all directions from the location of the former AST which are indicative of flooded LNAPL due to localized groundwater mounding causing mobilization of trapped chemicals in the vadose zone. Data in Table 10 shows that groundwater levels increased between the 2016 and 2017 sampling events and have shown a general declining trend since the December 2017 and 2018 sampling events. These data were correlated with several significant rain events that occurred in the area. Perched groundwater found at the depth of the perched zones is assumed to also be affected by rainfall events in the Tularosa Basin and locally at the site. Hydrographs for select perched wells are shown in Figure 13, and hydrographs for all regional wells are shown in Figure 14.”</p>	
<p><u>Comment 3</u> In the response to NMED's Disapproval Comment 32, the Permittee states, "[t]he increase in condensate is due to the installation of a larger moisture separator</p>	<p>No condensate was in the knockout pot upon dismantling of the system. The total amount of condensate was 56.55 gallons. The amount</p>	<p>NA</p>

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<p>knock out pot (75-gallon) on the replacement SVE unit to collect condensate versus the original unit (15-gallon)." The Permittee emptied the condensate knockout tank on October 26, 2016 and then collected condensate two weeks later on November 9, 2016. The condensate totaled 9.94 gallons. The knockout tank was replaced with the larger tank between November 2016 and February 2017. The system operated during most of 2017; however, condensate volumes were not recorded in 2017. The condensate volume measured on January 16, 2018 totaled 39.54 gallons, presumably accounting for the entire volume accumulated from February 2017 to January 16, 2018. Explain whether the volume recorded on January 16, 2018 represents the cumulative accumulated volume over 11 months. If the knockout tank was not emptied during 2017, the volume recorded on January 16, 2018 appears significantly lower compared to the volumes collected in 2016. Provide a more detailed explanation regarding the reduced condensate volume measured on January 16, 2018. Moreover, the SVE system was not dismantled until June 29, 2018. Table 12 (Investigation Derived Waste - Liquid Condensate Waste) does not provide any record after January 16, 2018. Provide complete data in a revised table.</p>	<p>collected on January 16, 2018 was a total of 39.54 gallons in three separate containers.</p> <p>There are no additional data to report.</p>	