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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 19, 2014

Mr. Thomas A. Ladd, Director
Public Works (Building 102)
U.S. Army White Sands Missile Range
White Sands Missile Range,
New Mexico 88002-5000

**RE: APPROVAL WITH MODIFICATIONS
RELEASE ASSESSMENT REPORT
SWMUs 107, 121, 122, 123, and 163
WHITE SANDS MISSILE RANGE
EPA ID# NM2750211235
WSMR-13-003**

Dear Mr. Ladd:

The New Mexico Environment Department (NMED) has completed its review of White Sands Missile Range's (Permittee) *Revised Release Assessment Report SWMUs 107, 121, 122, 123, and 163* (Report), dated October 2013. NMED hereby issues this approval with the following modifications.

Comment 1

The Permittee states in Section 1.0 (Introduction) that "Table 8-2 of the RCRA Permit also includes Rhodes Canyon Subgrade Asphalt Tanks (SWMUs 116, 117, and 118); Veterinary Clinic and McAfee Clinic Incinerators (SWMUs 125 and 126); Paint Shop Sump (SWMU 137); and Vandal Burial Site (SWMU 153) as requiring a Release Assessment. However, according to an NMED letter dated August 28, 2013 [Disapproval of the original document], the 2012 investigations conducted at SWMUs 116, 117, 118, 125, 126, 137 and 153 meet and replace the requirement for a Release Assessment Report (NMED, 2013). Therefore, these sites have not been included in this Release Assessment Report." Note that as part of a future permit

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modification, Table 8-2 will be modified to show that the release assessment requirements for these SWMUs have been met.

Comment 2

The Report includes a document titled *Decision Document for the Temperature Test Facility 25,000 Gallon Evaporation Tank, WSMR-5 (SWMU 107)* dated January 2000 in Appendix A. The Permittee states in the Response to Comments that “[t]he report documenting closure activities at SWMU 107 may not have been reviewed by NMED...” This document had not previously been submitted to NMED for review; by submitting it as part of this Release Assessment Report, the document has been reviewed. The tank appears to have been cleaned and removed from the site properly and a cap was placed over the evaporation pond (SWMU 104) where the tank had been located. NMED has no comments on the document in Appendix A.

Comment 3

In Section 2.1.1 (Site Description) the Permittee states, “[t]he evaporation tank (SWMU 107) had a capacity of 25,000 gallons and was installed as an interim measure to store any overflow from the TTF (Kearney, 1988). The dimensions of the evaporation tank are unknown.” In Appendix A, Tank #4 is described as “46’ long x 11’ Diameter.” This is the that tank the Permittee based the cleaning and removal description upon (Section 2.2.2 Closure Activities); a tank with these measurements can contain approximately 33,000 gallons depending on the accuracy of the estimated dimensions, this is likely the 25,000 gallon tank described.

Comment 4

The Report includes in Appendix B a document titled *Final Closure Report for the Storage Tank Removal and Remediation at Stallion Range Center, White Sand Missile Range* dated August 1993. In the Response to Comments the Permittee states, “[t]he final closure report documenting the removal of the Stallion Asphalt Tanks may not have been reviewed by NMED.” NMED concurs; the administrative record does not include a review of this document. The document discusses the removal of two of the asphalt tanks, soil removal and confirmation sampling activities. The report notes that confirmation soil samples contained levels of total petroleum hydrocarbons (TPH) above regulatory limits. The recommendations at the end of the document state that “[t]here is an unknown amount of asphalt that appears to be located in the subsurface soils, and approximately one foot of semi-solid asphalt in tank #3. Tank #3 can not be transported on state highways with any material remaining in the tank. ASI recommends that tank #3 be hauled to the Stallion landfill and disposed of properly. ASI also recommends that an area immediately below the tanks of approximately 100 feet in the North-South direction and 100 feet in an East-West direction and up to five feet deep be excavated.” It is not clear whether or not these activities were conducted and the final disposition of Tank #3 is unknown. The Permittee must address the remaining TPH contamination at the site and implement the recommendation for additional soil removal and confirmation sampling. Soils must also be sampled from the area where tank #3 was located to evaluate for the presence of residual contamination since no samples were collected there during the previous investigations.

Comment 5

In Section 3.2.3 (Closure Activities: Tank Removal) the Permittee states, “[s]ince the contents of the tanks were asphalt-related, TPH concentrations have been compared to the NMED-established residential direct exposure level for waste oil. The measured TPH concentrations are greater than the NMED-established residential direct exposure level for waste oil of 3,000 mg/kg TPH (NMED, 2012). The detected TPH concentrations may be attributed to asphalt which is not a regulated hazardous waste and is relatively immobile and hence may not be considered a constituent of concern.” NMED concurs that asphalt itself is not hazardous waste, but asphalt does contain hazardous constituents. The primary concern with asphalt are compounds such as benzo(a)pyrene and other semi-volatile organic compounds (SVOCs). NMED Risk Assessment Guidance states that “[t]he TPH screening guidelines in Tables 6-2 and 6-3 must be used in conjunction with the screening levels for petroleum-related contaminants given in Table A-1 because the TPH screening levels are NOT designed to be protective of exposure to these individual petroleum-related contaminants.” The Permittee must conduct additional soil sampling to determine whether or not SVOCs present unacceptable risk at the SWMU.

Comment 6

Appendix C contains a document titled *Commissary Landfill Trench Sampling* dated October 1994. Section 2.0 (Commissary Landfill Trench (CLT) Sampling), page 6 of the document states, “Each sample was obtained with a previously decontaminated (deconned) hand auger and placed in a previously deconned stainless steel mixing bowl ... Prior to placement of the sample(s) in sampling container, the sample was mixed with a previously deconned stainless steel mixing spatula.” Section 3.0 (Analytical Results) of the document states that “[a]ll CLT samples were analyzed for EPA Method 6010 Priority Pollutant Metals plus Barium, EPA Method 8080 Pesticides and PCB’s, EPA Method 8150 Chlorinated Herbicides, EPA Method 8260 Volatile Organics and EPA Method 8270 Semi-Volatile Organics.” The results of the VOC samples may not accurately reflect the conditions at the site due to improper sampling methods described in the sampling section of the document in Appendix C. The Permittee must demonstrate that unacceptable levels of VOCs are not present at the site.

In a future permit modification, Table 8-2 will be modified to show that the release assessment requirements for SWMU 107 (TTF Evaporation Tank), SWMU 121-123 (Stallion Range Asphalt Tanks), and SWMU 163 (Abandoned Disposal Trench at New Commissary) have been met.

The Permittee must submit a work plan to address TPH contamination at SWMUs 121, 122, and 123 and a separate work plan to address potential VOCs at SWMU 163 by **April 30, 2014**.

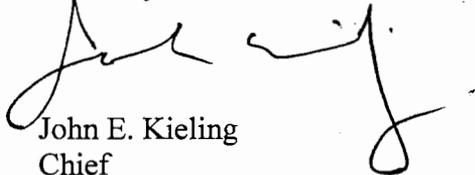
SWMUs 121 through 123 (Stallion Range Asphalt Tanks) and SWMU 163 (Abandoned Disposal Trench at New Commissary) are included in the Permittee’s Class 3 Permit Modification Petition, dated January 2013, but are not eligible for corrective action complete until the Permittee addresses the issues discussed in this letter and has obtained subsequent NMED approval. Once the investigations are complete, the Permittee may resubmit petitions for

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corrective action complete.

If you have any questions regarding this letter, please contact Kristen Van Horn at (505) 476-6046.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
K. Van Horn, NMED HWB
J. Gallegos, WSMR
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File: WSMR 2014 and Reading
WSMR-13-003