DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON WHITE SANDS MISSILE RANGE
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

April 28, 2014

ENTERED

Environmental Division

RECEIVED

MAY 2 2014

NMED
Hazardous Waste Bureau

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:

This letter is in response to the New Mexico Environment Department (NMED) Approval with Modifications letter for the Release Assessment Report SWMUs 107, 121, 122, 123 and 163, (WSMR-13-003) dated February 19, 2014. Enclosed are the responses addressing NMED's comments contained in that letter.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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 with enclosures to Ms. Kristen Van Horn, NMED-HWB; Ms. Neelam Dhawan, NMED-HWB; Mr. Dave Cobrain, NMED-HWB; Mr. Paul Torcoletti, EPA Region 6; Mr. Sudhakar Matlapudi, CB&I; and Mr. Robert Rowden, AEC.

Sincerely,

Jose A. Gallegos
Chief, Environmental Division

Enclosures

WSMR Response

to

February 19, 2014 Approval with Modifications
Release Assessment Report
SWMUs 107, 121, 122, 123, and 163
White Sands Missile Range
EPA ID# NM2750211235
WSMR-13-003

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

WSMR Response 1
Comment noted.

NMED 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.

WSMR Response 2
Comment noted.

NMED 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.

WSMR Response 3
WSMR Concurs. The 25,000 gallon evaporation tank is tank#4 which has dimensions of 46' (long) x 11' (diameter). Based on the dimensions, the tank has a capacity of (up to) 33,000 gallons. These details are provided in the Rinchem Report provided as Attachment B of Appendix A.

NMED 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 cannot 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.

WSMR Response 4

Based on the site walk conducted by WSMR in July 2010, tank #3 was removed. However there is no evidence of confirmation sample results being collected around tank#3. Additional sampling needs will be addressed in the Investigation Work Plan for SWMUs 121-123. This Work Plan will be submitted to NMED subsequent to award of the next Performance Based Acquisition contract.

NMED 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.

WSMR Response 5

Additional sampling needs will be addressed in the Investigation Work Plan for SWMUs 121-123 and submitted to NMED subsequent to award of the next Performance Based Acquisition contract.

NMED 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 corrective action complete.

WSMR Response 6

SWMUs 121-123 will be removed from consideration for a Corrective Action Complete petition and additional sampling needs will be addressed in an Investigation Work Plan. The Work Plan will be submitted to NMED subsequent to award of the next Performance Based Acquisition contract. WSMR will make a separate extension request for submitting the Investigation Work Plan and will work with NMED to develop an appropriate schedule for submitting the Investigation Work Plan for SWMUs 121-123.

Though we realize that the confirmation soil samples for VOCs were not collected using proper sampling methods during the sampling event conducted in September 1994, VOCs are not constituents of concern (COC) and lead is the only COC at SWMU 163. As part of the initial investigation/characterization conducted in August 1994 (prior to the confirmation sampling event), which involved collecting three soil samples for TCLP metals, three soil samples for total metals, and two soil samples for VOCs, lead was found to be the only constituent of concern. VOCs were not detected in the soil samples and other constituents were found to be below NMED Residential SSLs (Section 4.2.1 of the Revised Final Release Assessment Report and Section 5.2.2 of the Revised Final Correction Action Complete Proposals SWMUs 107, 121 through 123, 156 and 163). Also, as mentioned in Section 2.0, paragraph 3, page 1 of the CLT Trench Sampling Report, Ms. Robin Brown

from NMED (Hazardous and Radioactive Materials Bureau) was present at the CLT to observe the CLT, the sampling procedures and obtain split samples.

Finally the Voluntary Corrective Action (excavation and disposal of landfill material and contaminated soil) performed in September 1994 was approved by NMED Groundwater Protection and Remediation Bureau in a letter dated February 16, 1995. Therefore, further investigation is not required at SWMU 163 and the site is eligible for Corrective Action Complete without controls for the following reasons:

- *The initial investigation/characterization event only indicated lead as the COC. All other constituents were below NMED Residential SSLs.*
- *Landfill material and contaminated soil was properly excavated and disposed.*
- *Based on the results of the confirmation soil sampling, no COCs are present at the site in concentrations that exceed the NMED Residential SSLs.*
- *The Voluntary Corrective Action was approved by NMED in a letter dated February 16, 1995 attached as Appendix D-3 of the Corrective Action Complete Proposals for SWMUs 107, 121 through 123, 156 and 163 (The letter is attached to these responses for your convenience).*
- *Currently the site is developed and under asphalt pavement.*

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
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Santa Fe, New Mexico 87502
(505) 827-2850

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

GARY E. JOHNSON
GOVERNOR

February 16, 1995

Brigadier General Jerry L. Laws
Commander
U.S. Army White Sands Missile Range
White Sands Missile Range, N.M. 88002-5000

RE: Approval of Corrective Action at the Commissary Landfill site

Dear General Laws:

The Ground Water Protection and Remediation Bureau of the New Mexico Environment Department is in receipt of the Commissary Landfill Trench Sampling Report dated October 24, 1994, and the Commissary Landfill Trench Excavation Material Sampling Report dated December 1, 1994. These Reports are hereby approved pursuant to Section 1-203 of the New Mexico Water Quality Control Commission regulations.

If ground-water contamination occurs as a result of this landfill, or if additional information becomes available indicating that these corrective actions are inadequate, further efforts may be required. If you have any questions, please feel free to call Dave Morgan at 827-2754. Thank you for your cooperation in this matter.

Sincerely,

Marcy Leavitt, Chief
Ground Water Protection and Remediation Bureau

xc: Thomas A. Ladd, Director, Environment and Safety, White Sands Missile Range
Hector Magallanes, SWMU Program Manager, White Sands Missile Range
Gary McGinnis, Environmental Specialist, District III, NMED