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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

May 11, 2016

Tim Davis  
Chief, Environmental Officer  
National Aeronautics and Space Administration  
White Sands Test Facility  
P.O. Box 20  
Las Cruces, NM 88004-0020

Attention of: RE-16-039

**RE: APPROVAL WITH MODIFICATION  
STATUS UPDATE SMALL ARMS FIRING RANGES (SWMUS 29-31)  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
JOHNSON SPACE CENTER WHITE SANDS TEST FACILITY  
DOÑA ANA COUNTY, NEW MEXICO  
EPA ID #NM08800019434  
HWB-NASA-16-006**

Dear Mr. Davis:

The New Mexico Environment Department (NMED) has received the National Aeronautics and Space Administration (NASA) White Sands Test Facility (WSTF) (Permittee) *Status Update Small Arms Firing Ranges (SWMUs 29-31)* (Status Update), dated March 8, 2016 and received March 10, 2016. NMED has reviewed the Status Update and hereby approves the document with the following modification.

**Modification:**

**Permittee's Statement:** "Subsequent to approval [May 29, 2015] of the [Accelerated Corrective Measures Work Plan] (ACMWP), NASA reevaluated the proposed strategy and now recommends the removal and disposal of contaminated soil as an alternative cleanup strategy".

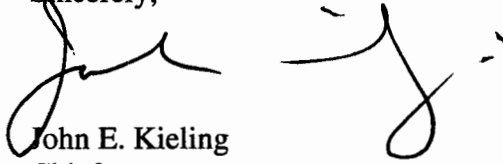
**NMED Comment:** The revised NASA clean-up strategy, which involves excavation and off-site disposal instead of the mechanical separation originally proposed, appears to be more aligned with the objective of an ACM remediation strategy. However, the following potential data gaps have been identified in the Permittee's approach and must be addressed.

1. In the Remedy Completion Report submittal, the Permittee must demonstrate the equipment utilized during the metal detector survey is designed for a level of sensitivity that allows for a comprehensive and thorough survey and removal of buried firing range munitions constituents (MC). Failure to meet this requirement may result in further investigation and cleanup activities at the firing ranges.
2. Based on review of the limited information provided in the Status Report regarding the field portable X-ray fluorescence (FP-XRF) soil screening and soil sample analysis conducted on soil samples collected from the range floors, the potential for the presence of additional MC still exists. Although a metal detector screening was conducted for all firing range fallout areas, additional screening (e.g, metal detector screening) of all of the firing ranges for MC and debris must also be conducted to confirm the removal of all source materials.
3. Additional soil sampling must be conducted in all areas mapped during preliminary screening activities as bullet impact zones, at the fallout areas, and at any areas of interest (e.g., 200 Area Firing Range wash) where MC has been identified. Soil which is found to exceed applicable NMED soil screening levels (SSLs) must be excavated and disposed off-site.
4. All soil sample and FP-XRF data collected during confirmation sampling activities must be statistically evaluated to determine correlation between results in accordance with the methodology referenced in the Work Plan. Results of the statistical evaluation must be included in the Remedy Completion Report.
5. Cleanup activities at all SWMUs must continue until all potential source materials have been removed to the extent practicable. Confirmation soil sample collection must be conducted following all source and contaminated material removal.

Mr. Davis  
May 11, 2016  
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If you have any questions regarding this letter, please contact Gabriel Acevedo at (505) 476-6043.

Sincerely,

A handwritten signature in black ink, appearing to read 'John E. Kieling', written in a cursive style.

John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: N. Dhawan, NMED HWB  
D. Cobrain, NMED HWB  
B. Wear, NMED HWB  
G. Acevedo, NMED HWB  
L. King, EPA 6PD-N  
M. Zigmond, NASA WSTF

File: NASA WSTF 2016 and Reading, NASA-16-006