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JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

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RYAN FLYNN  
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Deputy Secretary

TOM BLAINE, P.E.  
Director  
Environmental Health Division

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 22, 2013

Radel Bunker-Farrah  
Chief, Environmental Office  
National Aeronautics and Space Administration  
White Sands Test Facility  
P.O. Box 20  
Las Cruces, NM 88004-0020

Attention of: RE-E13-013

**RE: APPROVAL WITH MODIFICATIONS  
200 AREA INVESTIGATION - PHASE I STATUS REPORT  
NATIONAL AERONAUTICS SPACE ADMINISTRATION (NASA)  
JOHNSON SPACE CENTER (JSC)  
WHITE SANDS TEST FACILITY (WSTF)  
DOÑA ANA COUNTY, NEW MEXICO  
EPA ID #NM08800019434  
HWB-NASA-13-002**

Dear Ms. Bunker-Farrah:

The New Mexico Environment Department (NMED) has received NASA's (Permittee) *200 Area Investigation Phase I Status Report* (Phase I IR) dated August 2013 and received August 7, 2013. NMED has completed its review of the document and issues this Approval with the following comments and modifications.

**Comments:**

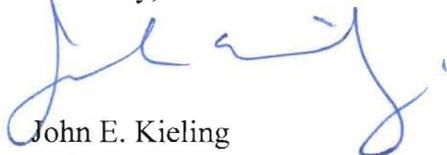
1. NMED believes that the results of the geophysical characterization are inconsistent and generally unreliable with respect to illustrating the apparent depth to various types of bedrock present in the study area. Installation of the 18 borings discussed in the Phase 1 IR should provide useful information about the alluvium/bedrock contact depths. The subsequent construction and sampling of multiport soil vapor monitoring (MSVM) wells that will be placed in the borings will provide additional information on subsurface soil gas concentrations and transport of soil gas within the study area.
2. In the event groundwater is encountered during borehole installation, disposable Teflon bailers, or other equipment approved by NMED, must be used to collect in-situ grab samples from the boreholes during drilling. Additional groundwater samples also must be collected following development, purging, and equilibration activities in the event that one or more combination multiport soil vapor groundwater monitoring (MSVGM) wells are installed during the investigation (assuming interception with the water table).

**Direction:**

1. Proposed soil boring 200-SB-GOx must be completed using hollow-stem auger drilling equipment or direct-push equipment. In the event that the auger cannot advance to the proposed 12 foot depth, a twin boring must be placed no more than five feet from the initial boring. The Stratex (air-rotary) drilling method selected for this investigation may be used for the other 17 proposed borings.
2. The Permittee must prepare and submit a revised 200 Area Phase II Investigation Work Plan (Phase II IWP) which reflects the increased number of soil borings and MSVM wells and/or MSVGM well(s) reflected in the Phase I IR. The Phase II IWP must include information consistent with Attachment 17 of Permit NM08800019434. The revised Phase II IWP must be submitted by no later than **October 30, 2013**.

If you have any questions regarding this letter, please contact Daniel Comeau at (505) 476-6043.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

Ms. Bunker-Farrah  
October 22, 2013  
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cc: N. Dhawan, NMED HWB  
D. Cobrain, NMED HWB  
R. Isaac, NMED GWQB  
J. Dyer, NMED SWB  
M. Dale, NMED HWB  
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File: NASA: 2013 – 200 Area Phase 1 IR NOA w/Mods

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