



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

Certified Mail - Return Receipt Requested

August 31, 2021

Colonel Jason F. Vattioni
Base Commander
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117

Ms. Melissa Clark
Civil Engineer Office
377 MSG/CEIE
2050 Wyoming Blvd SE
Kirtland AFB, NM 87117

**RE: SOIL VAPOR SAMPLING PROGRAM MODIFICATIONS
BULK FUELS FACILITY SPILL SITE
KIRTLAND AIR FORCE BASE, NEW MEXICO
EPA ID # NM9570024423
HWB-KAFB-20-008**

Dear Colonel Vattioni and Ms. Clark:

The New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) has recently evaluated the current soil vapor sampling program underway at the United States Air Force's (Permittee) Kirtland Air Force Base Bulk Fuels Facility Spill (BFFS) site. Changes to the sampling protocol and analyses were implemented in 2015 which are likely producing data that is not representative.

First, a reduction in purge volumes from 10 well volumes to 1 well volume was implemented for the soil vapor sampling procedure. The reduction in purge volumes corresponds to significant reductions in soil vapor concentrations. This outcome is likely related to inadequate purging resulting in the collection of a mixture of soil gas and stagnant air from the well, filter pack, and sampling train that is not representative of actual soil gas concentrations in the vadose zone. The industry standard for purging wells is three well volumes. The Permittee must purge three well volumes from each monitoring well prior to collection of soil gas samples for all future sampling events.

Also, the Permittee removed TPH fractions that were historically monitored in soil vapor from the list of analytes for soil vapor samples. The Permittee must resume analyses for TPH fractions in the next soil vapor monitoring event. TPH is a better indicator of the total mass of hydrocarbons in soil vapor, and analytical results can then be compared to historical data.

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Hazardous Waste Bureau - 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505-6313
Telephone (505) 476-6000 - www.env.nm.gov

Col. Vattioni and Ms. Clark

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If you have any questions regarding this letter, please contact me at (505)690-6148.

Sincerely,

Ricardo Maestas Digitally signed by Ricardo Maestas
Date: 2021.08.31 09:36:52 -06'00'

Ricardo Maestas
Acting Chief
Hazardous Waste Bureau

cc: L. Andress, NMED HWB
D. Cobrain, NMED HWB
B. Wear, NMED HWB
L. King, EPA Region 6 (6LCRRC)
S. Kottkamp, KAFB
R. Wortman, KAFB

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