

Governor

JOHN A. SANCHEZ

Lieutenant Governor

## NEW MEXICO ENVIRONMENT DEPARTMENT

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BUTCH TONGATE Cabinet Secretary BRUCE YURDIN Deputy Secretary

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 19, 2018

Colonel Richard W. Gibbs Base Commander 377 ABW/CC 2000 Wyoming Blvd SE Kirtland AFB, NM 87117-5606 Mr. Chris Segura Chief, Installation Support Section AFCEC/CZOW 2050 Wyoming Blvd SE, Suite 124 Kirtland AFB, NM 87117-5270

RE: R

RISK ASSESSMENT

**BULK FUELS FACILITY** 

SOLID WASTE MANAGEMENT UNIT ST-106/SS-111

KIRTLAND AIR FORCE BASE

EPA ID# NM9570024423, HWB-KAFB-13-MISC

Dear Colonel Gibbs and Mr. Segura:

The New Mexico Environment Department ("NMED") is in receipt of the Kirtland Air Force Base ("KAFB") Risk Assessment ("RA"), dated July 2017. The U.S. Air Force ("Permittee") prepared the RA to evaluate the potential for human and ecological exposure to, and potential risks from such exposures to, contaminants related to the historical fuel leak at the Bulk Fuels Facility ("BFF") site ("Site") either now or in the future. The RA contained two parts: the Human Health Risk Assessment ("HHRA"); and the Ecological Risk Assessment ("ERA"). The HHRA investigated whether there is any risk to human receptors from contamination at the Site, and the ERA examined whether there is any risk to ecological receptors, such as plants, birds, or mammals, from Site contaminants.

Both the HHRA and the ERA asked two questions to determine whether unacceptable risk exists. The first question was whether there is an exposure pathway for contaminated media to come in contact with human or ecological receptors. Once the complete and potentially complete exposure pathways were identified, the second question was whether the contamination is present at levels that could cause an unacceptable risk to human or ecological receptors, thus not

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protecting human health and the environment. At this time, NMED has completed its review of the HHRA soil and groundwater potential exposure pathways.

**Soil** – The HHRA identified complete and potentially complete soil exposure pathways for the on-site current/future commercial/industrial workers at the BFF, future construction workers at the BFF, and future hypothetical residents at the BFF. Total soil risks based on the maximum detected concentrations were at or below NMED target risk levels. Therefore, no unacceptable risk was identified based on exposure to on-site surface soil (0 to 1 foot below ground surface) or mixed soil zone (0 to 10 feet below ground surface) within the BFF. Additionally, as no contaminated surface or mixed zone soil is present off-Base, therefore, there are no complete or potentially complete exposure pathways for impacted soil for off-Base receptors.

**Groundwater** – The HHRA determined that groundwater impacted by contaminants from the BFF is not currently used as a drinking water source and that Land Use Controls ("LUCs") are in place to prevent exposure. Therefore, there are currently no complete exposure pathways for groundwater on-site or off-Base. Additionally, in order to inform risk management decisions and evaluate an unrestricted use scenario, domestic use of groundwater was evaluated on-site and off-Base. Total risks calculated using NMED tap water screening levels exceeded NMED target levels.

The New Mexico Office of the State Engineer issued a well drilling moratorium associated with BFF corrective action activities on February 9, 2017. The intent of this moratorium is to protect human health and prevent interference with ongoing corrective action activities by restricting the drilling of new wells and the transfer of water rights within the boundaries specified by NMED. BFF contaminants have not been detected in off-Base water supply sentinel wells at concentrations exceeding drinking water standards. In addition, KAFB drinking water supply wells are sampled monthly and no BFF contaminants exceeding screening levels have been detected. Based on the results of the HHRA, the interim corrective measures (groundwater extraction and treatment system) and LUCs are needed to prevent direct contact with groundwater.

NMED hereby approves the following portions of the Human Health Risk Assessment:

- On-site surface and mixed zone soil NMED agrees that surface and mixed zone soil contaminant levels do not pose unacceptable risks to current/future commercial/industrial workers at the BFF, to future construction workers at the BFF, and to future hypothetical residents at the BFF.
- Off-Base surface and mixed zone soil NMED agrees that there are no complete or potentially complete exposure pathways for surface and mixed soil zone for off-Base receptors.
- **Groundwater** NMED agrees that groundwater impacted by contaminants from the BFF is not currently used as a drinking water source, and that the ongoing interim corrective measures and LUCs are necessary to prevent exposure.

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NMED's review of the HHRA soil vapor intrusion potential exposure pathway, and of the ERA is not yet complete, and therefore will be addressed under separate cover in the near future.

If you have any questions regarding this letter, please contact NMED Chief Scientist Dennis McQuillan at (505) 827-2140.

Sincerely,

Bruce Yardin
Deputy Secretary

**Environment Department** 

cc:

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File: KAFB 2018 Bulk Fuels Facility Spill