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NEW MEXICO ENVIRONMENT DEPARTMENT

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BUTCH TONGATE Cabinet Secretary J. C. BORREGO Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 6, 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: NOVEMBER 16, 2017 NOTICE OF DEFICIENCY
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") issued a Notice of Deficiency ("NOD") to Kirtland Air Force Base ("KAFB") ("Permittee"), dated November 16, 2017. Since the issuance of the NOD, the Permittee has adequately addressed the following issues that had been identified as deficiencies:

- 1. The NOD required the Permittee to submit a revised work plan, subject to NMED approval, to conduct a vadose zone coring investigation to define the nature and extent of light non-aqueous phase liquid ("LNAPL") contamination in the subsurface. The Permittee submitted a work plan for the coring investigation on December 15, 2017. NMED conditionally approved the work plan on February 23, 2018.
- 2. The NOD required the Permittee to submit a work plan, subject to NMED approval, for the installation of additional groundwater monitoring wells to fill data gaps created by the rising water table and submergence of monitoring well screens. On December 20, 2017, the Permittee submitted a work plan to drill six new data gap monitoring wells. NMED conditionally approved the work plan on February 28, 2018. Additionally, the

Permittee's coring investigation (as discussed above and conditionally approved by NMED) will include the completion of at least five of the core holes as groundwater monitoring wells. The Permittee also has proposed to collect groundwater quality samples from at least seven previously dry soil-vapor and groundwater monitoring wells that now contain water as a result of the ongoing water table rise. As such, groundwater quality samples will be collected from at least 18 additional monitoring wells.

- 3. The NOD required the Permittee to submit, subject to NMED approval, a six-step capture zone analysis including a numerical or analytical model. On January 10, 2018, the Permittee, NMED, and other stakeholders held a plume capture meeting where it was agreed that the Modelling Technical Working Group would be tasked with developing one or more robust plume capture models in conformance with U.S. Environmental Protection Agency ("EPA") guidance for a six-step plume capture analysis. Since the Permittee has been, and will continue to be, heavily involved in this plume capture modeling effort, the Permittee is deemed to have complied with this requirement of the NOD.
- 4. The NOD expressed concern that the Permittee's evaluation of contaminant concentration trends may have over-estimated the amounts of contaminant degradation, since the observed decreasing trends also could be attributed to the rising water table and loss of monitoring well resolution. NMED and the Permittee have agreed that decreasing contaminant concentrations may have been caused by both actual degradation and the rising water table, and these possibilities will be further investigated and detailed in future reports.
- 5. The NOD directed the Permittee to either:
 - 1. Start reporting the results of monitoring of the USGS sentinel wells in quarterly reports;
 - 2. Integrate sampling and reporting of those wells into the Permittee's monitoring program; or
 - 3. Install sentinel wells that fill the need for the down-gradient water table and deep well screens.

The Permittee has elected to report the test results of the USGS sentinel wells in an appendix to the quarterly reports.

6. The NOD expressed concern about the continued shutdown of extraction well KAFB-106233, as the well provides important mass removal and plume capture. Since the date of the NOD, extraction well KAFB-106233 has been brought back into service. A new extraction well, KAFB-106239, was also brought into service. As of the date of this letter, all four extraction wells are operating.

Based upon the aforementioned actions taken, the Permittee has sufficiently addressed the deficiencies found in the NOD issued on November 16, 2017. NMED appreciates the Permittee's efforts to resolve these issues.

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

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Sincerely,

Juan Carlos Borrego

Deputy Secretary

Environment Department

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File: KAFB 2018 Bulk Fuels Facility Spill