Via Email

December 14, 2022

Colonel Jason F. Vattioni,
USAF Commander
377th Air Base Wing
2000 Wyoming Blvd SE
Kirtland AFB NM 87117
jason.vattioni@us.af.mil

RE: Notice of Violation: Stage 2 Abatement Plan Modification, ST-105 Nitrate Impacted Groundwater, Kirtland Air Force Base, Albuquerque, New Mexico.

Dear Colonel Vattioni:

On September 27 and September 28, 2022, the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) issued two Notices of Deficiency (NOD)s, titled *Notice of Deficiency: Stage 2 Abatement Plan Modification, ST-105 Nitrate Impacted Groundwater, Kirtland Air Force Base, Albuquerque, New Mexico* and *Notice of Deficiency: Public Notice Proposal, Stage 2 Abatement Plan Modification, ST-105 Nitrate Impacted Groundwater, Kirtland Air Force Base, Albuquerque, New Mexico.* Each NOD required Kirtland Air Force Base (KAFB) to remedy deficiencies within 30 days of receiving the respective NODs through revised submittals. On October 27, 2022, NMED received an extension request from KAFB requesting until December 30, 2022, to fulfill the NODs. NMED hereby denies KAFB's request and finds KAFB in violation of Sections 4000 through 4115 of New Mexico Ground and Surface Water Protection Regulations (20.6.2 NMAC) based on the following rationale:

In December 2021 NMED provided comments on a draft version of the Stage 2 Abatement Plan (S2AP) modification submitted in October 2021 to comply with NMED's *Extension Request Approval* dated April 29, 2021. NMED's comments provided direct insight into information deemed necessary to evaluate the merits of the S2AP modification. During the eight-month timeframe leading up to the August 2022 submission of the S2AP modification KAFB opted to not engage NMED in discussion. Upon receipt of the S2AP modification, NMED observed that many of the comments provided by NMED were dismissed, which subsequently become requirements in the NODs. To date KAFB has failed to provide the necessary information needed to evaluate the S2AP modification and in turn comply with the NODs.

NMED hereby requires KAFB to submit the required documents by February 1, 2023. NMED is providing until February 1, 2023, to account for the time needed to provide additional information requested by NMED under separate correspondence in December 2022. Failure to submit all required items to NMED in the timeframe noted above may result in the issuance of an administrative compliance order with civil penalties of up to $10,000 per day per violation of the New Mexico Water Quality Act, NMSA 1978, §§74-6-1 to -17 and regulations adopted pursuant to the Act.

In addition, KAFB states in the October 27, 2022 extension request that active remediation should be precluded on the premise that geogenic sources represent a perpetual source of nitrate and consequently renders active remediation as an untenable option. NMED provides the following responses concerning the use of active remediation:

- KAFB states that "*It is not an appropriate use of taxpayer dollars to remediate a naturally occurring chemical in groundwater";*
    - The potential presence of geogenic nitrate sources above the 20.6.2.3103 NMAC standard of 10 mg/L does not dismiss the need for abatement pursuant to 20.6.2.4000-4115 NMAC when anthropogenic impacts exist. Therefore, KAFB must discern and abate the anthropogenic nitrate impacts above 10mg/L regardless of the presumed presence of geogenic sources or costs associated to said abatement.

- KAFB states that "*The nitrate plumes do not pose a current or future risk under the current scenario, as there are no production wells near Tijeras Arroyo and any migration of these plumes will continue to be actively monitored under the existing S2AP";*
    - KAFB has provided no supporting documentation to demonstrate that nitrate contamination will not result in a future risk to receptors hydrologically downgradient that may live within or outside KAFB boundaries. NMED acknowledges that current site conditions do not appear to present a risk to receptors hydrologically downgradient. However, site conditions are always subject to change.

- KAFB states that "*Regardless of any future active remediation efforts at this site, groundwater will continue to be impacted into the future by high-level naturally occurring nitrate inventories found within the Tijeras Arroyo floodplain soils."*
    - KAFB has failed to provide substantive confirmatory data or supporting documentation to support this claim, which at present is based solely on a singular sampling event.

If you have any questions please contact me at 505-231-3773 or justin.ball@env.nm.gov or Matthew Smith, State Cleanup Program Project Manager, at 505-660-8497 or matthew.smith3@env.nm.gov or ros.general@env.nm.gov.

Sincerely,

Justin Ball Digitally signed by Justin Ball
Date: 2022.12.14 14:31:56 -07'00'

Justin Ball, Chief
Ground Water Quality Bureau

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ROS Reading File