



**DEPARTMENT OF THE AIR FORCE
377TH AIR BASE WING (AFGSC)**

Colonel David S. Miller, USAF
Commander
377th Air Base Wing
2000 Wyoming Blvd SE
Kirtland Air Force Base NM 87117

AUG 28 2019

Mr. Steve Pullen
Ground Water Quality Bureau
New Mexico Environment Department (NMED)
1190 St. Francis Drive, Suite N-2050
Santa Fe NM 87505

Dear Mr. Pullen

This report is submitted pursuant to the 15-day reporting requirement in 20.6.2.1203(A)(6) NMAC. Verbal notification was made within 24 hours of the release to Mr. Steve Pullen, Ground Water Quality Bureau (GWQB), at 10:00 am on August 13, 2019 and a detailed voice mail message was left with Mr. John Keiling, Hazardous Waste Bureau (HWB), shortly thereafter. An email notification was also provided to Ms. Michelle Hunter (GWQB), Mr. Andrew Romero (GWQB), Mr. John Keiling (HWB), and Mr. Dave Cobrain (HWB) on August 13, 2019. As detailed below, based upon the volume of the release, the absence of ethylene dibromide (EDB), the depth to groundwater (approximately 450 feet below ground surface) and the fact that there are no surface waters in the area of the spill, there is no reasonable potential for the discharge to injure or be detrimental to human health, animal or plant life, or property or unreasonably interfere with public welfare or use of property.

The air release valve (ARV) in the KAFB-106233 and KAFB-106234 Louisiana ARV vault failed at 2:27 pm on August 12, 2019 and began releasing water into the vault. The vault was subsequently filled with water that originated from the combined flow of extraction wells KAFB-106233 and KAFB-106234. These extraction wells are part of an Interim Measure under Kirtland Air Force Base's (AFB's) Hazardous Waste Treatment Facility Operating Permit (Permit Number NM9570024423). The objectives of this Interim Measure are to collapse and treat the dissolved-phase EDB plume that extends north of Ridgecrest Drive SE (Attachment 1, Figure 1).

The extraction wells for this Interim Measure are regularly sampled and analyzed for EDB. Analytical data from KAFB-106233 and 234 have been below the laboratory limits of detection since April 2019. Extraction wells are also analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) as a precaution even though BTEX has not been detected in this treatment train since January 2016.

The release occurred and was contained within federal government property known as the Louisiana Gibson Regional Drainage Facility, which is south of the Louisiana Boulevard SE and Gibson Boulevard SE intersection (Attachment 1, Figure 2). As the Louisiana ARV vault filled up from the inside, the water escaped to the surface and began flowing down the adjacent slope. An estimated 40 gallons of water in total was released, which ran approximately 110 feet north of the Louisiana ARV vault (Attachment 1, Figure 3).

Ground water treatment system (GWTS) personnel received a KAFB-106233/234 Louisiana vault leak alarm at 2:27 pm on August 12, 2019. At that time, GWTS personnel were completing a changeover of GWTS effluent discharge between the golf course main pond (GCMP) and injection well KAFB-7. Due to the changeover, the GWTS was not in operation when the ARV failed and the alarm was received. A call was immediately made to the GWTS management to notify about the alarm, and GWTS personnel arrived on the scene as soon as was possible. On arrival, water was observed to be flowing out of the Louisiana ARV vault and down the adjacent slope to the north. Although the GWTS was not in operation, water continued to flow from the ARV because water in the

line was backflowing through the ARV that appeared to have been stuck open. A photo log of the incident is included as Attachment 2.

Upon discovery of the source of the alarm and the resulting overflow of the ARV vault, personnel returned to the GWTS to retrieve a pump and hose to remove the water and stop the flow. While inside the GWTS, personnel also shut off the Train 1 (KAFB-106233, 234) influent line butterfly valve to prevent water from flowing backward toward the leak. GWTS personnel returned to the Louisiana ARV vault and immediately opened the vault. Water within the vault was pumped into two (2), 250-gallon polyethylene totes. Approximately 45 minutes after the initial alarm was received, the vault was pumped and the overflow was stopped. The source of the leak was then discovered to be the failed ARV, whose ball valve connecting it to the main conveyance line was closed.

On August 14, 2019, four soil samples were collected (including one duplicate) to assess EDB and BTEX concentrations in the soil. Samples GWTS-Soil-01-081419 and GWTS-Soil-01DUP-081419 were taken adjacent to the KAFB-106228 Louisiana vault where the most water had pooled. Sample GWTS-Soil-02-081419 was taken approximately 50 feet north of the KAFB-106233/234 Louisiana ARV vault, and sample GWTS-Soil-03-081419 was taken approximately 100 feet north of the KAFB-106233/234 Louisiana ARV vault. Attachment 1, Figure 3 indicates the sample locations. The samples were analyzed in accordance with U.S. Environmental Protection Agency (EPA) Methods SW8260C (volatile organic compounds) and SW8011 (EDB). The analytical laboratory was able to provide EDB results on a 3-day turn-around time. However, they were not able to provide a rush turn-around time for the BTEX results.

Results of the confirmation soil sample analyses for EDB are provided in the analytical results table (Attachment 3) and the analytical report is provided in Attachment 4. Analytical results for the samples were reported as non-detect for EDB.

Based upon the most recent monthly influent data from KAFB-106233 and 234, which is non-detect for BTEX (Attachment 4), the Air Force is confident that there will be no BTEX in the soil samples. As stated above, analytical data for BTEX has not yet been received. The Air Force anticipates receiving this data on August 29, 2019 and will forward the results to you for review.

If you have any questions or concerns, please contact Mr. Scott Clark at (505) 846-9017 or at scott.clark@us.af.mil or Ms. April Fitzner at (505) 853-1803 or at april.fitzner@us.af.mil.

Sincerely



DAVID S. MILLER, Colonel, USAF
Commander

Attachments:

1. Attachment 1, Figures
2. Attachment 2, Photo log
3. Attachment 3, Analytical Data Table
4. Attachment 4, Laboratory Analytical Reports

cc:

NMED HWB (Keiling), letter
SAF-IEE (Lynnes), electronic only
AFCEC/CZ (Renaghan, Clark, Kottkamp, Segura), electronic only
USACE-ABQ District Office (Moayyad, Phaneuf, Kunkel, Dreeland, Cordova), electronic only
Public Info Repository, Administrative Record/Information Repository (AR/IR) and File