



# New Mexico Environment Department

## **Regulatory Update Kirtland Air Force Base – Bulk Fuels Facility Corrective Action**

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**Radioactive and Hazardous Materials Committee  
October 15, 2024**



# Background



## CONTAMINATION SOURCES:

Aviation Gas (AVGAS)

- Used up to the 1950s
- Contains Ethylene Dibromide (EDB)

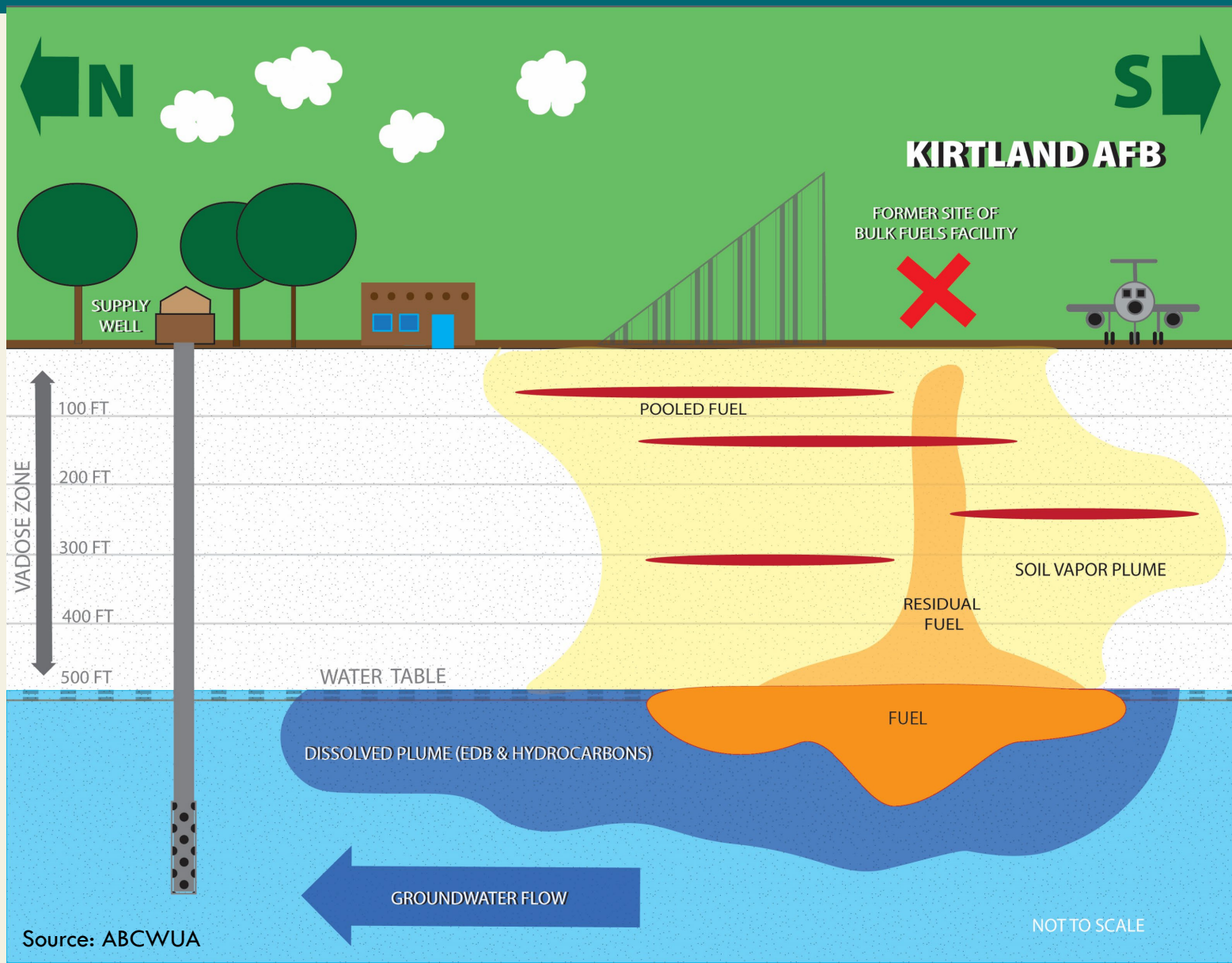
Jet Propellants (JP-4 & JP-8)

- Used 1950s up today





# KAFB Bulk Fuels Facility (BFF)



Source: ABCWUA



# KAFB BFF Regulatory History

- November 1999, KAFB discovered leaked fuel associated with the off-loading rack to their former bulk fuels facility tanks
- 2000 to 2010 preliminary investigations and interim measures were overseen by NMED's Ground Water Quality Bureau
- 2010 to 2024 expanded investigation and interim measures overseen by NMED's Hazardous Waste Bureau



# HWB Regulatory Authority

## Regulations

- ▣ Federal Resource Conservation and Recovery Act (RCRA)
- ▣ New Mexico Hazardous Waste Act (HWA)
- ▣ New Mexico Hazardous Waste Permit and Corrective Action Fee Regulations [20.4.2 NMAC]

## KAFB Permit

**(EPA ID# NMD9570024423; NM ID 2400)**

- ▣ Governs the Corrective Action Process
- ▣ Contains requirements for Corrective Action Process

<https://www.env.nm.gov/hazardous-waste/kafb/>



# Corrective Action Process

Investigation



CM Evaluation



CM Selection



CM Implementation

- Investigation – Determine the nature and extent of the contamination in all media at the site
- Corrective Measures Evaluation – Evaluate the potential methods to remediate the site
- Corrective Measures Selection – Cleanup technology is chosen by NMED with input from public, stakeholder, and facility
- Corrective Measures Implementation – Selected remedy installed, operated and maintained





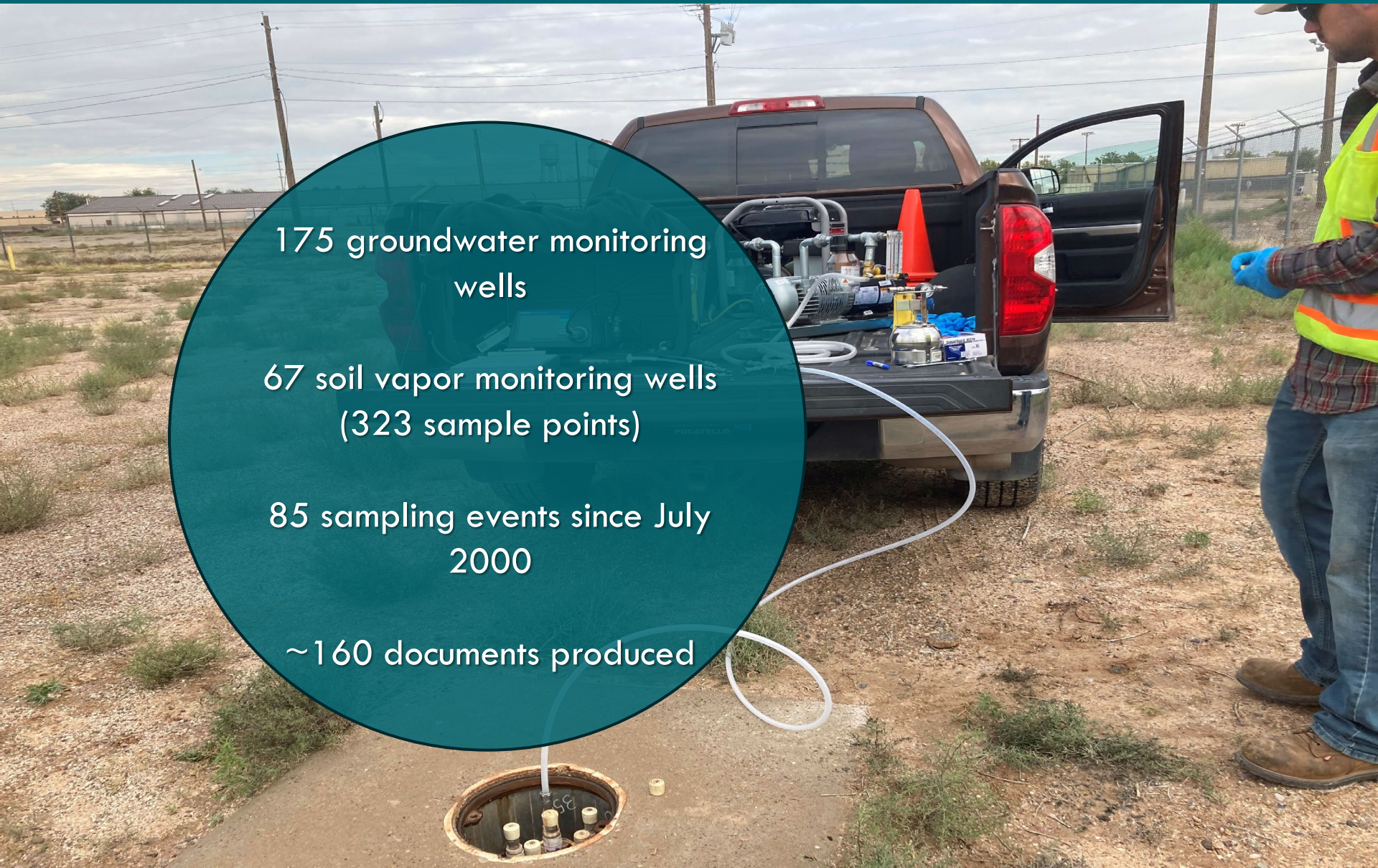
# Investigation / Monitoring

175 groundwater monitoring wells

67 soil vapor monitoring wells  
(323 sample points)

85 sampling events since July 2000

~160 documents produced



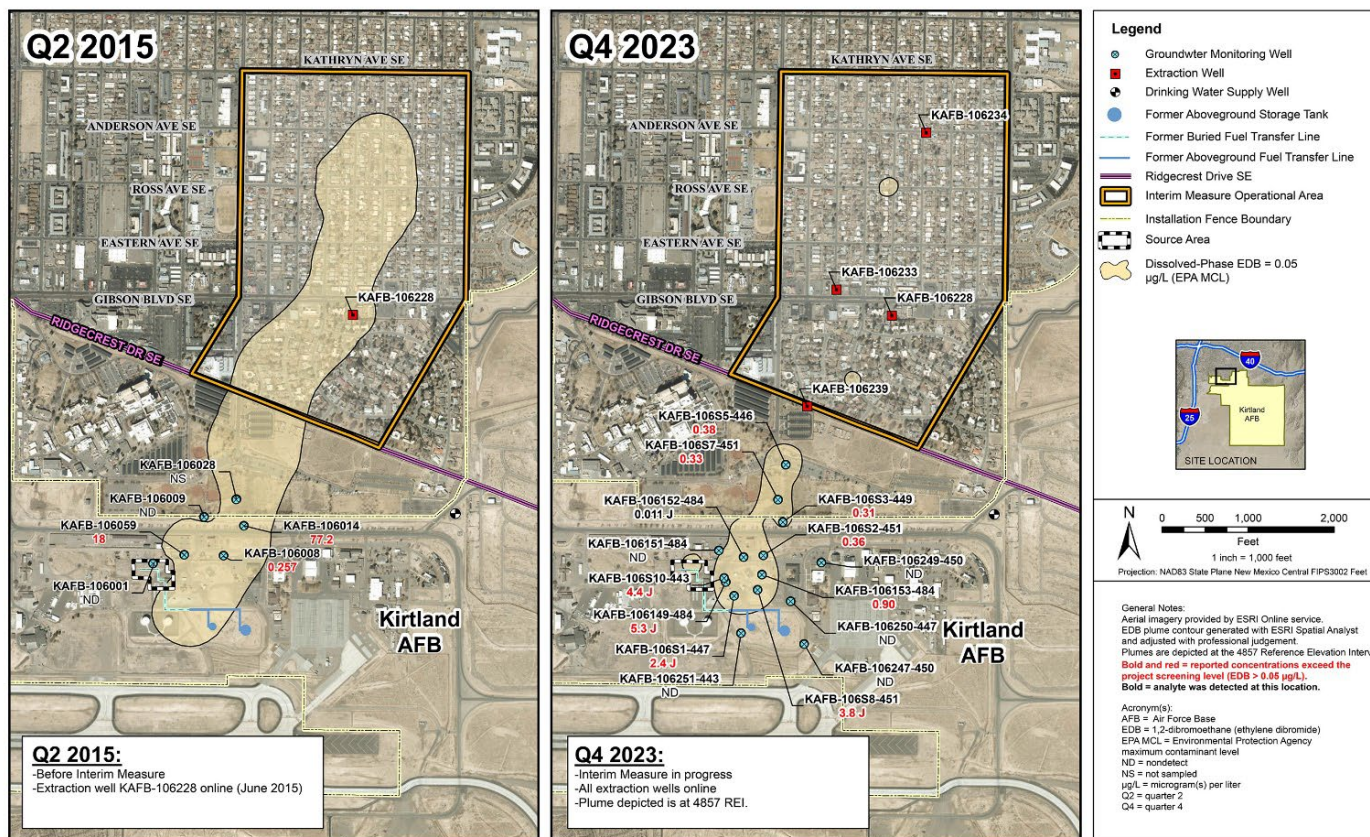




# Progress – Offsite

## EDB Plume Footprint (over time)

Comparison of Dissolved-Phase EDB in the Interim Measure Operational Area Between Q2 2015 and Q4 2023

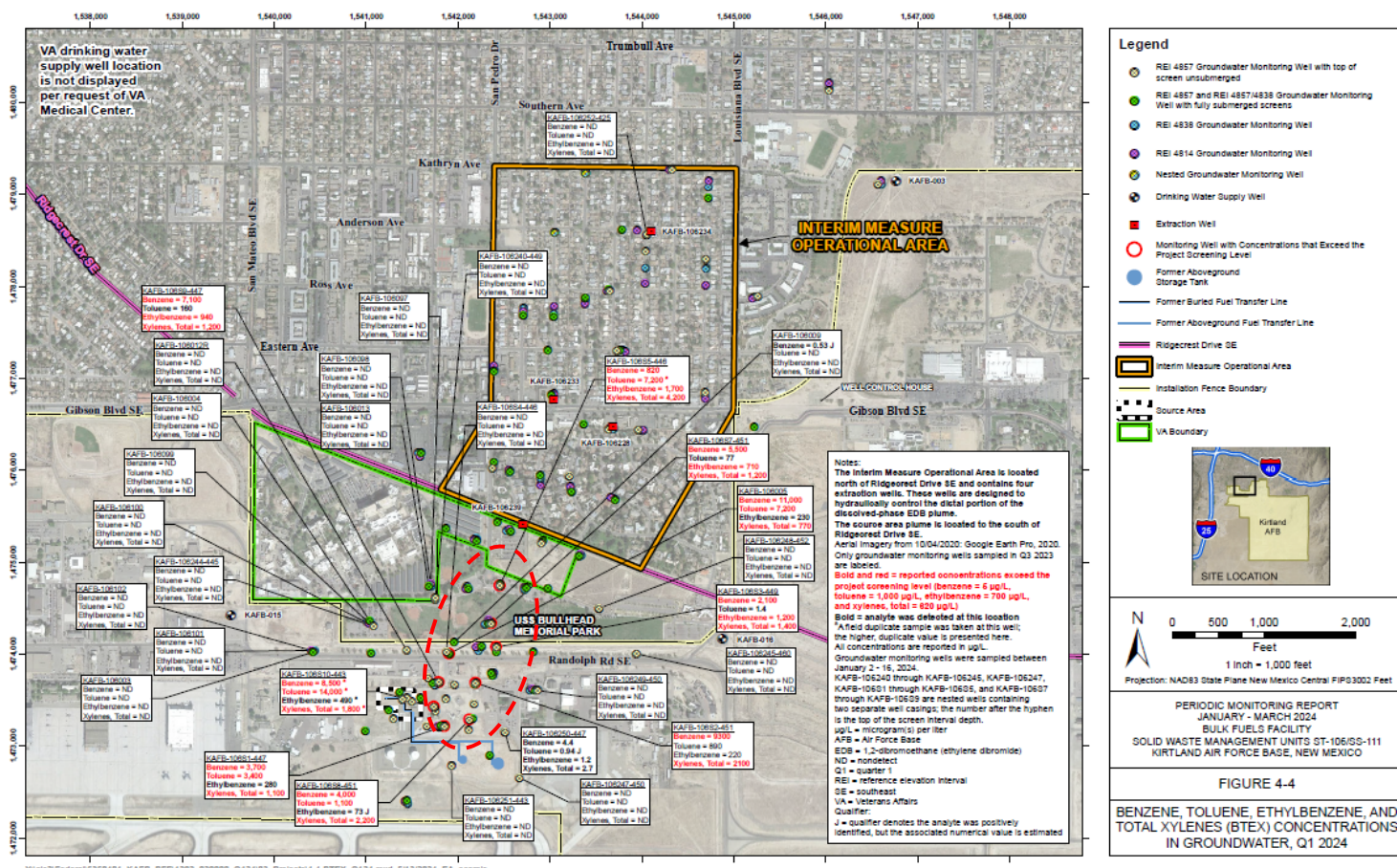






# Progress – Offsite

## Q1 2024 Benzene Detections







# Progress – Onsite

- Onsite and source area characterization
- Soil vapor extraction activities (2005-2015)
- Pilot studies (2015-2018)
- Ongoing monitoring of vapor and groundwater contamination







# Current Status

NMED approved the revised Soil Vapor Monitoring Plan in January 2024; sampling is now occurring under the new plan

NMED received the revised Groundwater Monitoring Plan in September 2024; currently in NMED review

NMED has reviewed four documents relating to installation of new soil vapor and groundwater monitoring wells and source zone characterization



# Current Status

## Air Force proposed adjustments to the Interim Measures treatment system in July 2024

- Air Force presented proposed adjustments and modeling data to NMED and stakeholders
- Additional discussions followed regarding Stakeholder concerns and additional NMED monitoring and reporting requirements
- Air Force determined not to propose any adjustments until after the Phase II RCRA Facility Investigation (RFI) is approved





# Path Forward

New soil gas data will be used to supplement the risk assessment and conceptual site model

- NMED will provide evaluation criteria to the Air Force to evaluate if historic soil gas data are quantitative
- NMED will evaluate past data with newly collected data to determine if historic data are representative and complete
- Evaluation will define which data used for nature and extent and direct the Phase II RCRA Facility Investigation how to proceed to the Corrective Measure Evaluation Phase



# Path Forward

Phase II RCRA Facility Investigation will fill in remaining data gaps and allow KAFB to proceed towards Corrective Measure Evaluation and Corrective Remedy Selection.

NMED continues to work with a third-party contractor to review the submitted monitoring reports and other documents, and to evaluate all past data.





# Path Forward

NMED is communicating frequently with KAFB to identify data gaps and resolve issues in order to move toward a final remedy selection.

NMED will continue to foster stakeholder engagement with the Air Force and build public confidence in our shared ability to safeguard the community.

Thank you!