



# New Mexico Environment Department

## Kirtland Air Force Base Jet Fuel Spill Clean-Up Update Radioactive and Hazardous Waste Materials Committee

*Stephanie Stringer, Resource Protection Division Director*

*November 4, 2019*





# NMED Guiding Principles

*Our four guiding principles are the means by which we protect and restore the environment and foster a healthy and prosperous New Mexico for present and future generations.*



1. **Science** – Using the best available science and data to inform our decision-making in protecting public health and the environment.



2. **Innovation** – Employing creative engineering and technological solutions to address environmental problems.



3. **Collaboration** – Engaging communities and interested stakeholders in environmental decision-making.



4. **Compliance** – Ensuring meaningful compliance with state regulations and permits.



# Goal

- NMED and the USAF are jointly working towards selecting a final remedy for the site in 2021.
  
- Since 2003, under NMED oversight the USAF performed activities that are termed “interim measures” and focused on protecting communities.
  
- Interim measures are not a longer term strategy to clean up groundwater to State standards.
  
- Selecting and implementing the final remedy to clean up the entire site is NMED’s number one priority.





# 2019-2020 Activities

- ❑ Continued Investigation of the source area to evaluate remedy options.
- ❑ Update the Conceptual Site Model.
- ❑ Conduct ongoing site monitoring and wellhead protection program.
- ❑ Continue to collaborate with the public and stakeholders





# 2019-2020 Activities

- Groundwater
  - Monitoring wells installed to fill data gaps caused by rising water table.
  - Well installation work plan due from AF to NMED in early 2020.
- Soil Vapor
  - AF to monitor and evaluate risk of vapor intrusion.
  - Shallow soil vapor investigation work plan rejected, revisions due on November 8, 2019.





# 2019-2020 Activities

## □ LNAPL

- AF conducted core drilling to evaluate for the presence of LNAPL.
- Coring report due from AF to NMED on November 1, 2019.

## □ Drinking Water

- No detections of ethylene dibromide (EDB) in drinking water wells or sentinel wells.





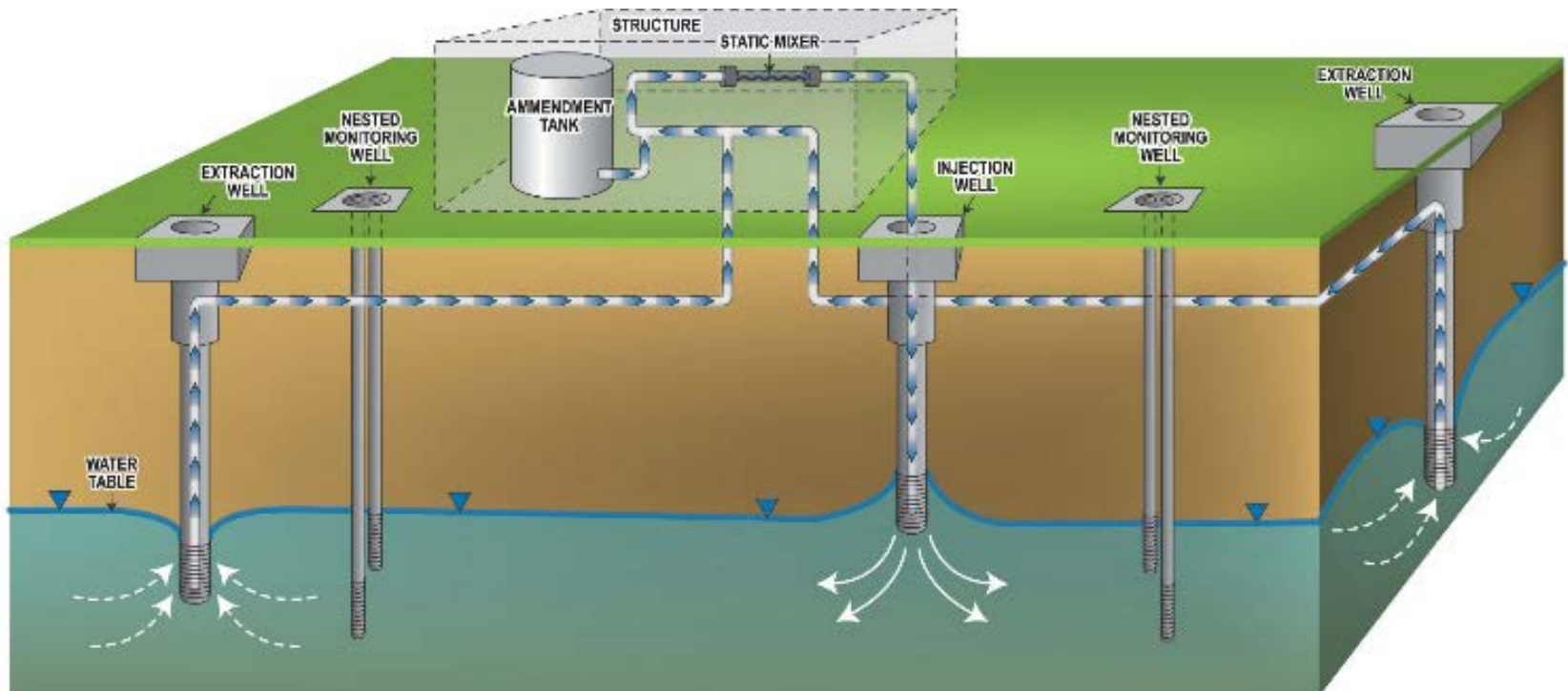
# 2019-2020 Activities

- The Conceptual Site Model is a tool to predict the behavior of groundwater and the plume. A variety of factors, including geology and water table levels can affect this behavior.
- The AF updates the model based on new information to describe the subsurface and the known extent of contamination.
- The U.S. Environmental Protection Agency (EPA) updates their site groundwater model and source area groundwater model.



# 2019-2020 Activities

- Continue to extract EDB from the northern area of the plume by operating the groundwater pump-and-treat system.
- Continue in-situ groundwater EDB biodegradation pilot test.

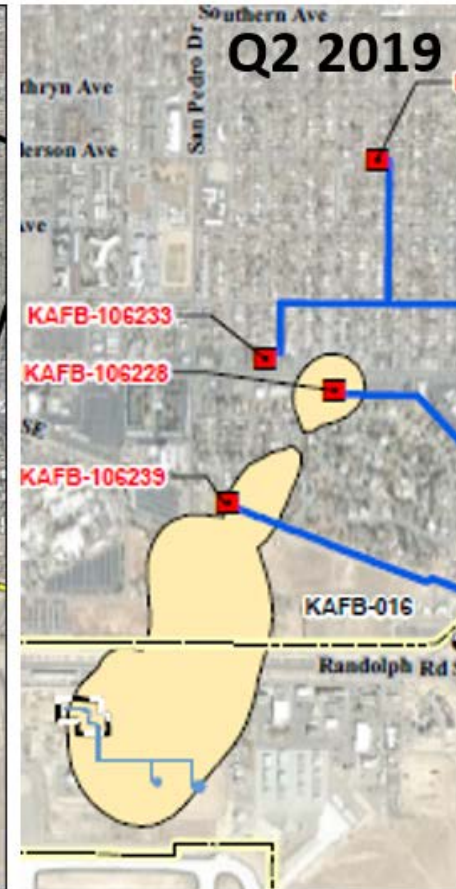
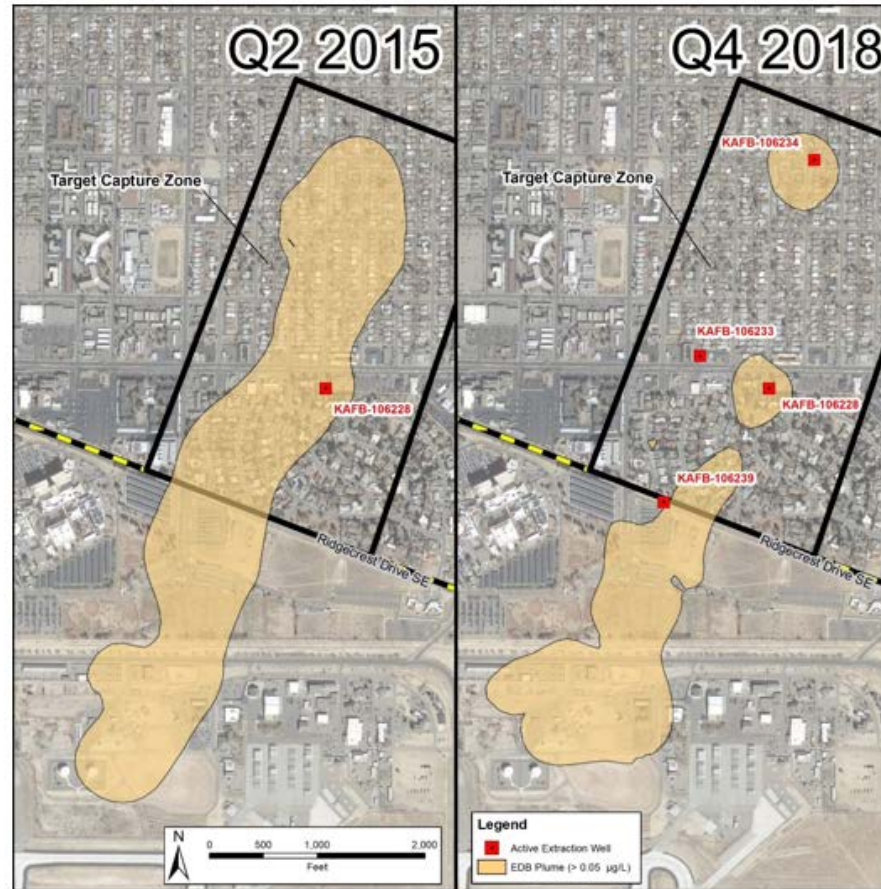






# Progress: North of Ridgecrest Dr.

- Target Capture Zone is groundwater north of Ridgecrest Dr. SE
- EDB plume is mapped as groundwater concentrations greater than the Drinking Water Standard of 0.05 ug/L
- Second quarter of 2015 was before startup of groundwater pump-and-treat system





# 2019-2020 Activities

- ❑ Public meetings (11/7/19)
- ❑ Stakeholder meetings (11/7/19)
- ❑ Technical working groups (TBD)



- ❑ NMED Public Involvement Plan coming soon
- ❑ Administrative record maintained online





# 2019-2020 Activities

- Ensure the AF is complying with their permit.
- Evaluating milestones for the final remedy.
- Tracking and monitoring progress, expediting wherever possible.
- Secure funding from the AF for NMED oversight.



# Questions?

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