### DERP Forum

Strengthening Relationships with our Regulatory Partners

St. Louis, Missouri May 8-9, 2019

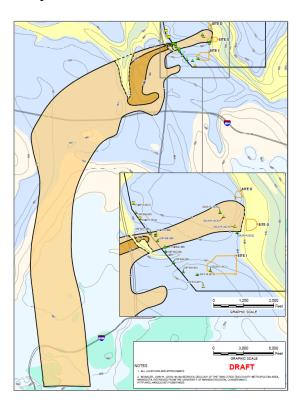
### Optimization – Adaptive Management Twin Cities Case Study

## Randy Cerar US Army Environmental Command

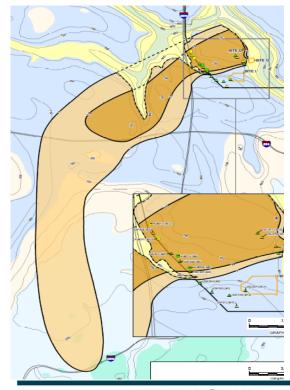
# Optimization — Adaptive Management Twin Cities Case Study

#### – Background:

- TCE
- RODs in place since 1990's
- Three operational treatment systems

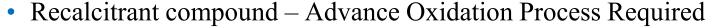


- 1,4 Dioxane
- Detected in both New Brighton (2015)
- Army notified in 2016



## Optimization — Adaptive Management Twin Cities Case Study

- Adaptive Management Starts:
  - Confirm the connection to TCAAP
  - Priority is the Municipal Wells
    - New Brighton City (Pop. 21,456)
    - St Anthony Village (Pop. 8,226)



- Air Force shared lessons learned
- Worked closely with industry
- St Anthony (Initial Operations 2017)
- New Brighton City (Initial Operations 2019)



### Optimization — Adaptive Management Twin Cities Case Study

- Adaptive Management Continues:
  - Address the third leg of the stool the Boundary Treatment System
  - Optimization and Groundwater Study
  - Improve TCE removal (Relocate Wells)
  - Treat the 1,4 DX (Advance Oxidation Process) and optimize removal
  - Second and Third Order Effects: Improve TCE removal has secondary side effect, increase vapor hazard to surrounding residence



#### Finish Line