

# Pilot Study of Heat Enhanced Hydrolysis of Munitions Compounds

Sidney, Nebraska

## Technology

- Electrical resistance heating performed to heat treatment volume to 80 degrees Celsius and maintain for six months to maximize hydrolysis destruction of RDX

## Site Characteristics

- Treatment volume: 14,000 cubic yards
- Vadose zone treatment (groundwater at 165 feet below ground surface)
- Treatment depth interval from 0-70 feet bgs
- Targeted treatment where RDX was found consistently from 20 to 60 feet bgs at an average of 15 mg/kg
- Low-temperature design eliminated need of vapor recovery infrastructure

## Operations

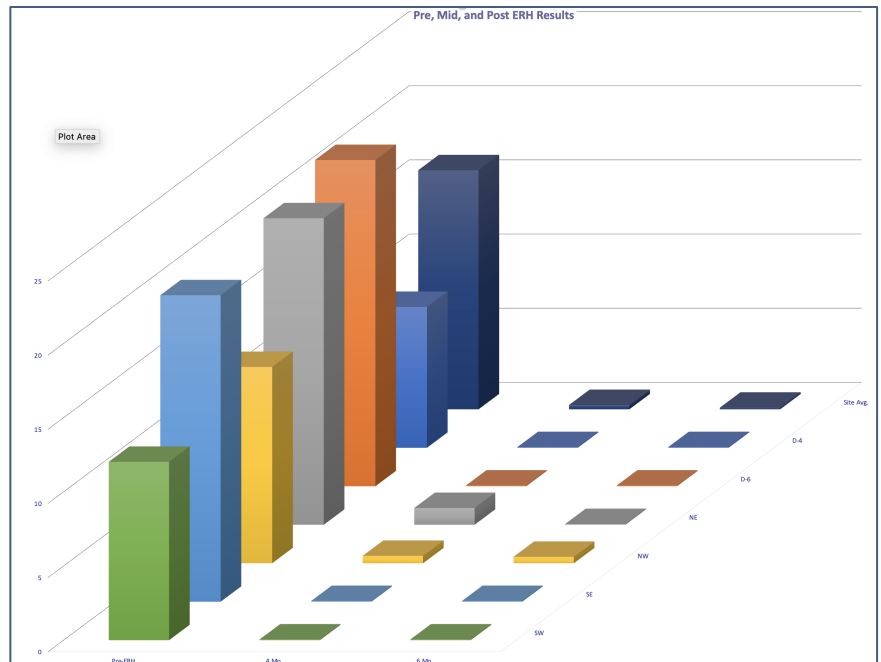
- Total run time: 188 days
- Energy use: 857,737 kWh

## Results

- 99.6% average reduction of RDX



Panoramic Drone Shot of Site



Pre, Mid and Post ERH Results