

# FACT SHEET

## Lowry Groundwater Cleanup Continues

Remediation of trichloroethylene (TCE) in the groundwater at the former Lowry Air Force Base (Lowry) is continuing with the fifth treatment scheduled for April-June, 2009. TCE is a common cleaning solvent used in many industrial applications for degreasing.

The overall groundwater treatment program at Lowry has been successful, resulting in an average decrease in TCE concentrations of 90% and a decrease in the area of contaminated groundwater by 65%. Concentrations in many areas are approaching the State standard of 5 micrograms per liter (ug/L) (see map on reverse side of fact sheet). The upcoming treatments will target source areas where TCE was originally spilled or disposed and areas with geology that make treatment more difficult.

### BACKGROUND

Groundwater contamination from source areas at Lowry extends to the north, in an area known as the main TCE plume. The groundwater is not used for drinking and is 10 to 40 feet below the ground surface. Lowry Assumption, LLC (LAC) has worked with the Colorado Department of Public Health and Environment (CDPHE) to develop an aggressive groundwater cleanup program; implementation of the program began in the fall of 2004, and additional treatments were performed in 2006, 2007 and 2008. LAC has received approval from CDPHE to do another treatment this spring.



### TREATMENT PROGRAM

The groundwater treatment program employs an oxidant (potassium permanganate) to break down the TCE and reduce concentrations in the groundwater. The oxidant will be injected at approximately 525 locations throughout the plume. The bulk of the work is scheduled for May 2009 and is expected to be completed no later than mid-June. Up to four crews will be performing the work, each crew consisting of up to four vehicles. All work will be performed in roadways, alleys and easements. The crews will move to several locations in a day, spending several hours at each location. Small portions of the roadways may be blocked off, as necessary. There will be minimal dust or noise from the work. Following the injection, each borehole will be filled with bentonite and sealed off. Patches to asphalt or concrete will be made where necessary.

### FUTURE STEPS

After the injections are completed, the oxidant is active in the groundwater for a number of months, breaking down TCE. Groundwater samples in the plume are collected semiannually in July and January. Results of the sampling will be evaluated and used to make decisions regarding techniques and timing of future treatments, if they are needed. Program technical reports are available at the LAC library at 125 Rampart Way, Suite 302 (call 303 972 6633 x331 for appointment) and on the Air Force administrative record:

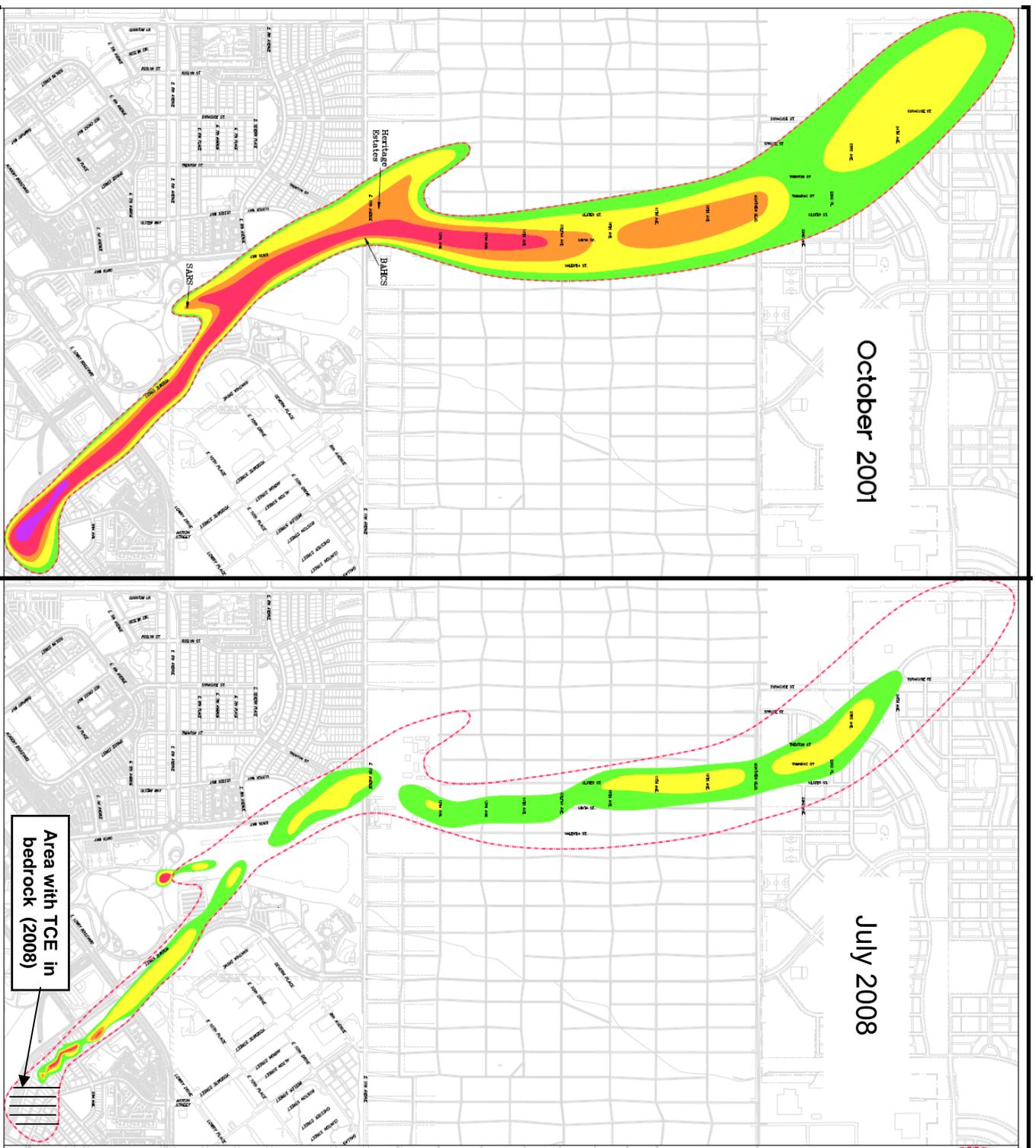
<https://afarpa.lackland.af.mil/ar/docsearch.aspx>

### FOR MORE INFORMATION:

Elizabeth Sopher  
Lowry Assumption, LLC  
303-972-6633 x331 [esopher@irgco.com](mailto:esopher@irgco.com)

Marilyn Null  
Colorado Dept of Public Health and Environment  
303-692-3304

# Main TCE Plume Then and Now



Concentrations of TCE in groundwater are greater than State standard in colored areas, and concentration ranges are shown below

### TCE Concentration (ug/L)

- >1000
- >100
- >40
- >20
- >5
- 2001 PLUME BOUNDARY (TCE > 5 ug/L)