

## The Environmental Corner

*By: Steve Henshaw*



### State Of California Targets Dry Cleaners

Dating back to March 1992 when the California Regional Water Quality Control Board published a report entitled, “Dry Cleaners – A Major Source of PCE in Groundwater,” the State of California has concentrated its regional groundwater investigations on dry cleaning facilities. Although the March 1992 report looked at other industries as potential sources of perchloroethylene (PCE) groundwater contamination, it concentrated its investigation on dry cleaners.

Fast-forward ten years and the State of California’s Department of Toxic Substances Control (DTSC) Northern California – Central Clean-up Operations Branch is at it again. DTSC began the Dry Cleaner Site Discovery Project with support from the United States Environmental Protection Agency, Region 9 (EPA) under the fiscal year 2003-2004 Preliminary Assessment/Site Inspection Cooperative Agreement between DTSC and EPA.

According to the State’s report, the DTSC proposed the Discovery Project because the chemicals that dry cleaners use can pose human health risks and are frequently found in public water supplies throughout California. During fiscal year 2003-2004, DTSC prepared a draft Dry Cleaner Site Discovery Process for conducting initial discovery-level assessments of dry cleaning operations, dated June 23, 2004, and submitted it to the EPA. The EPA approved and funded the next step in the process.

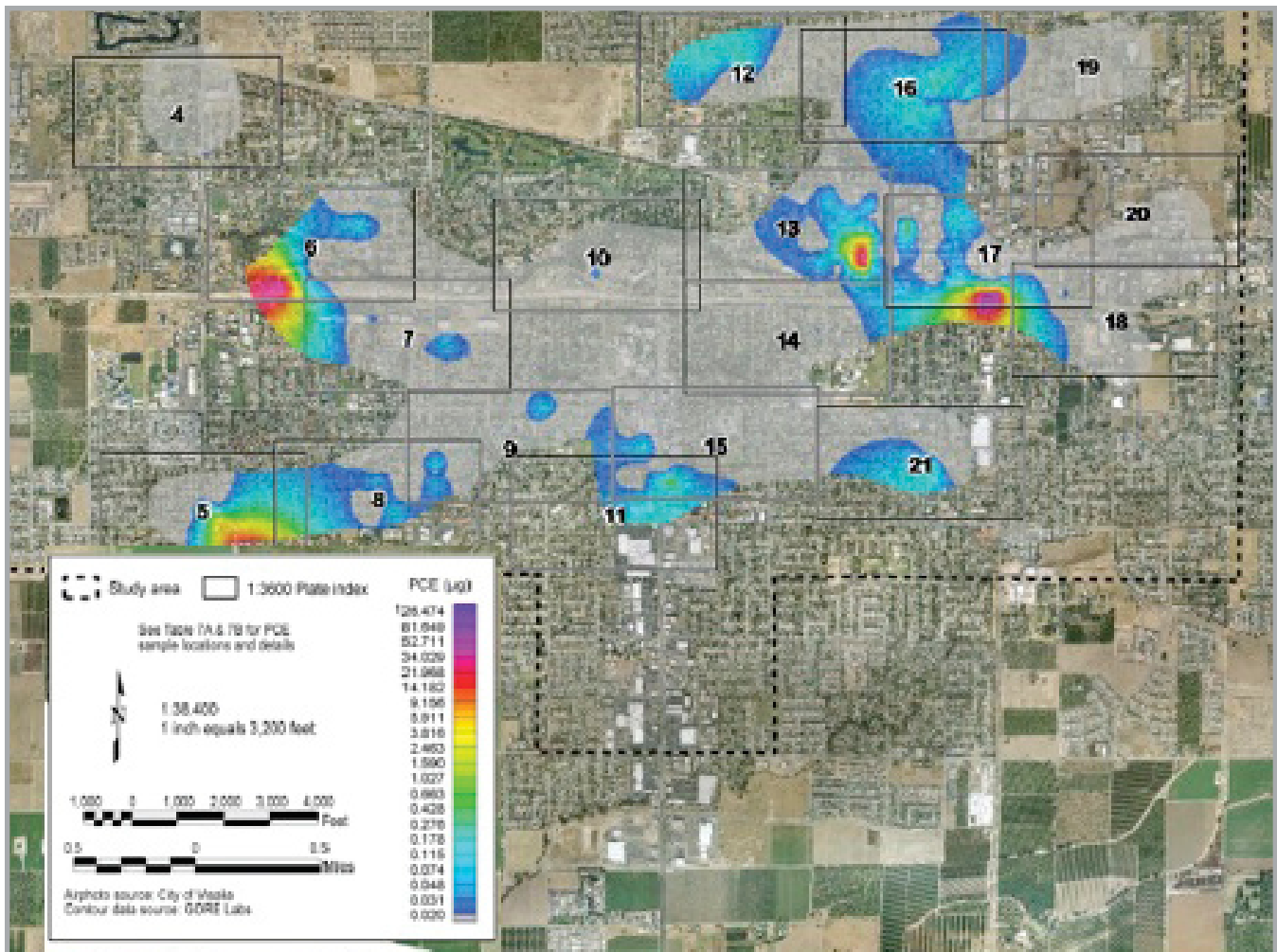
The DTSC created the Visalia Dry Cleaner Investigation Project as a pilot study to investigate the sources of PCE contamination detected in the City of Visalia’s public water wells. Visalia is a small, central California city situated in the heart of California’s agricultural San Joaquin Valley, approximately 230 miles southeast of San Francisco and 190 miles north of Los Angeles. The project study area is north of Walnut Avenue within the

*Continued on page 2*

*As Seen In...*



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**Visalia Dry Cleaner Investigation PCE Overview Map.**

City of Visalia.

In 2007, the DTSC funded a passive soil gas investigation in Visalia. In layman's terms, a passive soil gas investigation includes burying small granular activated carbon cartridges a few feet below the ground surface. The carbon cartridges are left buried for several weeks and, over this time, volatile organic compounds (e.g. PCE and TCE) that are present in groundwater and soil, adsorb onto the carbon cartridges. During the summer and fall of 2007, 245 carbon cartridges were installed, collected and analyzed across the Visalia study area. The results of the PCE analysis are depicted in the colorimetric

figure above which indicates higher concentrations of PCE in purple, red, orange and yellow and lower concentrations in green and blue. The results identified areas of suspected releases to the environment based on this colorimetric scale and the DTSC cross checked these locations with the locations of current and historical dry cleaning operations found in the Yellow Pages, city directories and other public records.

As of today, the DTSC has identified 33 current or former dry cleaners in the Visalia study area of Visalia. It has narrowed the future investigative activities to 18 dry cleaners across the city. In 2009, the DTSC plans to

conduct site inspections, active soil gas sampling, sewer surveys and sampling, and further evaluations of the 18 identified cleaners. Additionally, the EPA will be installing shallow groundwater monitoring wells in the vicinity of these 18 identified dry cleaners and alleged source areas.

While the study today focuses on the City of Visalia, past and current dry cleaners across California should anticipate that future investigation programs like this, funded by the Obama administration's EPA, may visit a town near you.

Upcoming articles will include, "Protecting Your Assets, What Should You Do"?