



# San Gabriel Valley Area 1 Superfund Site

South El Monte Operable Unit (SEMOU)

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## Indoor air sampling in the South El Monte area

The U.S. Environmental Protection Agency (EPA) is conducting indoor air sampling in your neighborhood to evaluate the potential for vapor intrusion. The purpose of the testing is to ensure there are no potential long-term health concerns. EPA is asking owners and tenants for permission to sample the air inside residences and businesses near sources of contamination. EPA began air sampling in 2013, and identified and responded to elevated levels of indoor contaminants in several locations. EPA will continue to expand the investigation in areas where vapor intrusion could be occurring.

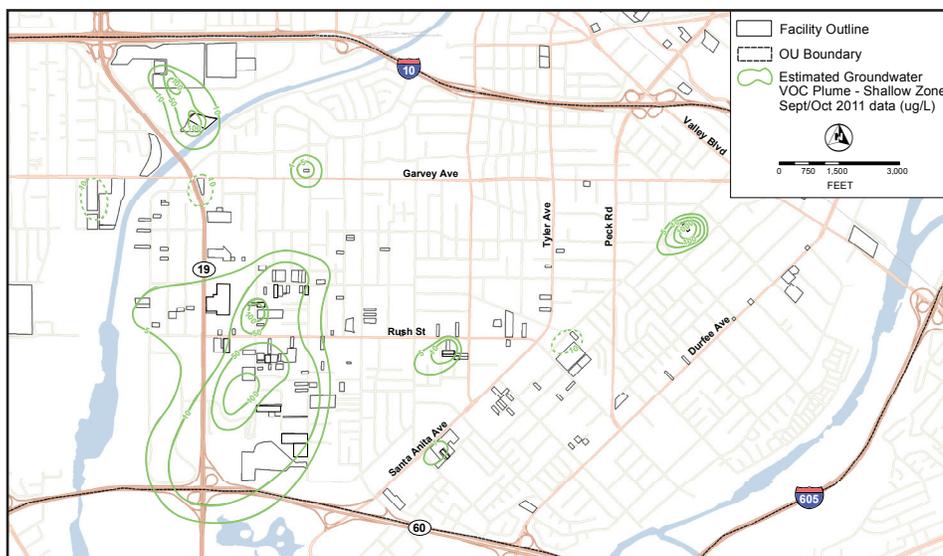
Based on the air testing results, EPA will determine the appropriate next steps. Due to privacy concerns, EPA will not publicly disclose any individual home results. However, the indoor air results for each property will be shared with each individual owner and tenant and a summary of the data for the area will be made publicly available. EPA is conducting a Remedial Investigation (RI) for the entire SEMOU and plans to propose additional remedial actions in the next few years.

### What is vapor intrusion?

Vapor intrusion refers to a process where vapors produced by a volatile chemical spill or leak make their way into indoor air. When high concentrations of volatile chemicals are released to the environment, they have the capacity to turn into gas or vapor and travel through the soil away from the source of contamination. These vapors can then enter a building through cracks in the foundation or a basement. EPA conducted soil gas sampling in 2011 and 2012 at known sources of contamination in the SEMOU. The soil gas sample results indicate levels of volatile chemicals that have the potential to migrate into overlying buildings through vapor intrusion. The shallow contaminated groundwater in the area is not used as a drinking water source or for any other household uses.

### Site Background

The SEMOU is part of the San Gabriel Valley Area 1 Superfund Site, and addresses contaminated groundwater under the cities of South El Monte, El Monte, and Rosemead. The groundwater contamination is the result of decades of poor chemical handling and disposal practices by hundreds of industrial facilities. The primary chemical contaminants in the Site's groundwater are tetrachloroethene (PCE) and trichloroethene (TCE), both industrial solvents. Other chemicals detected in the groundwater include 1,4-dioxane, used as a stabilizer in chlorinated industrial solvents, and perchlorate, used in fire-works and rocket fuel. EPA's ongoing remedy includes extracting and treating contaminated groundwater. The treated water meets all federal and state health protective standards for drinking water. Groundwater continues to be an important source of drinking water to residents and businesses in the San Gabriel Valley.



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## Sampling

The planned sampling will be conducted by EPA and its contractors.

The first step is a building walk-through, where EPA will select sampling locations with input from the resident or business. Samples will be taken of indoor air, crawl space air, sub-slab soil gas, and/or outdoor air. If sub-slab sampling is required, the sampling would include drilling one or more temporary holes of about 3/4 inch diameter to collect air samples. Air samples are collected in canisters approximately the size of a basketball that are left in place for up to 24 hours. They do not move and do not make noise, and EPA will work with residents and businesses to establish mutually agreeable times for sampling.



Summa® canister

## What if there is a vapor intrusion problem?

If indoor air sampling results exceed acceptable levels, EPA will work with the owner and/or tenant to lower the indoor air levels and to prevent the contamination from accumulating in the residence or business. EPA may recommend the installation of a vapor intrusion control system to reduce indoor air levels. With the consent of the property owner, this would generally include sealing any potential conduits and installing a sub-slab or sub-membrane vapor intrusion control system. These systems are similar to radon mitigation systems commonly installed throughout the country.

## Trace Atmospheric Gas Analyzer (TAGA) mobile laboratory

During the upcoming investigation, EPA will be testing for the presence of VOCs such as PCE and TCE in indoor and outdoor air. To perform this testing, EPA will utilize the TAGA mobile laboratory in addition to other sampling methods. The TAGA is a motorhome-like vehicle that has been customized with laboratory equipment allowing EPA to receive immediate results from air samples. To measure the concentrations of VOCs in air, the TAGA utilizes a sampling tube, air trapping canisters, and air trapping bags. Since the TAGA provides real-time results, it can also help locate where vapors may be entering a building.



**Figure 3:** A) Parked Trace Atmospheric Gas Analyzer Mobile Laboratory. B) Photo inside vehicle showing a computer monitor that allows TAGA operators to track air sampling activities. C) An EPA technician tests air quality in a crawl space. D) EPA technicians testing air quality in outdoor air.

## Contact information

If you have questions or would like more information, please contact EPA:

**Viola Cooper**  
EPA Community  
Involvement Coordinator  
(415) 972-3243  
Toll Free: 1-800-231-3075  
[cooper.viola@epa.gov](mailto:cooper.viola@epa.gov)

**Rachelle Thompson**  
EPA Project Manager  
(415) 972-3962  
[thompson.rachelle@epa.gov](mailto:thompson.rachelle@epa.gov)

More information is also available at:  
<http://www.epa.gov/region9/SouthElMonte>



For information in Vietnamese, Spanish or Chinese please contact the number below.

Đối với thông tin trong tiếng việt, xin vui lòng liên hệ số dưới đây.

Para información en español, por favor llama al número a continuación.

有關中文信息, 請打下列電話號碼和我們聯繫。

**Toll Free: 1-800-231-3075**