

# Fact Sheet

## Soil Gas Sampling

Laurel Bay Military Housing Area,  
Marine Corps Air Station Beaufort, South Carolina



March 2016

### Introduction and Background Information

The Marine Corps Air Station (MCAS) Beaufort and the Naval Facilities Engineering Command (NAVFAC) have prepared this Fact Sheet to provide information about an environmental sampling event that is planned for the Laurel Bay Housing Area.

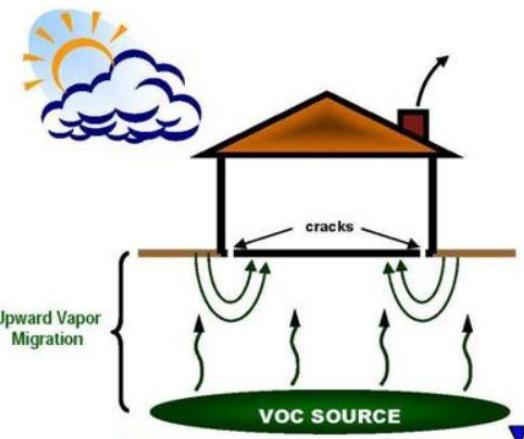
Legacy homes within the Laurel Bay Housing Area were formerly heated using heating oil stored in underground storage tanks (UST) at each residence. Heating oil has not been used at Laurel Bay since the mid-1980s. As was the accepted practice at the time, out-of-service USTs were drained, filled with dirt, capped, and left in place. In 2007, MCAS Beaufort began an effort to remove the heating oil USTs and conduct soil and ground water sampling to determine if, and to what extent, tanks may have leaked.

### What is Petroleum Vapor Intrusion?

Vapor intrusion is the term used to describe the migration of vapors from a contaminant source in soil or groundwater upward through the soil column and into buildings through cracks or holes in building foundations or slabs. The term petroleum vapor intrusion is used when those vapors are the result of a release of a petroleum product. Heating oil previously used in Laurel Bay has compounds common to all petroleum products that can vaporize easily and quickly dissipate. These are known as volatile organic compounds (VOCs).

Examples of the vapors from VOCs are the smell of gasoline, fingernail polish remover, solvents, oil, etc. when a container is opened. Soil gas sampling in Laurel Bay is being done to determine if there is a potential for heating oil from UST leaks to have created petroleum vapor intrusion into homes.

### Vapor Intrusion – Conceptual Model



### What happens if a problem is found?

The presence of heating oil vapors in a home is a concern if there is long term exposure to a concentration level that exceeds standards set by the Environmental Protection Agency (EPA). If heating oil vapor intrusion is identified as a concern at any home, measures will be taken to address the problem. Corrective measures may be as simple as sealing cracks in the foundation or installing a venting system.

### When will this study be done and when do you expect to get results on the vapor intrusion testing?

Sampling work will start in late spring. The procedures will follow EPA guidelines and be done in coordination with the South Carolina Department of Health and Environmental Control (SCDHEC). Sampling will be done in phases with results available approximately one to two months after each phase is complete. Results will be published to Laurel Bay residents as they are available.

### For More Information

MCAS Beaufort wants to keep you informed about the environmental project being conducted in your neighborhood and will continue to update you as new information becomes available. For questions or further information, please contact Mr. William Drawdy at (843) 228-7370 or email at [william.drawdy@usmc.mil](mailto:william.drawdy@usmc.mil).