

July 92

# THE FACTS

Information About  
Environmental Cleanup  
at McClellan AFB.

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Number 12

## Off-Base Soil Gas Sampling Planned

McClellan AFB will conduct a soil gas sampling program to determine if soil vapor has moved from contaminated areas on the base to residential areas off the base. Soil gas can originate as vapor from fuel and solvent wastes disposed in the past. The vapor moves through the spaces between particles of soil and rock. Soil gas sampling is planned during the months of August and September in the residential areas to the north and west of the base (see map on back). McClellan AFB will be obtaining permission from property owners to conduct the sampling at up to 200 locations. The sampling program will be overseen by the U.S. Environmental Protection Agency (EPA) and the California Environmental Protection Agency, Department of Toxic Substances Control (Cal-EPA DTSC).

### Background

In the past, McClellan AFB disposed of fuel and solvent wastes in pits in the northwest area of the base, now referred to as Operable Unit D.

Soil gas sampling has been conducted at onbase and offbase locations near OU D. Sampling was conducted in crawlspaces and in domestic wells at four residences adjacent to OU D from 1984 to 1987. Results indicated that there were no unacceptable health risks, based on agency health standards. McClellan AFB conducted additional sampling in January 1992, but the EPA requested that a new sampling method be used that provides better results with lower detection levels. McClellan AFB is currently repeating the crawlspace

sampling using the new method, and will also sample and analyze soil gas in offbase areas using a mobile laboratory.

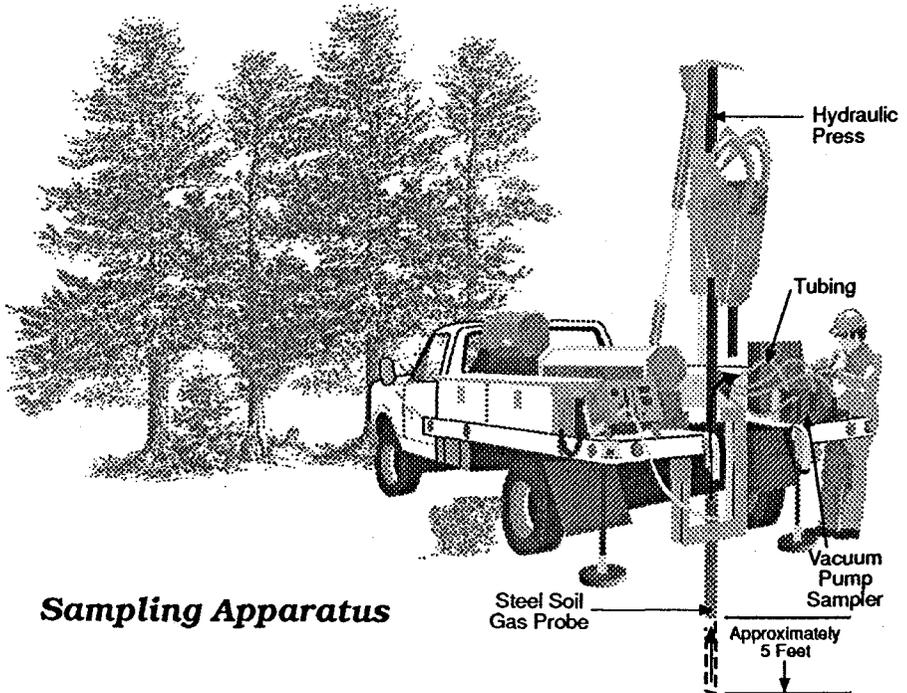
### Why is McClellan Conducting More Gas Sampling?

Some of the soil gas compounds detected during the previous sampling are considered hazardous to human health. For example, vinyl chloride, a known human carcinogen (meaning it can cause cancer), may form as a breakdown product from some of the solvents disposed in the OU D waste pits. McClellan, EPA, and Cal-EPA are concerned about potential underground buildup and movement of vinyl chloride and other waste contaminants in soil gas on and off

the base. With this study, McClellan will determine the extent of vinyl chloride and contaminant movement, and will determine if any residences may be affected.

### What Are the Risks to Residents Near the Base?

At this time, there is no indication that residents living adjacent to the base are exposed to harmful levels of soil gas contaminants in the air they breathe. The purpose of this study is to collect soil gas samples in a broad area near OU D to determine if soil gas is moving, and if so, how far it has moved. The results of the study will be used to support a further study of potential risks to human health.



Sampling Apparatus

If the agencies and McClellan determine that residents in the area are being exposed to unhealthy levels of vinyl chloride or other contaminants, contingency plans are in place. In the short term, possible solutions include venting of crawlspaces under homes or improving ventilation inside living areas. The long term plan is to clean up the source of the contamination problem and remove the soil gas from the ground. A prior issue of *The Facts*, No. 10, describes soil vapor extraction technology being studied in OU D.

### What Kind of Equipment and Work Schedule Should You Expect During the Sampling?

Prior to and during sampling and other field activities, precautions will be taken to ensure that the public is not exposed to soil gas contaminants. Precautions will also be taken to ensure that sampling locations are left in the condition they were found.

McClellan will need to sample in backyards using a pickup truck equipped with a mobile laboratory. The truck has a soil gas probe under it to collect samples (see figure). Prior to sampling, McClellan will request access agreements from the property owners. The access agreement will be between the property owners and McClellan AFB.

The sampling holes will be approximately 1 inch in diameter and 5 feet in depth. Holes will be placed at 300-foot intervals progressing outward from the base boundary away from OU D. McClellan will collect the samples quickly so as not to inconvenience residents with the work. The time required for sample collection should be about one hour per location. Each affected property owner will be given a copy of McClellan's work schedule. Working hours will generally be from 8:00 a.m. to 5:00 p.m., Monday through Friday. Noise from the equipment should not be very noticeable.

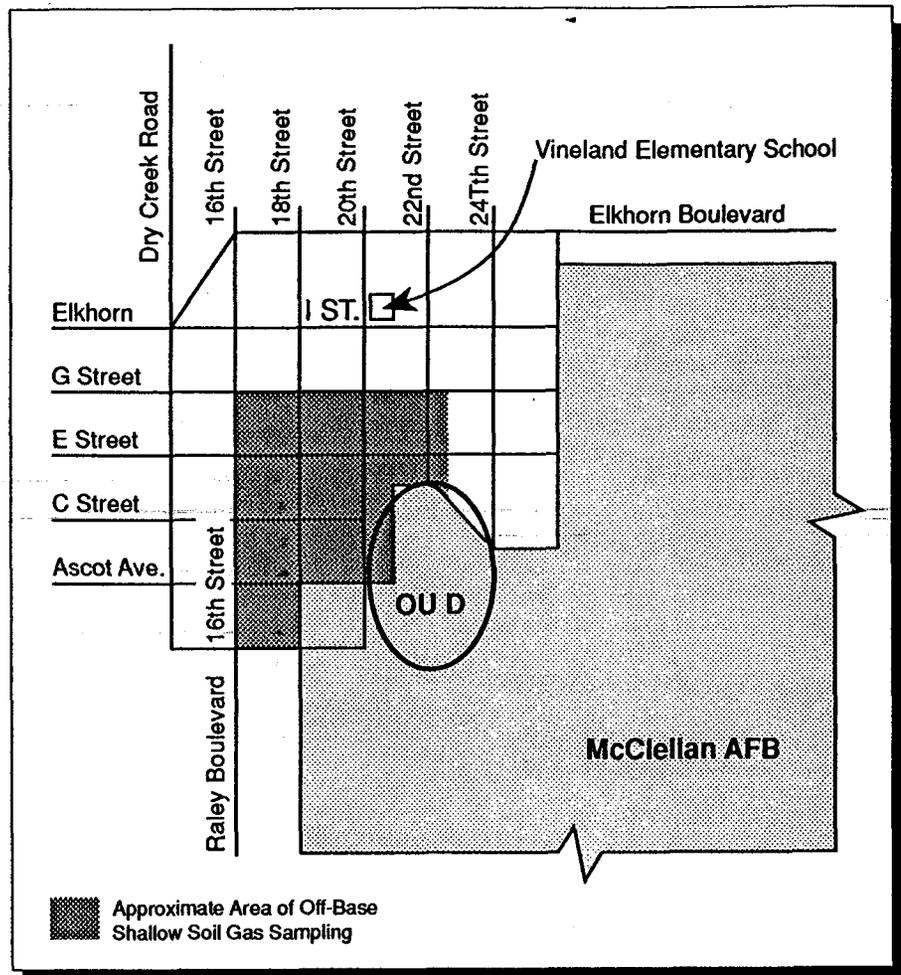
### Public Availability Session

McClellan and the agencies will be available to discuss the soil gas sampling program and answer questions on July 7, 1992, from 6:00 p.m. to 9:00 p.m., at the Vineland Elementary School, on 20th and I

Streets (6450 20th Street).

### For More Information

If you are interested in visiting the future sampling sites, or would like further information, please contact the EPA, Cal-EPA, or Public Representatives listed below.



### For More Information Contact

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#### Public Representatives

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and  
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