

## Onizuka Village Supplemental Remedial Investigation

Joint Base Pearl Harbor-Hickam

#### Fact Sheet No. 01

#### INTRODUCTION

This fact sheet provides information about an environmental investigation managed by the U.S. Navy for petroleum affected soil found at the Onizuka Village housing area.

## SITE LOCATION AND BACKGROUND

Onizuka Village is located on the Hickam Field portion of Joint Base Pearl Harbor-Hickam (*Figure* 1). The property is located south of the Hickam Base Exchange and Commissary buildings and north of the flight line.

The Onizuka Village housing area was used as an airfield in the 1940s and 1950s. The first Onizuka Village housing was built in 1992 over part of the former flight line runway and aircraft parking area (*Figure 2*). During construction of the current housing area in November 2009, petroleum affected soil was observed between 9 and 11 feet below ground surface. Although the source of the petroleum is unknown, an aviation gasoline plume and underground fuel pipelines exist nearby.

#### WHAT WE KNOW SO FAR

Limited soil vapor sampling conducted in 2011 found fuel-related chemicals including several Volatile Organic Compounds (VOCs) above Hawaii Department of Health (HDOH) Environmental Action Levels (EALs).

A follow-on investigation performed between February–August 2013 confirmed the following:

- No VOCs or explosive gases were detected in underground utility corridors
- No EAL exceedances were detected in groundwater
- Subsurface soil (4 to 6 feet deep) exceeded total



Figure 1: Location of Onizuka Village on Hickam Field.



Figure 2: 1950's aerial photo overlain by future Onizuka Village housing development. Red asterisks (\*) are locations of petroleum affected soil found in 2009.

petroleum hydrocarbon EALs at seven locations outside of residences

- Indoor air screening showed no detectable VOCs except at one residence, which matched background levels
- Sub-slab soil gas samples beneath 28 residences detected petroleum hydrocarbons well below the EALs indicating that vapor intrusion is not currently occurring

Pearl Harbor-Hickam Restoration Advisory Board Meeting December 9, 2013, 7 p.m., Oahu Veteran's Center 1298 Kukila Street, Honolulu, Hawaii 96818

#### December 2013

#### Fact Sheet No. 01

## WHAT'S NEXT?

The Navy is evaluating cleanup alternatives to remediate the deeper soil gas and prevent it from accumulating beneath nearby buildings. One type of technology being evaluated is soil vapor extraction, which removes vapor phase contaminants from soil by using vacuum blowers to induce vapor flow in the subsurface.

## **QUESTIONS & ANSWERS**

Could there be elevated soil vapor in more than just the seven areas found?

The Navy has conducted extensive screening of subsurface utility corridors, soil vapor screening, and follow up soil vapor sampling throughout Onizuka Village and believe that no other areas warrant further investigation.

#### What is vapor intrusion?

Vapor intrusion occurs when vapors from contaminated groundwater or soil evaporate and then rise through the soil and enter buildings through cracks and holes in foundations or slabs of buildings.

# If the results are low does that mean vapor intrusion will not occur in the future?

If VOCs or methane is detected at low concentrations in the sub-slab samples, vapor intrusion is likely not currently occurring; but it's possible that vapors could accumulate beneath buildings in the future. Additional sampling will be conducted periodically to ensure vapors are not accumulating.

#### Will exposure to VOCs make residents sick?

Having VOCs in breathing air does not mean adverse health effects will occur. Virtually everyone is exposed to VOCs on a regular basis through everyday household products. Whether or not adverse effects will occur depends on a variety of factors including how much you are exposed to, how long and how often the exposure occurs, the individual's sensitivity to the specific chemical, and the toxicity of the chemical. For most vapor intrusion sites the concentration of chemicals are too low to cause short term health effects. When sampling results indicate an issue, they typically involve potential health effects from long term exposures (i.e., 30 or more years).

#### What products contain VOCs?

Many materials and substances commonly found in businesses and homes contain VOCs that may be detected by indoor air testing. Examples include: paints, paint thinners, certain building materials and cleaning products, certain types of personal products, carpet adhesive, shoes, dry-cleaned clothing, and cigarette smoke. VOCs are also present in motor vehicle emissions and other outdoor sources such as fuel powered equipment and fuel pumps.

## **COMMUNITY INVOLVEMENT**

The Navy encourages the public to gain a comprehensive understanding of the site and the activities that have been conducted there. Community members and regulatory agencies have provided input through periodic **Restoration Advisory Board (RAB)** meetings and by reviewing written reports and documents. The Navy provides information to the community through RAB meetings and the information repository for the site.

#### For More Information/Comments

Contact:

Ms. Denise Emsley, Public Affairs Office, Naval Facilities Engineering Command, Hawaii

#### Address:

COMMANDING OFFICER NAVFAC HAWAII ATTN: D. EMSLEY CODE 09PA 400 MARSHALL ROAD BLDG A4 JBPHH, HI 96860-3139

Phone:	808-471-7300
Fax:	808-474-5479
<u>E-mail:</u>	denise.emsley@navy.mil

#### For More Information:

All site-related documents are available for review at the Navy information repository established at the Pearl City Public Library and University of Hawaii Hamilton Library.