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FACT SHEET REGARDING OPERABLE UNIT 2 (OU 2) NTC ORLANDO FL  
3/1/2010  
NTC ORLANDO



# Naval Training Center Orlando Florida



## Operable Unit 2 (OU 2)

This fact sheet was developed to inform interested citizens about the Naval Training Center (NTC), Orlando environmental program. Fact sheets will be distributed periodically to keep the community informed. Additional copies of these fact sheets can be obtained by contacting Art Sanford at (843) 743-2135.

### NTC Orlando's Environmental Program

Environmental studies and cleanup actions are currently underway at the former NTC, Orlando as part of the Department of Defense's Installation Restoration (IR) Program. Through this program, areas of known or suspected contamination from past practices and operations are being identified, evaluated, and, if necessary, cleaned up.

### Operable Unit 2 Description and History

Operable Unit 2 (formerly McCoy Annex Landfill) is located 8 miles south of the main base at NTC, Orlando, and is immediately west of the Orlando International Airport and Greater Orlando Airport Authority (GOAA) property as shown on Figure 1. Operable Unit 2 is an inactive landfill located in the southern part of McCoy Annex. The western portion of the site was used as a landfill by the Air Force from about 1960 to 1972, while the eastern portion was used as a landfill by the Air Force and the Navy from 1972 until about 1978.



Figure 1: OU 2 (yellow site boundary) and adjacent Greater Orlando Aviation Authority property (red site boundary).

During landfill operation, ditches (100 to 200 feet long by 20 to 25 feet wide by 10 to 15 feet deep) were excavated into which trucks disposed waste. Waste was also

occasionally burned in the ditches. Ditches were filled with waste to within 3 or 4 feet of the ground surface and then backfilled with soil and seeded.

The landfill occupies approximately 114 acres, and its relatively flat topography slopes from north to south. The estimated volume of waste is more than 1,000,000 cubic yards (yd<sup>3</sup>). Landfill wastes reportedly included hospital wastes, paint and paint thinner, automobile batteries, airplane parts, and asbestos.

From 1982 to 2007, a nine-hole golf course covered most of the inactive landfill. The southern half of the site was once wooded, but the trees have been removed and the area was covered with clean soil.

### What are Benzene, Vinyl Chloride, PCE, and TCE?

**Benzene** is a colorless liquid that evaporates at room temperature and burns easily. Benzene is a natural part of crude oil, gasoline, and cigarette smoke. It is also found in commonly used products like paints, inks, detergents, and pesticides.

**Vinyl chloride** is a colorless gas that burns easily and it is not stable at high temperatures. It has a mild, sweet odor. It is a manufactured substance that does not occur naturally. It can be formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. It is also found in polyvinyl chloride (PVC) products which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

**Trichloroethene (TCE)** is a nonflammable, colorless liquid used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, and spot removers.

**Tetrachloroethene (PCE)** is a manufactured chemical used for dry cleaning and metal degreasing.

More information about these contaminants can be found at the following website:

<http://www.atsdr.cdc.gov/>

planned every two years until sampling results indicate that this is no longer necessary.

## **Investigation and Remediation**

A Remedial Investigation was conducted at the site in several phases from May 1997 to March 2001. Investigators found that the surface soil was contaminated with landfill material in the southern portion of the golf course and in the wooded area in the south portion of OU 2; surface water and sediment were not contaminated, but groundwater could cross contaminate these media in the future.

To address soil contamination, 2,000 yd<sup>3</sup> of contaminated surface soil was removed from the northern portion of OU 2 in April 1999, and additional soil cover was placed in the southern portion of OU 2 in August 2000.

Quarterly groundwater monitoring began in 2002, and was followed by additional groundwater investigation in 2004. In the southern portion of OU 2, benzene, tetrachloroethene, trichloroethene, vinyl chloride and other chlorinated solvents are chemicals of concern.

The final decision document for OU 2 is underway; however, interim measures have been implemented. To prevent groundwater contamination from migrating across the adjacent property boundary shared with the Greater Orlando Aviation Authority, the Navy implemented a bio-barrier in 2007. This barrier is designed to treat contaminated groundwater by injecting emulsified oil substrate (EOS®) into a series of locations parallel and adjacent to the drainage canal in the southern part of OU 2. Post-injection samples were collected in 2009.

## **What's Next?**

The Navy transferred the OU 2 property to a developer in 2008. The current owner of the site is Bogey Boggy Creek 08, LLC, and the planned future use for the land is industrial/commercial. To protect human health and the environment, land use controls have been implemented to prevent exposure to contamination. These controls include prohibiting use of groundwater, prohibiting soil disturbance, prohibiting residential use of the site, and a requirement that at least two feet of soil cover must be in place over any buried landfill waste. Yearly inspections are performed on an ongoing basis to monitor these controls. Groundwater samples are collected semi-annually, and surface water samples are collected monthly. The Navy plans to extend the bio-barrier wall, and additional EOS® injections to treat groundwater are

## **For More Information**

The public is invited to submit any questions or comments on the remedial action described in this fact sheet. Comments should be directed to Art Sanford at (843) 743-2135. Reports on the work conducted at OU 2 can be reviewed at the Orange County Public Library, Orlando Branch (4th Floor), 101 East Central Boulevard, Orlando, Florida 32801.