



Davidsonville Nike Launch and Control

What You Need to Know

Site Location

The former Davidsonville Nike site is located at 3700 Elmer F. Hagner Lane, Davidsonville, Anne Arundel County, Maryland. The 15.94-acre former Control site is located on 3789 Queen Anne Bridge Road, southwest of the intersection of Queen Anne Bridge Road and Wayson Road. It is now the Davidsonville Recreation Area. The 25.02-acre former Launch site is about ½ mile east of the former Control site at the end of Elmer F. Hagner Lane. The former Launch property is owned by the Anne Arundel County.

Site History

The Davidsonville site was a Nike anti-aircraft missile defense battery which operated between 1954 through the early 1970s. The missile defense system was developed and improved during the cold war. The batteries were deployed around the United States from the 1950s through the 1970s. Each battery was comprised of a radar control site and a missile firing site, usually separated by a distance of between ¼ - 1 mile.

Environmental Investigations and Actions

In 1987, Maryland conducted an investigation of the former Control site. Sampling and analysis of the on-site well and area residential wells for volatile organic compounds (VOCs) was included. No contamination was detected in the on-site well and 2µg/L of chlorobenzene was detected in a neighboring well. Follow-on sampling did not confirm this result.

Based on this information, the U.S. Environmental Protection Agency (EPA) gave the Control site No Further Remedial Action Planned (NFRAP) status in 1992. As part of an initiative to re-evaluate NFRAP sites, MDE conducted a Site Survey Initiative (SSI) in 1999. This SSI confirmed the previous conclusion that the site should be considered NFRAP under the Pre-Remedial Program.

In 1986, the U.S. Army Corps of Engineers (USACE) contracted for environmental studies of a number of former Nike missile bases, including the former Launch site. In the course of this investigation, three monitoring wells were installed and sampled, and soil and water samples were obtained. The results revealed that the groundwater contained metals below Maximum Contamination Levels (MCLs). Soil samples revealed petroleum hydrocarbons, tetrachloroethene, and lead at levels below EPA Risk Based Concentrations (RBCs).

The Maryland Department of the Environment (MDE) sampled the three on-site monitoring wells and the on-site water supply well in 1987, and had the samples analyzed for volatile organic compounds (VOCs). No VOCs were detected at that time.

In 1992, EPA contracted for a Site Inspection of the former Launch site, including sampling and analysis of groundwater from the monitoring wells. Analysis of the groundwater samples indicated the presence of tetrachloroethene, 1,1,1-trichloroethane, phenol, and arsenic at levels



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below MCLs. Polycyclic aromatic hydrocarbons and metals were also detected in the soil, surface water, and sediment at levels below RBCs.

Based on this information, EPA gave the site NFRAP status in 1992. MDE conducted an SSI in 1999. This SSI confirmed the previous conclusion of NFRAP status. In the 2007 - 2008 timeframe, the USACE conducted a project closeout for several former Nike sites in Maryland. For the Davidsonville Launch site, this included the disposal of seven rusting 55-gallon drums (which contained soil cuttings from monitoring well installation), closure of three monitoring wells (two were left in place for use by the U.S. Geological Survey), removal and disposal of 150 gallons of hydraulic fluid and the removal of about 3,600 liters of asbestos. While lead paint removal and abatement were conducted at the other Nike sites, it was not conducted at Davidsonville. In 2007, MDE notified the USACE that the limited nature of the lead paint removal and abatement could leave lead paint in place with the potential for leaching.

In August 2011, MDE collected four soil samples and one groundwater sample from the former Launch site. The soil sampling detected arsenic at a maximum concentration of 12.4 mg/kg, which exceeds the non-residential screening level of 1.9 mg/kg. No other metals or VOCs were detected in the soil samples above RBCs. In November 2013, an additional sampling event was conducted. Four surface soil samples were collected for analysis of semi-volatile organic compounds (SVOCs). Benzo(a)pyrene was detected in one of the four soil samples collected at 780 µg/kg, which exceeded the non-residential RBC of 390 µg/kg. No other SVOCs were detected in soil samples above non-residential risk based screening levels.

A follow up site inspection was completed by the Air and Radiation Management Administration in August 2013. Screening for radiation was completed using a RadEye B20-ER and an ICX Radiation Identifier 2. Two former Nike silos, a water catchment basin and an agricultural shed were screened. No radiation readings above background equivalent were noted. The interior and exterior of the silos and shed were screened.

Current Status/Planned or Potential Future Action

There are no further actions planned for this site.