



Maryland Department of the
Environment

FACTS ABOUT: ROCKVILLE LAUNCH (MD-226)

Site Description

The address for the 13.7-acre Rockville Launch (MD-226) was 770 Muddy Branch Road, Gaithersburg, Montgomery County, MD 20878. The geographic coordinates for the site are 039 degrees 7 minutes 00.72 seconds north latitude by 077 degrees 13 minutes 11.43 seconds east longitude. The Maryland grid coordinates are 467,000 north by 738,000 east.

The Rockville Nike Launch Facility operated from 1955 through 1974 at the location off Muddy Branch Road near Gaithersburg. This report references the site as Rockville W-92. Following base closure in 1974, the site was turned over to the Consumer Product Safety Commission and later, to the National Institute of Standards and Technology. Currently, the Nike launch site is owned by the U.S. Federal Government.

Site History

The Nike missile launch site is a testament to the Cold War era. “Rockville W-92” was a guided missile base installed to help defend the Nation’s Capital from enemy bombers. Built in 1954, the missile launch site located west of Muddy Branch Road, housed both NIKE Ajax and Hercules missiles. The launch site contains three missile silos and a collection of barracks and out-buildings. The Nike site remained operational until 1974, when rendered obsolete by the refinement of intercontinental ballistic missiles.

In the early years of the Cold War, the United States Army set up a battery of Nike missile defense systems around forty major US cities. The typical Nike base consisted of two operational areas: the launch area and the fire control area. The launch area contained the facilities and equipment required to assemble, test and maintain the missiles and associated launch mechanisms.

Waste Description

The Nike Ajax missile was a liquid fueled rocket using red fuming nitric acid mixed with unsymmetrical dimethyl hydrazine (UDMH) and JP-4 jet petroleum. The Nike Hercules missile used ammonium perchlorate as an oxidizer and synthetic rubber mixed with aluminum as the fuel.

Contaminants used at the Nike site include trichloroethene (TCE), tetrachloroethene (PCE), benzene, carbon tetrachloride and associated degreasing agents, petroleum



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compounds, red fuming nitric acid, dimethyl hydrazine, perchlorates, lead based paints, asbestos containing materials, polychlorinated biphenyls, pesticides and heavy metals.

There was one dry well associated with the rocket cleaning and assembly building and a second dry well associated with the rocket fueling facility.

Environmental Investigations

The United States Army Corps of Engineers (USACE) has investigated the site under the formerly used defense site (FUDS) initiative. Portions of the site were remediated under USACE oversight. Monitoring well sampling at the Rockville Launch site revealed levels of chlorinated solvents in on site monitoring wells significantly above background and or above regional screening levels. Samples of site soils found elevated levels of metals and poly-aromatic hydrocarbons (PAH) in some on site locations.

The results of early groundwater studies identified TCE in monitoring well MW-4 at 21 ug/l. This is an on site well located adjacent to the old missile assembly building. The USACE in 2003 and ARM in 2007 conducted confirmatory sampling of MW-4 and did not identify TCE or any other significant levels of volatile organic compounds in the well. USACE abandoned MW-2, MW-3 and MW-4.

Indoor air sampling found TCE above the USEPA vapor intrusion guideline in samples collected on site. The soil gas investigation identified TCE at levels above the EPA Vapor Intrusion Guidance Criteria of 2.2 ug/m³.

ARM conducted a soil gas study in August 2007. The samples collected from the missile assembly building and the propellant building were above EPA vapor intrusion guidelines.

Current Status

USACE has no further plans for remediation of the site. In October 2011 MDE conducted a FUDS Site Inspection (SI) of the Rockville Launch site to identify soil and groundwater contamination and to determine if further vapor intrusion studies were warranted. The SI report found minimal residual contamination of the surface and subsurface soils at the Rockville Launch site. While TCE has been documented on the Rockville Launch site, there are no domestic wells in use in the vicinity of the site. Based on USACE findings, low levels of TCE are present in groundwater on site. ARM documented low levels of TCE in soil vapor under three site structures, the missile assembly building, the propellant handling building and the administration building. However, there is currently no evidence of contaminants at levels that could be considered significant; therefore, MDE does not believe that further action is warranted at this site.

