



# Facts About...

Whaley Farm  
(FUDS – MD #525)

---

## Site Location

Whaley Farm is located on a parcel of land off Hayes Landing Road, Berlin, Worcester County, Maryland. The parcel under investigation is a portion of the current Newport Farms Property and consists of an approximately 120-acre piece of land situated on a 1447-acre property in a rural setting just southeast of Berlin. The property is located on the United States Geological Survey (USGS) Berlin quadrangles at approximately 38°17.3808' north latitude and 075°11.7868' west longitude and has a Maryland grid coordinate of 172000N and 1317300E. Maryland Department of Assessments and Taxation lists the property as Map 41 Grid 12 Parcel 59.

## Site History

On November 2, 1918, the Chemical Warfare Service of the War Department in conjunction with American University conducted a field test of Adamsite or DM, a riot control agent. The test was performed by igniting 300 “candles” that dispersed the chemical into the atmosphere at a location in the northeast section of the property. The prevailing winds at the time were from the northwest.

The purpose of the test was to determine the protection afforded by various gas mask canisters against DM and the effective area of the resultant cloud from these candles. The test consisted of firing 300 Xylol (commercial grade xylene) washed DM candles that were placed in three parallel rows of 100 candles each and spaced one yard apart. No improvements to the property were made by the War Department and no record of disposal of the materials was found. The test report states that this location was not suitable for the test due to the swampy land, and wind currents off of the bay and the adjoining woods.

## Environmental Investigation and Action

An Ordnance and Explosive Waste (OEW) risk assessment was completed by EA Engineering on October 28, 1994. The risk assessment consisted of a score sheet that was prepared using site documentation. No environmental samples were analyzed for the assessment. The total hazard probability value was calculated at 23, which corresponds to a hazard value of “probable.” The risk assessment value for the site was determined to be “marginal.”

In September 2003, the MDE conducted a FUDS Site Inspection (SI) that investigated the impact of the Adamsite (DM) testing on the soils of the site. Samples were collected from an area assumed to be downwind of the release point as well as locations upwind of the release point to establish area background. A total of thirty-four soil samples were collected. All consisted of shallow composite samples collected from a ten foot by ten foot grid. Ten of the 31 sample locations documented the presence of arsenic. All but one of these samples was found to be along the 5-foot topographic contour line. The one exception was collected from the suspected release area and was found to contain arsenic concentrations (27.1 mg/kg) that exceeded both the MDE Residential Cleanup Standard of 2 mg/kg and the MDE Non-residential Cleanup standard of 3.8 mg/kg.



