

## **Blossom Point Field Test Area (MD-136) Charles County, Maryland**

### **Site Location**

The Blossom Point Field Test Area (BPFTA), located approximately 50 miles south of Washington D.C., covers 1,600 acres on the southern end of Cedar Point Neck, in southern Charles County, Maryland. Nanjemoy Creek forms the western boundary and the Potomac River forms the southern and eastern boundaries of the BPFTA. The BPFTA is an active facility under the US Army Research Laboratory (ARL) in Adelphi, Maryland.

### **Site History**

In 1941, the National Bureau of Standards (NBS) leased the southern portion of Cedar Point Neck from the Catholic Church for fuze and ordnance testing. The facility was originally known as the Blossom Point Proving Ground. The Ordnance Development Division of NBS was transferred to the Department of the Army in 1953. The leased facility was also transferred and renamed the Diamond Ordnance Fuze Laboratory Test Area. It was used for the applied research and development of radiating or influence fusing, time fusing, signature analysis and the target intercept phase of terminal guidance as well as ordnance testing. When the Department of the Army reorganized in 1962, the name was again changed to Harry Diamond Laboratory (HDL) Test Area. HDL is one of seven Electronics Research and Development Command laboratories, which are part of the U.S. Army Materiel Development and Readiness Command.

A 23-acre portion of the site was permitted to the Navy in 1956 to establish a tracking system for the early Vanguard missiles, as well as for use as a satellite command and control base for defense related satellite programs.

From 1943 until the early 1970s, portions of the Potomac River and the Nanjemoy Creek served as impact areas from ordnance testing. Both bodies of water are owned by the State of Maryland and use of the surrounding water bodies as impact areas was ceased in the early 1970. However, testing is actively conducted on adjacent Department of Defense controlled land.

From July 1974 to January 1976, testing was suspended at this facility due to the inability to retain technical personnel, as well as increased competition from private industry and other federal agencies. The potential for the sale of the property prompted the Army to investigate the feasibility of decontamination. The Army decided to buy the land from the Catholic Church, and purchased it in June 1980. The name was again changed to its present operating name – the Blossom Point Field Test Activity.

### **Environmental Investigations**

Previous environmental assessments of the BPFTA began in 1973 with the U.S. Army Biomedical Research Team's survey of flora and fauna.

An Installation Assessment conducted in 1981 identified eight sites where chemicals, shell casings, and construction material was buried. These areas were designated Landfills 1 through 8:

- Landfill 1 was used in 1980 to dispose of rocket bodies, shell casings, fuzes, scrap metal and construction debris.
- Landfill 2 was used between 1940 and 1980 and was reported to contain shell casings, metal scraps, rubber tires and packing cases.
- Landfill 3 consists of two small pits whose locations are unknown, pit one was used to bury 200 kg of unknown chemicals from NBS laboratories and the other pit was used to dispose of police confiscated bomb materials, which included perchlorates and metals.
- Landfill 4 was used until 1982 for the disposal of construction debris, rubbish and scrap metal.
- Landfill 5 was used between 1954 and 1960 for the burial of classified fuzes that had been crushed and destroyed before burial.
- Landfill 6 was used to burn and bury out of date film in 1966.
- Landfill 7 was used in 1951 to dispose of chemicals stored at the BPFTA since 1942. It has been reported that they were disposed of in a manner to prevent the bottles from breaking.
- Landfill 8 was reportedly used to dispose of chemicals from 1965 to 1975.

Historically, in addition to the landfills, six active test ranges have also been used since 1945. A wide variety of ordnance including grenades, artillery, ballistic rockets and bombs has been fired on this range. Ranges 2, 3, 4, and 5 were used from 1942 to 1950 for testing ballistic rockets. Range 6 was an earthen embankment used to stop projectiles in a one-time test of a special small caliber weapon. The initial assessment also revealed the suspected presence of ordnance disposal areas, as well as chemical burn areas.

The Army conducted a RI in 1988 at the areas suspected to be landfills 3, 7, and 8. Groundwater samples revealed the presence of trichlorofluoromethane, methylene chloride, numerous unknown organic compounds, as well as explosive compounds. Intrusive investigations that occurred at landfills 3, 7 and 8 in 1989 and at landfills 3 and 7 in 1995 did not reveal the presence of buried hazardous waste.

A shoreline stabilization project has been proposed by the Army for the western shoreline along Nanjemoy Creek in order to prevent extensive erosion to this shoreline. However, the Army has not proposed and does not plan any shoreline stabilization projects at the southern shoreline, where waste from the landfills 3 and 7 are in danger of eroding into the Potomac River.

### **Current Status**

Blossom Point Field Test Area is currently an active U.S. Army explosives testing facility. The Army maintains that groundwater contamination within the areas of the suspected landfills is a result of current and historical operation of the firing ranges rather than leachate from the suspected hazardous waste disposal sites.

**Facility Contacts**

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