



Naval Research Laboratory-Chesapeake Bay Detachment (MD-0062)

What You Need to Know

Site Location

The Naval Research Laboratory – Chesapeake Bay Detachment (NRL-CBD) is located at 5813 Bayside Rd, Chesapeake Beach, in Calvert County, Maryland. The 168-acre property is identified on Calvert County Tax map 12, parcel 66. Several buildings are present on-site, with scattered wooded areas and streams which empty into the Chesapeake Bay. The site is located on the west bank of the Bay, with the eastern boundary steeply dropping off to the rip-rap-reinforced shoreline, approximately 80 feet below. The site is secured with fencing and a manned guard post. Maryland Rt. 261 (Bayside Rd) runs north-south through the site, dividing it into western and eastern portions. The facility also includes 2-acres on Tilghman Island and a range area extending into the Chesapeake Bay in the direction of Tilghman Island (not addressed in this factsheet).

Site History

The NRL-CBD site is one of several field sites of the NRL, whose main campus is in Washington, D.C. The NRL-CBD site is used to conduct testing involving radar, electronic warfare, optical devices, materials, communications, and fire research. Land for the site was initially acquired in 1941, with major expansion occurring in 1953-1954 with construction of a large laboratory building, shop facilities, and complete utility systems.

Environmental Investigations

In 1984, the Navy conducted an Initial Assessment Study of the site as part of their Superfund equivalent program (the Navy Assessment and Control of Installation Pollutants, or NACIP). In that and subsequent studies, the following Installation Restoration (IR) sites have been identified at NRL-CBD:

- Site 2 (Chemical Burial Site) 1950s-1960s, disposal and/or burning area for chemical wastes generated at NRL D.C. and brought to NRL-CBD.
- Site 3 (Landfill #1) 1942-1950, household garbage, oily rags, lubricant cans, paint sludge, paper, etc., and open surface storage of equipment.
- Site 4 (Landfill #2) -1950-1958, household garbage, oily rags, lubricant cans, paint sludge, paper, etc.



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- Site 5 (Landfill #3) -1958-1968, household garbage, oily rags, lubricant cans, paint sludge, paper, etc., and open surface storage of equipment.
- Site 6 (Power Plant Oil Spill) -1973, a 75-gallon oil spill that was cleaned up.
- Site 7 (Road Oil Application) -1940-1952, waste oils sprayed on roads to control dust.
- Site 8 (Well Mercury Contamination) -one-time mercury release from a flowmeter to the water supply, cleaned up in the 1970s with no apparent residual effects based on blood testing and 8 months of drinking water monitoring.
- Site 9 (Photoprocessing Waste Discharge) -1950s-1975, discharge of photochemicals to ground.
- AOC A (Fire Testing Area) -Tested fire extinguishing agents.
- AOC B (Quarters) -Residential buildings (now razed) with lead-based paint and asbestos.
- AOC C (Chemical Burial Site 2) -1960s, similar history as Site 2.
- AOC D (Water Tower) -1950s-1970s, lead-based paint on tower, in surface soil.

The Military Munitions Response Program (MMRP) sites identified at NRL-CBD are as follows:

- UXO-1 (Hypervelocity Low Pressure Gun) -1967-1995, used to study the impact of high velocity projectiles on various target materials.
- UXO-2 (Randle Cliffs Zuni Launch Site) -1960s-1992, used in testing and research associated with Chaff rounds.
- UXO-2 (Randle Cliffs Gun Mount) -1944-1948, utilized in conjunction with experiments involving Naval vessel gun-sighting.
- UXO-3 (Small Arms Range) -1960s-early 1990s, recreational range for Navy personnel and civilians.

Current Status

Several of the IR sites are currently in the remedial investigation phase, and the Navy has recommended No Further Action for Site 2, AOC B, AOC C, Site 8, and Site 6. In 2014 and 2017 respectively, soil and groundwater background studies were performed to provide information to aid in the evaluation of remedial alternatives for both IR and MMRP sites. In 2017, the Navy completed site-wide sampling for Perfluorobutanesulfonic Acid (PFBS), Perfluorooctane Sulfonate (PFOS), and Perfluorooctanoic Acid (PFOA) in shallow and deep groundwater, and the presence of these compounds was confirmed in the shallow groundwater zone; additional investigations will focus on AOC A, the Fire Testing Area. The anticipated plan for UXO-3 is excavation of lead-contaminated soil and proper off-site disposal.