



Facts About...

Triumph Explosives Industries
Carpenter's Point Proof Range
(Non-Master List - MD-545)

Site Location

The Carpenter's Point Proof Range (CPPR) was sited on what are now principally residential and commercial marina properties. The site comprises approximately 11 acres of land located three miles southwest of Charlestown, Cecil County, Maryland 21903. The site is situated in an area that has been associated with Bay fisheries since the 1800s. The site is located at the confluence of Northeast Creek and the Chesapeake Bay, and is situated less than 10 feet above mean sea level. The geographic coordinates are latitude 039° 32.3878' north and longitude 076° 0.2960' west. The Maryland grid coordinates are north 622,800 feet and east 1,080,000 feet.

Site History

Triumph Explosives Industries (TEI) acquired rights to the property in 1938, and operated an ordnance test facility at the site until plant activity ceased in 1945. Under their ownership, ordnance manufactured in the TEI Elkton facility was fired from stationary gun emplacements on Carpenter's Point. The guns generally fired projectiles in one of two directions, either into a target set in a sand bank or down the Chesapeake Bay to a protected range area. Munitions tested at the range included 20-mm, 37-mm and 40-mm anti-aircraft shells and 50-calibre machine gun ammunition. Munitions were live-fired; explosive rounds were shot into a bermed target on the property.

From 1942 through 1945, TEI test-fired military ordnance from a battery located on the southern terminus of Carpenter's Point Road on Carpenter's Point, Charlestown, Maryland. The roughly rectangular shaped parcel of land is bounded to the west by Riverside Lane, to the south by Carpenter's Point Road and the Chesapeake Bay, and to the north and east by the Northeast River. The range site is now comprised of an abandoned swimming pool and recreational area. General surface features consist of a grassy field and a concrete-covered, relatively flat parcel sloping gently down to a sand beach.

Historical research indicates that the site was originally owned by the Carpenter's Point Company and the Bay Shores Company. From 1938 through 1945, TEI manufactured munitions and military fireworks for both the U.S. and foreign governments. After TEI closed its Elkton operation in 1945, the Carpenter's Point property was transferred to Robert J. Andrews, et. al. In October 1981 the Riverside Recreational Resort, Inc. acquired the property. The property was transferred to J. R. Crouse Holdings, L.L.C., the current owners, in October 2004.

Under TEI's ownership, there were several employees and approximately six buildings on the property. The number of employees is based on witness information that identified an officer and gun crew operating on the range. The number of buildings is based on aerial photo interpretation of the post World War II property. The exact numbers are unknown.

Environmental Investigations

The Army Corps of Engineers (Corps) funded an assessment of the site to determine if the site met the definition of a formerly used defense site (FUDS). The Corps concluded that the government did not undertake ownership of the company and that the site was not FUDS eligible. EA Engineering performed

the evaluation that determined that the site was not FUDS eligible. The Corps will not release this information due to its predecisional nature. There are no records of previous Comprehensive Environmental Response Compensation and Liability Act environmental studies for the facility.

The present property owner funded a private Phase I Assessment of the property in September 2004. This assessment found several minor issues relating to petroleum storage tanks, hazardous materials storage and polychlorinated biphenyl contaminated transformers.

MDE performed a Preliminary Assessment in March 2007 and a geophysical investigation in August 2007. Both of these studies concluded that unexploded ordinance (UXO) and munitions-related debris potentially remain on the property.

MDE conducted a Site Inspection (SI) of CPPR in October 2007. Samples of groundwater, surface water, sediment and soil were collected and analyzed for metals, semi-volatile organic compounds (SVOC), nitro-aromatic compounds and perchlorates. Results are documented in the 2008 report, "Site Inspection of the Carpenter's Point Proof Range (MD-545)."

Current Status

An abandoned swimming pool and recreational area lay on the site of the proof range firing line. An adjacent house has incorporated portions of the facilities bunker into its basement construction. The current owners of the property have plans for a residential community on the site. J.R. Crouse Holdings, LLC intends to build 90 homes on a 45-acre parcel that includes the 11-acre site of the CPPR.

Conclusions/Recommendations

Although laboratory results did not detect significant levels of nitroaromatic compounds in site soils, there is still cause for concern. This lack of significant data may be a function of soil type; site soils consist of sand loam and as such do not provide a bond for the nitroaromatic compounds, or it may be a function of sample site selection. Samples were collected from areas deemed to be outside of defined UXO-like anomalies in order to avoid any potential detonations.

A toxicological evaluation was prepared for the site, assuming a residential future use scenario. Risk estimates from the incidental ingestion of detected noncarcinogenic groundwater contaminants exceeded MDE and EPA recommended risk levels for all residential populations using both total and dissolved metals data, with iron and manganese as the risk drivers. Risk estimates from the incidental ingestion of nondetected carcinogenic groundwater contaminants exceeded MDE recommended risk ranges for all residential populations and EPA recommended risk ranges for the adult resident, youth resident, and child resident populations using both total and dissolved metals data.

MDE has recommended that additional work be performed on the site to clear any remaining ordnance related debris.

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Last updated: April 28, 2008