



Maryland Department of the
Environment

FACTS ABOUT: BRANDON WOODS II PROPERTY (Voluntary Cleanup Program)

Site Location

The Brandon Woods II property operates as a commercial warehouse facility and consists of one parcel of land (Lot 19RR) totaling 15.68-acres and is located at 7629 Gambrills Cove Road, Curtis Bay, Anne Arundel County, Maryland 21226. The property is situated in a mixed use industrial, commercial and residential area and is bounded to the north by light industrial facilities, Fort Smallwood Road and the Brandon Shores Power Generating Facility beyond, to the south by a cleared easement with power lines and residential homes beyond, to the east by a storm water management basin used for the Brandon Woods Business Park (BWBP), and residential homes beyond, connected to the west by a light industrial facility, undeveloped land and Solley Road beyond.

The site is located approximately 20 feet above mean sea level and has been graded flat. The site is situated above the Patapsco aquifer where shallow unconfined groundwater is expected at approximately 5 feet below ground surface (bgs). The deeper semi-confined Lower Patapsco aquifer is presumed located approximately 40 bgs. The nearest surface water body is the northeast adjacent storm water management pond that collects water from a majority of the northern BWBP and discharges into Cox Creek via box culvert and eventually discharges via pipe flow to the Patapsco River.

Site History

The business park was undeveloped wooded land until Baltimore Gas and Electric Company (BGE) utilized the property to deposit fly ash coal combustion byproduct (CCBP) between November 1982 and 1993. Specifically, the property was cleared and graded between 1988 and 1994. Approximately 35 million tons of CCBP was deposited at the now developed 200-acre BWBP. CCBP is believed to be approximately 10 feet thick beneath the site. In 1999, the property was improved with one 351,620 SF slab on grade industrial warehouse structure. The current tenant uses the facility as an overflow and distribution warehouse. Site cover consists of concrete, asphalt and landscaped areas. In February 2000, a Memorandum of Understanding (MOU) was written between BGE and the MDE Water Management Administration detailing best management practices to address exposure to fly ash during development; however, the document was never ratified. The site landscape areas were purportedly constructed with six inches of low permeability cover material (anticipated to be greater than 1×10^{-6} cm/s) and six



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inches of topsoil. Sloped landscape areas purportedly received twelve inches of topsoil. Asphalt pavement and the concrete building foundations were constructed directly above CCBP.

Environmental Investigations and Actions

In 1981, the Department issued a 397 permit for the site. As part of the permit process, nine ground water monitoring wells were installed at the BWBP to characterize groundwater conditions in the shallow and deep Patapsco aquifer prior to fly ash deposition. Prior to site development, 21 ground water monitoring wells were installed across the site. The lower aquifer did not identify increasing metals concentrations from pre-deposition of fly ash up to 1997. The background wells located in the upper shallow aquifer identified increasing metals concentrations, but this increase was attributed to road salt; although sulfates had also increased in all three wells. In 1988, the Department issued a pozzolan exemption for fly ash.

Multiple reports were completed prior to, during and after the 397 permit process in order to evaluate the site for deposition of CCBP (Combustion Ash Disposal Feasibility Study-1980, Foundation Engineering Guidelines-1982 and Environmental Aspects of the Brandon Woods Coal Ash Site-1994). Seven Phase I Environmental Site Assessments were independently performed on the subject property between March 1998 and April 2014. Conclusions of the most recent report identified the deposition of CCBP as a recognized environmental condition. An endangered species inquiry and review was completed between March and April 2014. It was determined that a Least Tern colony (*Sterna antillarum*) is located on the rooftop of the connected FILA USA building. The Wildlife Heritage Service of the Department of Natural Resources has recommended no human disturbance within ¼-mile of the colony during breeding season (April 15-July 31) and no land use changes at the colony location. In March 2015, as part of the Voluntary Cleanup Program (VCP) application, a Phase II Environmental Site Assessment (ESA) was performed. Capping soil placed above the land filled CCBP was sampled and determined not impacted by metals and PaHs. Two geotechnical samples of the soil cap identified the cap was not continuous across the land filled area and ranged in thickness between 2 and 24 inches. Soil samples collected identified the permeability of the cap to be insufficient to current standards.

Current Status

On October 20, 2014, a VCP application was submitted by TR Brandon Woods II LLC seeking a No Further Requirements Determination as an inculpable person with future restricted commercial use identified for the property. The Department is currently reviewing the application package.



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