



Facts About...

Addison Station Development
(Brownfields Site)

Site Location

The 23-acre former class III rubble fill is located in a primarily residential area approximately 0.15 mile north of the intersection of Addison Road and Route 214 (Central Avenue) in Seat Pleasant, central Prince George's County, approximately 0.7 mile east of Washington, D.C.

Site History

On February 19, 1986, Prince George's County Department of Environmental Resources received a call from a surveyor working for a prospective developer that had plans to construct a retirement high-rise on the site. The surveyor complained that a blue substance with a foul odor was welling up out of the fill at an undisclosed location.

On February 20, 1986, Prince George's County Department of Environmental Resources and Maryland Department of Health and Mental Hygiene (DHMH) personnel visited the site and observed an area approximately 100 x 75 feet void of vegetation and covered with a blue substance. Runoff from this area was discharging into a sediment basin on site. A strong chemical odor pervaded the stained area. Soil samples were collected and delivered to the DHMH lab for analyses. Preliminary results indicated cyanide contamination. MARVACO, operator of the former landfill, was notified of possible cyanide contamination at the former landfill. At that time, it was thought that a surface spill/dump had occurred since only the tops of small rocks and stones were coated in blue.

On May 6, 1986, ECO-FLO, contractor for Harris Management, scraped off the top 1-2 inches of discolored soil from the approximate 100 x 75 feet area. An 18 x 24 inch test pit revealed a softball-sized chunk of dark blue-black tar-like material. A sample was collected from the bottom of the test pit. Results from the chemical analysis from soil samples collected identified cyanide at 4,185 parts per million (ppm). Several more areas void of vegetation and stained blue were observed.

Environmental Investigations

In August and September 1990, approximately 200 truckloads of soil from the main area of concern was excavated and removed from the site by ECO-FLO. On September 17, 1990, the Maryland Department of the Environment's (MDE) Hazardous and Solid Waste Management Administration submitted a letter to then Seat Pleasant Mayor Blackwell stating that the September 7, 1990 removal of ferrocyanide wastes found at and near the surface of the Addison Road Rubblefill was satisfactorily completed.

On December 29, 1993, MDE's Solid Waste Enforcement Division personnel conducted a site inspection with a Prince George's County Environmental Sanitarian. A dark blue, odorous substance was observed. However, this location cannot be identified at this time.



On April 1997, CDT Bio-Soil System conducted a methane survey to depths of four to six below ground surface (bgs) at the former landfill. The report indicated only two locations where methane was present (up to 36% methane) above the lower explosive limit (LEL).

On July 1997, Rust Environmental Inc. (REI) completed the *Addison Station Development WSSC Pre-Design Investigation Final Report* that included advancement of soil borings, methane gas monitoring and a geophysical survey. Additionally, eight shallow monitoring wells (25 feet) and four deep monitoring wells (to 70 feet) were installed for methane gas and groundwater sampling. Findings of the report revealed little organic matter in the fill. The only organic matter encountered consisted mainly of wood chips and roots. Two perched water bearing zones were identified and believed to be somewhat isolated (upper perched zone may leak into the lower perched zone). Analytical results from the soil and groundwater samples collected as part of that investigation identified elevated levels of semi-volatile organic compounds (SVOCs) and metals and low levels of pesticides in the shallow (10 to 16 feet bgs) and deep soil (65 to 67 feet bgs). Tetrachloroethene (PCE) at 32 µg/Kg, toluene at 14 µg/Kg and xylene at 11 µg/Kg were detected in a deep soil sample. Elevated levels of metals and low levels of SVOCs were detected in the shallow monitoring well samples and elevated levels of metals and PCE (up to 40.8 µg/Kg) were detected in the deep monitoring well samples. The report did not specify if the metals results were filtered. The report also concluded that the methane present above the LEL indicated in the April methane investigation was due to localized organic rich peaty layers encountered during monitoring well installation. No other evidence of municipal solid wastes was observed during the monitoring well installation (i.e. garbage, clothing, household wastes).

In January 1999, the Washington Suburban Sanitary Commission (WSSC) announced the results of a third party review (TECHNICO Environment, Inc.) of the REI report. The Washington Suburban Sanitary Commission confirmed its original findings that the methane gas mitigation design, which was limited to utility trenches, was inadequate and unacceptable for a town home development.

In October 2005, MDE completed a Brownfields Assessment of the 23-acre site. Twenty-four surface soil grab samples (including two duplicates) and twenty-six subsurface soil grab samples (including two duplicates) were collected from twenty-four borings and analyzed for carcinogenic polyaromatic hydrocarbons (cPAHs), polychlorinated biphenyls (PCBs) via immunoassay methods, and metals concentrations using X-Ray Fluorescence field screening techniques by the MDE laboratory. A subset of select soil samples was analyzed by Phase Separation Science, Inc. for volatile organic compounds (VOCs), SVOCs, target analyte list metals, cyanide, pesticides and PCBs. Three groundwater grab samples from newly constructed monitoring wells were collected (plus a field blank) and two surface water and two sediment grab samples, including a duplicate of each, from a storm water retention pond were analyzed by Phase Separation Science, Inc. for VOCs, SVOCs, target analyte list metals, cyanide, pesticides and PCBs.

Current Status

The October 2005 MDE Brownfields Assessment suggested further characterization of the contamination detected in the soil prior to development. Such characterization better identifies the quantity of soil that may need to be managed during site development.

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