MARYLAND
Department of the Environment

Facts About...

BLACK AND DECKER (MD-370)
(State Deferral)

Location

The 286-acre Black and Decker property is located at 3626 Hanover Pike, Hampstead, Maryland in the predominantly rural setting of northeastern Carroll County. The main facility occupies approximately 146 acres of the property. A wastewater treatment plant and associated lagoons are located on the south end of the property.

Site History

The site was purchased in 1951 by Black and Decker. Prior to that time, it was probably used for agricultural purposes. From 1952 to 1987, the plant's activities were predominantly the manufacturing of power hand tools. By 1987, the plant had shifted operations from manufacturing to distribution. In 1999, the property was sold to AG/GFI Hampstead, Inc. Black and Decker maintains a small distribution facility on the property and has retained responsibility for all prior environmental issues related to their former on-site operations.

Environmental Investigations

Contamination of production wells was first identified at Black and Decker in April 1984 when a local gasoline spill was investigated. In September 1984, in response to this contamination, the Maryland Department of Health and Mental Hygiene (DHMH) ordered Black and Decker to provide information regarding storage and disposal of chlorinated solvents, provide surface water and ground water sampling results, delineate the extent and source of contamination and implement corrective action if necessary. In April 1985, Geraghty and Miller installed 21 monitoring wells as part of the investigation. A soil investigation was completed by BCM Eastern in 1986. BCM Eastern installed an air stripper unit to treat the on-site potable water supply when the investigation revealed that the water was contaminated with chlorinated solvents. Additionally, in 1987, carbon filters were installed on an adjacent farm well used to water dairy cattle due to tetrachloroethene (PCE) contamination.

Roy F. Weston (Weston) was contracted to perform an environmental investigation, which was completed in 1989. Weston installed 17 additional monitoring wells as part of this investigation. Seven areas were identified as possible sources of ground water and/or soil contamination: the previous storage tank areas, a plant landfill area, two heat-treating residue and waste deposition areas, an off-specification product disposal area, an area of used-product burning and the on-site lagoons. A UST area was identified to be a continuing source of ground water contamination. The investigation also identified separate plumes of ground water contamination: trichloroethene (TCE) was the primary ground water contaminant on the eastern half of the site and PCE was determined to be the primary contaminant on the western half of the site. Weston recommended the installation of a ground water pump and treat system that would create a hydraulic barrier to contaminant migration.

NUS Corporation completed a Site Inspection in February 1991. In ground water samples collected as part of this investigation, TCE was detected at a maximum concentration of 12,000 micrograms/liter (µg/l) in a monitoring well located on the south side of the plant. PCE was detected at a maximum concentration of 1,800 µg/l collected from a monitoring well in the former landfill area located west of the plant. On-site production well samples (prior to filtration) contained TCE and PCE at up to 50 µg/l and 1,600 µg/l, respectively. Outfall effluent contained PCE at up to 89 µg/l. TCE was detected at up to 7 micrograms/kilogram (µg/kg) in sediment collected from the West Lagoon and PCE was detected at up to 46 µg/kg in sediment collected from below the effluent outfall pipe.

From 1990 to 1993, remedial design investigations were undertaken by Black and Decker and ten ground water extraction wells were installed at the site. The installation and testing of the extraction wells resulted in the construction of a ground water remediation system which provides for the hydraulic capture of the contaminated ground water on-site. The remediation system went into full-scale operation in August 1994.

As part of a supplemental investigation, Weston conducted a test pit investigation at the site in August 1996. Only two pits (of eight total) contained waste material. These were in areas that an electromagnetic survey indicated buried metal objects. These pits revealed waste at an initial depth of two feet and extended to eight feet. The waste material included sanding disks with a metallic mesh backing, metal shelving, electrical wiring, and some small metal tubing. Soil sample test results for the waste pit indicated that the waste was not hazardous and did not contribute to ground water contamination at the site.

Weston installed an enhanced soil vapor extraction system at the northernmost corner of the plant building. This system went into full scale operation in November 1997 and has since been removed, after achieving the remedial goals.

Current Status

In the spring of 1993, the Black and Decker site was proposed for the State Deferral Pilot Program due to both the site's potential for inclusion on the National Priorities List and Black and Decker's apparent willingness to undertake necessary remedial actions and investigations at the site. The Maryland Department of the Environment (MDE) and Black and Decker signed a Consent Order to finalize remedial investigations in April 1995 and since that time, remedial investigations have been handled under the MDE's CHS Enforcement Division. The ground water remediation system remains in operation and continues to remove contamination from the ground water. The CHS Enforcement Division conducted a comprehensive review of the project in August 2007 and determined the system is being properly maintained. MDE continues to receive quarterly and annual reports related to site operations.

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Last updated: August 17, 2010