

BIG ELK CHAPEL ROAD LANDFILL

Andora, Maryland

Site Location

The 7-acre Big Elk Chapel Road Landfill site is an inactive, overgrown landfill in the Fair Hill Natural Resource Area of Andora, Cecil County, Maryland. The site is located in the Piedmont Physiographic Province of the Appalachian Mountains. The geographic coordinates for the site are 39° 41' 05" North and 75° 51' 34" West.

The landfill is located in a predominantly rural area immediately south of Big Elk Chapel Road. Residential homes are to the south, while other portions of the resource area border the property on the north, east and west. The ground surface tends to be hummocky as a result of the buried waste. Some waste such as rusted white goods and drums are visible at the surface. Two small, unnamed streams flow between landfill trenches, merge on site, and eventually reach Gramies Run, a fishery. These streams are influenced by runoff from a storm drain on Big Elk Chapel Road. A third small stream flows just south of the site and into Gramies Run.

Site History

The Cecil County Commissioners opened the Big Elk Chapel Road Landfill site in 1954 as a public landfill for the surrounding communities. The property owner from 1954 to 1971 was William DuPont, Jr. who leased the property to the County. Operations involved the systematic excavation and filling of trenches. The original trench dug at the site was purportedly 70 feet long by 10 feet wide by 6 feet deep. As each trench was filled with waste, it was covered and a new trench dug. The site was left open and unfenced 7 days a week, 24 hours a day, which allowed anyone to dump any materials into the trench. The County closed the landfill in 1971, by which time, it covered 7 acres. At closure, the landfill was covered with topsoil and compacted.

During its operation, the landfill was subject to inspections by the Cecil County Health Department. Many of the inspections cited the property for containing uncovered waste, foul odors and vermin.

In 1975, the Maryland Department of Natural Resources (DNR) purchased the property for use as a recreational area.

A citizen complaint alleged that William Dupont, Jr. deposited drums of hazardous chemicals and tanker trucks of plasticizer chemicals from his Dupont Chemical plant in Delaware.

Environmental Investigations

The Maryland Department of the Environment (MDE) completed a *Preliminary Assessment* of the property in 1991 and a *Focused Site Inspection* (FSI) in 1994. While preparing the FSI, surface water, groundwater, sediment, soil, and four residential well samples were collected and analyzed for a full scan of all organic and inorganic priority pollutants.

Organic contaminants were not detected in the residential wells. Inorganic contaminants were detected, but were not attributable to the landfill. Inorganic contaminants were detected in surface water samples,

but none were associated with releases from the landfill. Sediment samples contained some organic contaminants, but none were attributable to the site. Phenol was detected in four sediment samples, with the highest concentration, 2,400 parts per billion (ppb), occurring in a background sample. Other organic contaminants, including polycyclic aromatic hydrocarbons, were also found in sediment samples. One soil sample from a landfill trench contained di-n-butylphthalate at 2,100 ppb. Another soil sample taken near a decayed drum contained Endosulfan sulfate at 4.5 ppb. No other organic contaminants were detected in the soil samples. Two soil samples contained lead at concentrations more than three times background. No other inorganic compounds were associated with the landfill.

On the basis of the information contained in the FSI, the U.S. Environmental Protection Agency (EPA) issued the Big Elk Chapel Road site No Further Remedial Action Planned (NFRAP) status under the Comprehensive Environmental Restoration, Compensation and Liability Act.

In 1999, MDE prepared a *Site Survey* of the Big Elk Chapel Road site and recommended the site be designated a Formerly Investigated Site on Maryland's State Master List and archived by EPA.

Current Status

The Formerly Investigated Sites List identifies State Master List sites at which the MDE has determined, on the basis of available information, that no further action by the State is planned.

Contact

Art O'Connell, Chief	Maryland Department of the Environment Site and Brownfields Assessments/ State Superfund Division	(410) 537-3493
----------------------	---	----------------