

DeKalb County Scales Road, Advanced Disposal and BFI Waste Systems Landfills February 6, 2007

Introduction

In April 2005, the Agency for Toxic Substances and Disease Registry (ATSDR) received a petition from a citizen action group requesting a health consultation to investigate the potential for human exposure to groundwater contaminants originating from the Scales Road, Advanced Disposal, and BFI Waste Systems (BFI) construction and demolition landfills in South DeKalb County. Working in partnership with ATSDR, the Georgia Division of Public Health (GDPH) reviewed environmental sampling data to assess whether exposure to contaminated groundwater has occurred, is occurring, or may occur at levels of health concern.

Site Description and History

All three of the landfills are construction and demolition (C&D) landfills. A C&D landfill is defined by the Georgia Environmental Protection Division (GEPD) as a disposal site which accepts waste building materials and rubble resulting from construction, remodeling, repair and demolition operations of pavements, houses, commercial buildings and other structures. These wastes can include but are not limited to asbestos containing waste, wood, bricks, metal, concrete, wall board, paper cardboard, inert waste landfill material, and other nonputrescible wastes which have a low potential for groundwater contamination.

All three C&D landfills are located within one-mile of each other, and are approximately 1.75 miles northeast of the city of Lithonia, Georgia. Land use in the area is mainly industrial with scattered residences with a mile of each landfill.

The Scales Road landfill was permitted in 1989 by GEPD to dispose of C&D waste. The corporate owners of Scales Road landfill filed for bankruptcy in November 2000. The landfill operations ceased in August 2003 because of lack of funding needed to properly close and cap the landfill.

The Advanced Disposal landfill began operations in 1988.

BFI Waste System landfill (BFI) began operations in December 1995.

Environmental Sampling/Results

Scales Road Landfill

Groundwater monitoring was conducted at the Scales Road Landfill site on a semi-annual basis from December 1997 until its closure in December 2003. VOCs were detected in samples from two monitoring wells. Of the VOCs detected, vinyl chloride and benzene have exceeded their respective comparison values (CVs). In addition, during the December 2003 monitoring event, beryllium was detected in one groundwater monitoring well at a concentration of seven parts per billion (ppb), which exceeds the Maximum Contamination Level (MCL) of four ppb. Mercury was also detected during this sampling event in a monitoring well at a concentration equal to its MCL of two ppb.

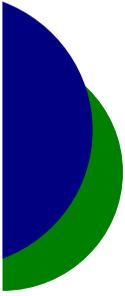
No post-closure activity has been conducted at this landfill since 2003. Recently, GEPD's request for closure and post-closure care funding through the Georgia Solid Waste Trust Fund was approved by the Georgia Board of Natural Resources. Activities are expected to begin in late 2007.

Advanced Disposal Landfill

Advanced Disposal landfill has fourteen groundwater monitoring wells consisting of six up-gradient and eight down-gradient monitoring wells. During the most recent sampling event in October 2005 only benzene was detected above a comparison value.

BFI Waste Systems Landfill

AT BFI, benzene was initially detected in one monitoring well in April 1999, peaked in September 2001 (12 ppb) and has been decreasing over time to the most recent concentration of 7 ppb. Benzene, initially detected at a second monitoring well in September 1999 (2 ppb) and in the ten subsequent sampling events, was reported below the detection limit in February 2005 and again in August 2005 above its MCL. These impacts do not extend beyond the property boundary.



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Conclusions

Based on the data evaluated, GDPH considers this site to pose **no past or current public health hazard**.

Specifically:

- Exposure to contaminated groundwater originating from these landfills above health guidelines has not occurred for Lithonia residents consuming private well water west of the landfills because private wells are located upgradient and opposite the direction of groundwater flow. Also, the private well located east of Scales Road landfill has not been used since 1989 and the home located on this site is abandoned.

- Aside from the four upgradient private wells located near the landfills, all residents living near the landfills are connected to municipal water.
- Current and future exposure to potable water from municipal wells having contamination is unlikely because DeKalb County drinking water supply is drawn from the Chattahoochee River which located approximately 42 miles from the landfills. In addition, the water supply is tested as often as hourly, 24 hours a day at the water treatment facility and five days a week throughout the distribution system.

Recommendations

There are no recommendations at this time.