



Gwinnett County B.J. MSWL June 18, 1998

Introduction

The Georgia Division of Public Health (GDPH) was requested by the Georgia Department of Natural Resources, Environmental Protection Division (EPD), to conduct a health consultation on the Gwinnett County B.J. Municipal Solid Waste Landfill (MSWL). The cooperation between EPD and GDPH was initiated through a memorandum of agreement for GDPH to address public health hazards at any Georgia sites where EPD is concerned about environmental contamination releases from a site that they regulate. EPD is concerned about possible adverse health effects caused by past, present and future exposures to environmental contamination from the B.J. Landfill.

Site Description and History

The B.J. Landfill is currently owned and operated by Georgia Waste Systems Incorporated (GWSI). The landfill site covers 122 acres and lies in southwest Gwinnett County. The site was originally owned and operated by Gwinnett County and began filling activities in the late 1950s. The site is currently under its final phase of use (Phase IV) and is scheduled for closure in approximately two years.

The site has been under investigation since the detection of volatile organic compounds (VOCs) on its first scheduled groundwater monitoring event.

Environmental Sampling/Results

The soil was sampled for VOCs, total petroleum hydrocarbons (TPHs), and lead. All VOCs and TPHs were below the detection limit, and the highest lead level recorded was 21.4 ppm. Soil has been eliminated as a concern for significantly contaminated media.

Surface water sampling has shown no elevated levels of VOC or TPH contamination except for detections of VOCs in the sedimentation pond. These levels were not above the appropriate Minimal Risk Levels (MCLs), which are regulatory standards for public drinking water supplies. Some sampling efforts for heavy metals have shown elevated levels of lead and copper in both the sedimentation pond (on-site) and Crooked Creek (off-site). However, recent sampling and testing of the creek

surface water and sediment have shown no levels of metals or VOCs above the MCLs

Landfill gas has been monitored for the presence of VOCs and methane. There have been a number of occasions where elevated levels of VOCs were detected in the landfill gas. This gas is collected and transferred to a treatment system off site. There were no detections of methane gas which exceeded the regulatory limits set for environmental compliance by EPD.

Leachate samples, which were taken from the leachate collection system on site, have contained elevated levels of benzene, TCE, tetrachloroethylene, trans-1,2-DCE, toluene, PCB-1248, bis(2-ethylhexyl)phthalate, arsenic, beryllium, chromium, mercury, and lead, all above the corresponding MCLs.

Groundwater has been monitored for the presence of VOCs and metals. The VOCs which have been found in the on-site groundwater have been the main area of concern in terms of environmental contamination. 1,1-DCE has consistently been recorded at levels above the MCL, and vinyl chloride exceeded the MCL in May and October 1996. No sampling results have shown elevated levels of metals above the MCLs in the past two years. None of the off-site groundwater sampling and testing efforts have shown levels of VOCs or metals above the MCLs.

Conclusions

This site poses ***no apparent public health hazard*** due to the fact that recent data indicate that no one is exposed to contaminants at the site. Past exposure may have occurred to site contaminants, but all indications from available data suggest that levels were likely very low.

Recommendations

- Continue to monitor off-site groundwater and surface water for migration of contamination from the landfill.
- Once approved, ensure that the corrective actions for remediation of the site are carried out to reduce levels of contamination on-site to the appropriate regulatory levels.