



Rockdale County Miller Bottom Road MSWL March 28, 2007

Introduction

Regulated contaminants were detected in groundwater at the boundary of the Miller Bottom Road Municipal Solid Waste Landfill (Miller Bottom Road Landfill) site. The landfill is adjacent to residential properties with domestic water wells. In response, the Georgia Environmental Protection Division (GEPD) requested that the Georgia Division of Public Health (GDPH) conduct an investigation to assess whether residents using wells near the landfill may be exposed to contaminants in groundwater at levels of health concern.

Site Description and History

Miller Bottom Road Municipal Solid Waste Landfill is a closed landfill located near Conyers in Rockdale County, Georgia. The area within one mile of the landfill is primarily residential including approximately 30 homes to the south and west of the landfill. Additionally, a large municipal reservoir is located west of the landfill. The majority of residents in the area use domestic wells.

The Miller Bottom Road Landfill began operations in the 1970s for the disposal of municipal solid waste. Waste was disposed at various depths, including at land surface. A contamination plume of chemicals from the landfill is migrating off-site. The residences and the drinking water reservoir are in the migration path of the contaminant plume. There is concern that the regulated chemicals, including tetrachloroethylene, trichloroethylene, and vinyl chloride, could potentially contaminate the domestic wells at levels of health concern.

Environmental Sampling

Available data include analyses of groundwater samples collected from on- and off-site monitoring wells and off-site domestic wells. Samples were taken from 23 on-site monitoring wells, 11 off-site monitoring wells, and 25 domestic wells during 1994-2006. Monitoring well depths range between approximately 10 and 90 feet bgs. Domestic well depths vary from an estimated 40 feet to over 150 feet bgs.

Results

Since the early 1990's, 29 sampling events have

occurred, with the last being conducted in June 2006. Results show several VOCs present in on-site groundwater above levels of health concern. Landfill-related contaminants have been detected in two domestic wells located immediately adjacent to the southwest corner of the landfill. Surface water collected from Randy Poynter Lake and Sandy Creek, which lies to the west of the site, was also analyzed, and no contaminants were detected.

Conclusions

GDPH has determined that this site poses **no apparent public health hazard**. Although human exposure to contaminated groundwater is occurring, the exposure is below a level of health concern.

There is a potential for exposure to groundwater contamination in the future, because although the plume is currently delineated, fractured bedrock can provide a conduit for further contaminant migration. However, future exposure is considered unlikely because connection to the public water supply is available to all residents within a half mile of the landfill, and future remediation is expected to be sufficient to protect public health from future exposure.

Residents are responsible for the care and safety of their water wells. Residents using domestic wells as their primary water source are encouraged to properly maintain their wells.

Recommendations

- GDPH and GEPD recommend that unused, shallow, bored wells down-gradient from the landfill be properly abandoned to help prevent groundwater contamination and injury.
- GDPH recommends that the City of Conyers oversees the proper abandonment of unused, shallow, bored wells down-gradient of the landfill at no cost to residents.
- GDPH recommends that GEPD continue to oversee site remediation actions plans, and once remediation begins; oversees site remediation.