Sidney Landfill
Sidney, New York
Region 2
NYD980507677

Site Exposure Potential

Sidney Landfill site covers 20 hectares in Sidney, New York (Figure 1). The landfill received an unknown amount of municipal and commercial refuse and waste oil from the Bendix Corporation between 1967 to 1972. The wastes included PCBs, oil, phenols, and volatile organic compounds. Leachate problems have been associated with the site since the late 1960s. No leachate collection system has been used at the site (EPA 1987).

The site is located on a natural ridge 545 to 636 meters above mean sea level (EPA 1987). The ridge slopes 20 percent west toward the valley floor. The surrounding topography is characterized by steep hills, farmlands, and wooded areas. Several areas of leachate seeps and stained soil have been observed on the site. The vegetation in the leachate seeps is stressed. Seepage from the site drains into a ditch that empties into two small wetlands 45 meters downgradient from the landfill. An unnamed stream drains the wetlands and flows through another wetland and two small ponds before discharging into Carrs Creek

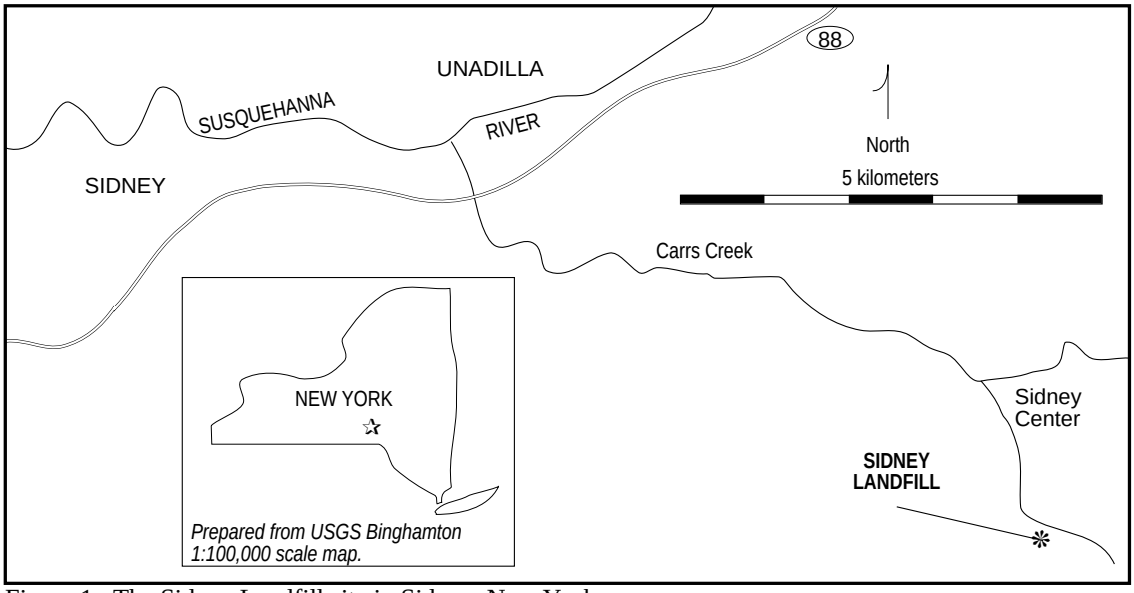

Figure 1. The Sidney Landfill site in Sidney, New York.

2.5 km below the site (USGS 1982). Carrs Creek enters the Susquehanna River 10 km further downstream. The Susquehanna River flows 500 km before it empties into the Chesapeake Bay.

Contaminant migration pathways to NOAA trust resources include surface water and groundwater discharge to Carrs Creek.

Site-Related Contamination

The contaminants of concern to NOAA are PCBs. PCBs have been measured in groundwater on the site at concentrations that exceeded AWQC for the protection of

freshwater aquatic life (Table 1) (EPA 1986, 1987). Low levels of volatile organic and inorganic compounds were also detected in groundwater. Volatile organics were detected at concentrations below 100 µg/l while the concentrations of inorganics were not reported in the documents reviewed

Table 1. Maximum concentration of selected contaminants at the Sidney Landfill site (EPA 1987); AWQC for the protection of freshwater aquatic life (EPA 1986); concentrations in µg/l.

			AWQC	
Contaminant	Groundwater	Leachate	Acute	Chronic
PCB (Aroclor 1248)	5.2	ND	2.0	0.014
PCB (Aroclor 1242)	17	ND	2.0	0.014
ND: Not detected				

NOAA Trust Habitats and Species in Site Vicinity

No information was available regarding the aquatic habitats of the unnamed stream. Carrs Creek is a small, continuously flowing, low-gradient stream that is an average of five meters wide (Sandford 1988). Creek depth varies from 0.03 meters in the riffle areas to one meter in the pooled areas. The substrate consists of cobble and gravel. The water quality is generally good. The Susquehanna River is a continuously flowing, low-gradient river system an average of 75 meters wide near its confluence with Carrs Creek. River depth varies from 0.03 meters in the riffle areas to two meters in the pooled areas. The substrate is a mixture of gravel and cobble in the riffle areas and silt in the pooled areas.

American eel is the only NOAA trust resource near the site. Four dams at the mouth of the Susquehanna River block the runs of anadromous fish species, but American eel and American shad are stocked above the dams. While this restoration project will permit anadromous fish to move up the Susquehanna River, it is not clear whether Carrs Creek will be used by fish due to the creek's small size (Sandford 1988). -By a 1986 court order, Philadelphia Electric must provide fish passage at the Conowingo Dam by 1991. Planning and construction of fish passage facilities are underway on the Holtwood, Safe Harbor, and York Haven dams on the Susquehanna River (Daniels 1989).

Response Category: Federal Enforcement

Current Stage of Site Action: RI/FS Workplan

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References

EPA. 1986. Quality Criteria for Water. Washington, D.C.: Office of Water Regulations and Standards, Criteria and Standards Division. EPA 440/5-86-001.
EPA. 1987. Hazard Ranking System Package, Sidney Landfill, Sidney, New York. New York: U.S. Environmental Protection Agency, Region 2.

Sandford, K., fishery biologist, Department of Environmental Conservation, Fishery Division, Stanford, New York, personal communication, December 15, 1988.