

**C & J Disposal Site
Hamilton, New York
Region 2
NYD981561954**

Site Exposure Potential

The C & J Disposal site is located in a rural area north of Hamilton, New York (Figure 1). C & J Leasing Company, owners of the property next to the disposal site, used 0.04 hectares of New York Department of Transportation property as a dumping area for lead-based paints and other liquid wastes. Wastes were dumped directly on the ground. These activities occurred through 1976. C & J Leasing also abandoned seventy-five to 100 55-gallon drums at the site. Rather than removing the drums when requested by the New York Department of Environmental Conservation, C & J Leasing is reported to have buried them (EPA 1987).

Near-site surface waters include a small marsh next to the site and a pond south of the site. A small, unnamed stream drains these, as well as surface runoff from the site, and flows to Woodman Pond 800 meters downstream of the site. Woodman Pond drains via an unnamed stream to Payne Brook, which flows to the Chenango River 9 km south of the site. The Chenango River joins the Susquehanna River 96 km from Payne Brook. The Susquehanna River flows south for 465 km until it enters the northern reaches of the Chesapeake Bay estuary.

Groundwater is three meters below the site. A groundwater divide exists at the site and groundwater may flow away from the site in any direction (EPA 1987).

Possible contaminant pathways to NOAA trust resources include surface runoff, infiltration to the groundwater, and groundwater flow to Payne Brook and the Chenango River.

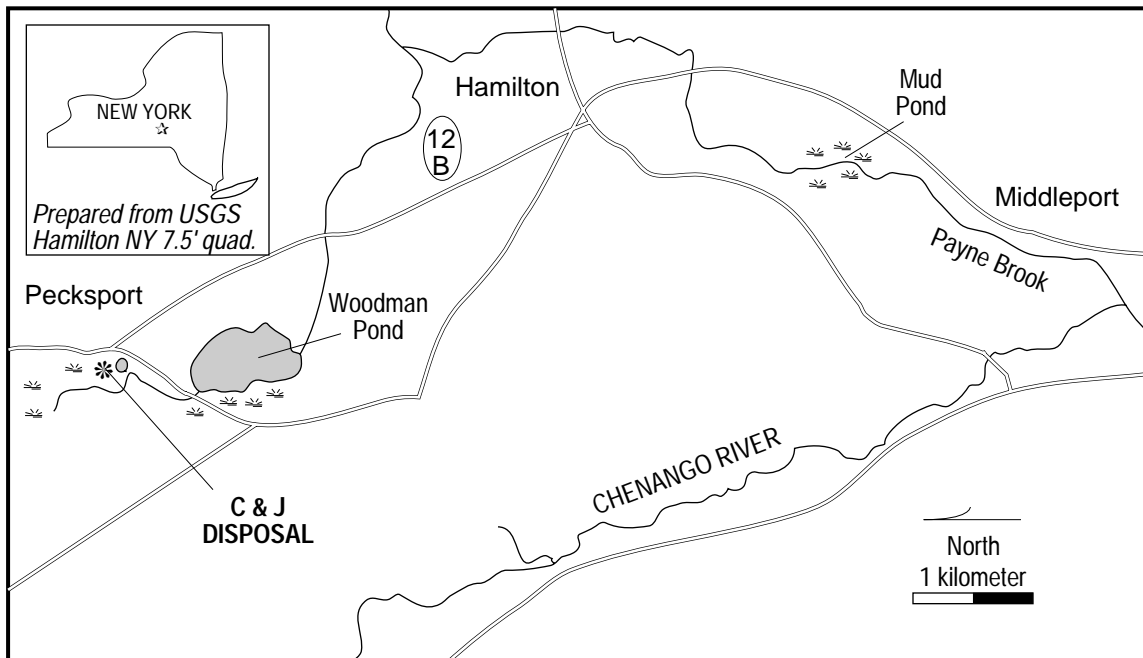


Figure 1. The C & J Disposal site in Hamilton, New York.

Site-Related Contamination

Contaminants of concern to NOAA are metals and PAHs. Metals were found in on-site soils, surface waters, sediments, and groundwater (Table 1). A surface water sample collected from the pond next to the site contained lead. One groundwater sample taken from a well near the site contained 91 µg/l nickel.

Soil samples taken from the site contained PAHs, metals, and other contaminants (EPA 1987). A sediment sample taken from the pond on-site contained cadmium, lead, nickel, and zinc. A sediment sample taken from the small stream that drains the near-site pond, collected near Woodman Pond, contained PAHs. Bis(2-ethylhexyl)phthalate was detected in a surface water sample collected from the pond.

Table 1. Maximum concentrations of selected contaminants at the C & J Disposal site (EPA 1987); AWQC for the protection of freshwater aquatic life (EPA 1986); soil and sediment concentrations in mg/kg; water concentrations in µg/l.

Contaminant	Sediment		Soil	Groundwater	Surface water		AWQC	
	Pond	Stream	On-site	On-site	Pond	Stream	Acute	
Chronic								
ORGANIC COMPOUNDS								
<u>Volatiles</u>								
4-methyl-2-pentanone	ND	ND	0.03	ND	ND	ND	N/D	N/D
tetrachloroethene	ND	ND	0.01	ND	ND	ND	N/D	N/D
toluene	ND	ND	0.29	ND	ND	ND	*17500	N/D
ethylbenzene	ND	ND	0.11	ND	ND	ND	*32000	N/D
total xylenes	ND	ND	0.48	ND	ND	ND	N/D	N/D
<u>Semi-volatiles</u>								
total PAHs	ND	7.3	34	ND	ND	ND	N/D	N/D
bis(2-ethylhexyl)phthalate	ND	ND	322	ND	33.0	ND	N/D	N/D
INORGANIC SUBSTANCES								
<u>Trace Metals</u>								
cadmium	6.5	ND	165	ND	ND	ND	3.9†	1.1†
lead	15	ND	10400	ND	8.3	ND	82†	3.2†
manganese	499	ND	1310	19.0	126	ND	N/D	N/D
nickel	109	ND	62	91.0	ND	ND	1400†	160†
zinc	77	ND	152	ND	ND	ND	120†	110†
ND: Not detected				N/D: Not determined				
† hardness-dependent (based on 100 mg/l CaCO ₃)				* LOEL				

NOAA Trust Habitats and Species in Site Vicinity

No NOAA trust resources use the waters near the C&J Disposal site; a series of hydroelectric dams in the lower Susquehanna River blocks anadromous and catadromous fish from migrating to the upper watersheds. There are four major dams on the Susquehanna River. In the order as they occur from the river mouth, they include the Conowingo Dam (569 km from site), the Holtwood Dam (563 km from site), the Safe Harbor Dam (560 km from site), and the York Haven Dam (distance from site unknown). Full fish passage has been blocked since 1910. Because of the length of time that the dams have blocked the migration of fish to the upper watersheds, little information is available on historical runs on the Chenango River and Payne Brook near the site. However, before the dams were constructed, it is known that blueback herring, alewife, American eel, American shad, white perch, and striped bass migrated up the Susquehanna River as far as the Chenango River tributary, 9 km south of the site (Wedge 1989).

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).

An experimental fish trap and fish planting operation has existed since 1973 on the Susquehanna River at Conowingo Dam; captured American eel and American shad have been placed into pools above the Holtwood, Safe Harbor, and York Haven dams.

The waters near the site may become important to NOAA trust resources with the restoration of fish runs to the Susquehanna River and its tributaries.

Response Category: Federal Fund Lead

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

Joel Schlagel 212-264-9588

NOAA Coastal Resource Coordinator

John Lindsay 404-347-5231

References

Daniels, S., fisheries biologist, Pennsylvania Fish Commission, Philadelphia, personal communication, January 11, 1989.

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. Hazardous ranking system package, C & J disposal site, Hamilton, New York, Region 2. New York: U.S. Environmental Protection Agency, Region 2.

Wedge, L., biologist, New York State Department of Environmental Conservation, New York City, personal communication, January 12, 1989.