Carroll and Dubias Sewage Disposal Deerpark, New York Region 2 NYD010968014

Site Exposure Potential

The Carroll and Dubias site is in Deerpark, New York (Figure 1). The site has been operated primarily as a junkyard for automobile parts. Seepage wastes and industrial sludges have also been received at this site and stored in four unlined waste lagoons. Two of the lagoons were covered with soil and two remain uncovered (WEHRAN 1986). One of the uncovered lagoons is currently used for seepage waste and the other is inactive (EPA 1987).

The site slopes to the southeast with Gold Creek the nearest downslope water body, 330 meters southeast of the site. Gold Creek flows parallel to the Neversink River and discharges into it 1.5 km downstream. The Neversink River flows for 2 km before discharging into the Delaware River, which flows to Delaware Bay, approximately 350 km downstream of the site. Depth to the groundwater at the site is nine meters.

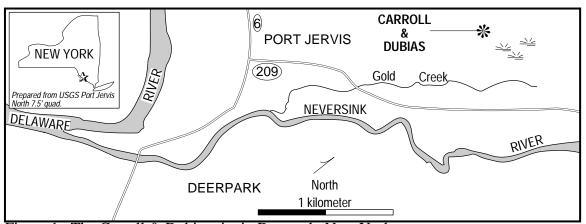


Figure 1. The Carroll & Dubias site in Deerpark, New York.

Possible contaminant migration pathways to NOAA trust resources are surface water runoff and groundwater flow to Gold Creek and the Neversink River (EPA 1987).

Site-Related Contamination

Contaminants of concern to NOAA are organic compounds and trace metals, which have been detected in groundwater, lagoon water, and lagoon sediment (Table 1) (EPA 1987). Concentrations of several metals in groundwater samples exceeded AWQC for the protection of freshwater aquatic life. Several pesticides were detected, but could not be quantified in the lagoon water. Due to the high detection limits for the pesticide, it was not possible to determine whether the values were above or below AWQC. There were no data available on on-site surface soils.

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

	Lagoon	Groundwater	Lagoon	AWQC	
Contaminant	Sediment		Water	Acute	Chronic
ORGANIC COMPOUNDS					
<u>Volatiles</u>					
chlorobenzene	3.4	N/A	3,400	250†	50†
Semi-volatiles					
bis(2-ethylhexyl)phthalate Pesticides	48.3	N/A	N/A	40†	3†
2,4-D	N/A	N/A	<100	N/D	N/D
endrin	N/A	N/A	<10	0.18	0.0023
toxaphene	N/A	N/A	<100	0.73	0.0002
INORGANIC SUBSTANCES Trace Metals					
arsenic	8.2	<10	<1000	360	190
cadmium	4.6	<4	90	3.9*	1.1*
chromium	33.9	60	<80	16	11
copper	1,390	130	N/A	18*	12*
lead	536	200	<200	82*	3.2*
mercury	N/A	N/A	<200	2.4	0.012
nickel	121	170	N/A	1400*	160*
silver	10.4	N/A	<50	4.1*	0.12*
zinc	1,820	290	N/A	120*	110*
<u>Other</u>					
cyanide	3	N/A	N/A	22	5.2
N/A: Not available	N/D: Not determined				
† LOEL	 * Hardness-dependent (based on 100 mg/l CaCO₃) 				

NOAA Trust Habitats and Species in Site Vicinity

NOAA trust resources in the vicinity of the site include American eel and American shad. Resources of interest to NOAA are limited near the Carroll and Dubias site due to the distance from the site to Delaware Bay. The American eel is found in the Delaware River, the Neversink River, and Gold Creek. Limited numbers of American shad spawn in both the Neversink River and Delaware River (Pierce 1989).

Response Category: Undetermined

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

Caroline Kwan 212-264-0151

NOAA Coastal Resource Coordinator

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. Hazardous ranking system package. Carroll and Dubias, Deerpark, New York. New York: U.S. Environmental Protection Agency, Region 2.

Pierce, R., aquatic biologist, New York Department of Environmental Conservation Bureau of Fisheries, New York City, personal communication.

USFWS. 1980. Atlantic coast ecological inventory: New York. Washington, D.C.: U.S. Fish and Wildlife Service. 40072-AI-EI-250. 1:250 000 scale map.

WEHRAN. 1986. Wehran Engineering site inspection form. Deerpark, New York: Carroll and Dubias. (#336015), Orange County.