

Recticon/Allied Steel Corporation
East Coventry Township, Pennsylvania
Region 3
PAD002353969

Site Exposure Potential

The Recticon/Allied Steel Corporation site consists of two properties on 12 hectares in East Coventry Township, Pennsylvania (Figure 1). One property was Rockwell International's Recticon plant. The other, less than 30 meters to the southeast, is the Allied Steel facility. The two properties are suspected of contributing to elevated trichloroethylene (TCE) levels found in regional groundwater (EPA 1987).

Recticon manufactured silicon wafers from 1974 to 1981. The property was also used by a former tenant to produce silicon wafers. In 1980, a Recticon contractor found TCE in drain lines from the plant, in sludge trapped in buried waste lines, and in soils. In May 1981, the contaminated soil was removed and transported to a hazardous waste facility. Recticon and the Pennsylvania Department of Environmental Resources entered into a Consent Order and Agreement in October 1981, under which Recticon was to pump and treat groundwater (EPA 1987).

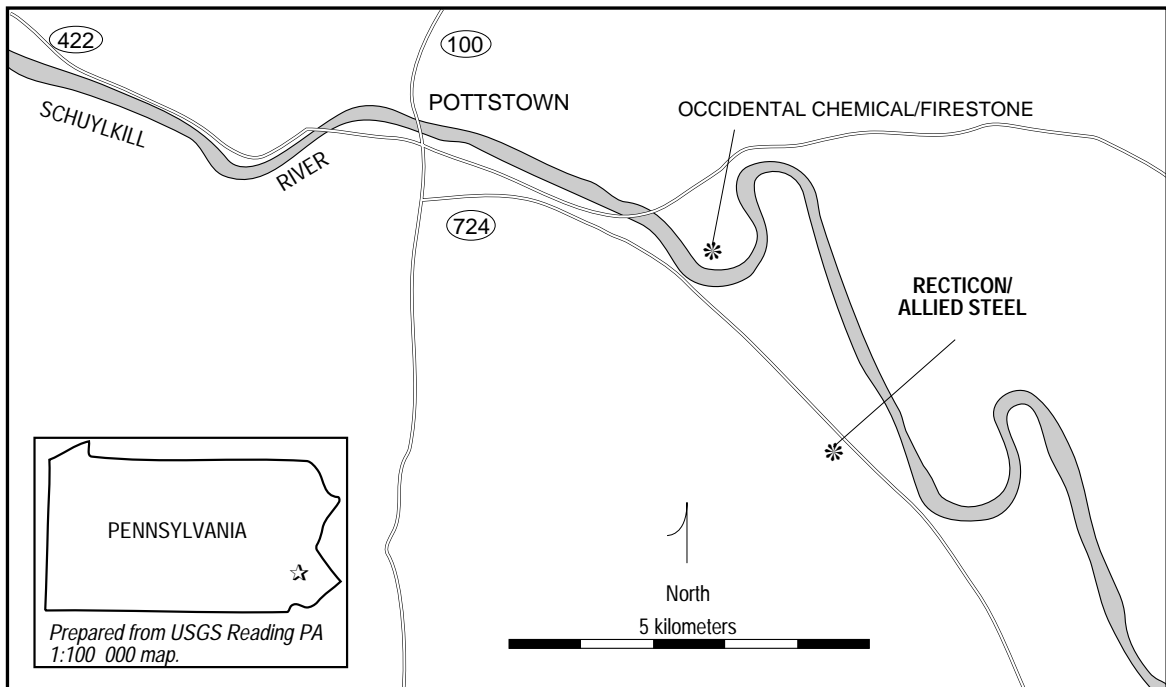


Figure 1. The Recticon/Allied Steel site in East Coventry Township, Pennsylvania.

Allied Steel Corporation has fabricated steel since 1972. In 1984, an Allied contractor determined that leakage in the area of Allied's compressor room had released TCE to the ground. In addition, high levels of TCE were found in Allied's on-site well (EPA 1987).

The Recticon/Allied Steel Corporation site lies on the southwest portion of the Schuylkill River floodplain (Weston undated). The site slopes gently towards the river, less than 750 meters from the site (EPA 1987). The Schuylkill River flows 60 km before merging

with the Delaware River, which enters Delaware Bay 150 km below the site. Another Superfund site, Occidental Chemical/Firestone, is located less than 5 km north of the site.

The major contaminant pathways to habitats of concern to NOAA are groundwater flow and surface water runoff to the Schuylkill River.

Site-Related Contamination

The contaminants of concern to NOAA are VOCs, which have been detected in soils and groundwater. TCE and 1,2-dichloroethene have been measured in on-site groundwater at high concentrations, but maximum concentrations of both compounds are well below LOEL for freshwater aquatic life. No sampling has been done for other possible contaminants at the site.

Table 1. Maximum concentrations of selected contaminants at the Recticon/Allied Steel site (Weston undated); LOEL (EPA 1986); concentrations in (µg/l).

Contaminant	Groundwater	LOEL	
		Acute	Chronic
trichloroethylene	6,496	45,000	21,900
1,2-dichloroethene	6,571	11,600	N/D
N/D Not determined			

Trust Habitats and Species in Site Vicinity

The reach of the Schuylkill River that flows near the site is a low-gradient, warmwater river one to two meters deep and 30 to 100 meters wide. This river is considered the most heavily used water body for wastewater assimilation in Pennsylvania. There is also a great deal of agricultural runoff affecting the river. Due to these factors, the river is generally considered to be of low water quality. The river substrate is gravel/cobble in riffle reaches and silt in pool reaches. Heavy aquatic plant beds are found throughout the river, with the dominant plant species being water milfoil and pickerelweed (Koffman 1989).

Anadromous fish species are prevented access to the Schuylkill River adjacent to the site by a series of six dams from Philadelphia to Pottstown. Of these dams, only Fairmount, the dam furthest downstream near Philadelphia, permits fish passage. There is a move towards installing fish passages on the entire series of dams to reestablish a natural fish run. American shad are presently being stocked in the river above the dams near Pottstown and catadromous American eel presently migrate the entire length of the river. Hence, both species use the freshwater habitats of the Schuylkill River near the site. If the fish passages are installed, the expected future anadromous fish runs adjacent to the site will include striped bass, alewife, and blueback herring (Koffman 1989).

Response Category: Federal Enforcement Lead

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

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NOAA Coastal Resource Coordinator

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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. National Priorities List, Superfund Hazardous Waste Site Listed under the CERCLA, Recticon/Allied Steel Corporation, East Coventry Township, Pennsylvania. Philadelphia: U.S. Environmental Protection Agency, Region 3.

Koffman, M., fisheries biologist, Pennsylvania Fish Commission, Revere, Pennsylvania, personal communication, January 18, 1989.

Weston. undated. Final Report Review of Groundwater Monitoring Data, Rockwell International Recticon, Inc., Pottstown, Pennsylvania. East Coventry Township, Pennsylvania: Allied Steel Corporation.