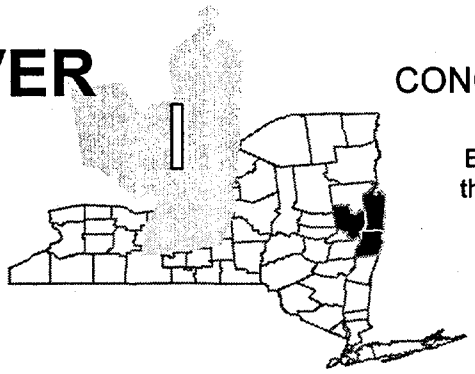
70495

# HUDSON RIVER PCBs
## NEW YORK



**EPA REGION 2**
CONGRESSIONAL DIST. 22
and Others
Between Hudson Falls and
the Battery in New York City

## Site Description

The Hudson River PCBs site includes the approximately 200-mile stretch of the Hudson River from Hudson Falls to the Battery in New York City. The Upper Hudson River, an approximately 40-mile reach of the river from Hudson Falls to Troy, in Washington, Saratoga and Rensselaer Counties, is the major focus of the investigations, and is the reach that is being considered for remediation. The General Electric Co. discharged between 209,000 and 1.3 million pounds of polychlorinated biphenyls (PCBs) into the river from two capacitor manufacturing plants located in Hudson Falls and Fort Edward. Previous studies identified 40 hot spots in the Upper Hudson, defined as sediments contaminated with greater than 50 parts per million (ppm) of PCBs. Also included in the site are five remnant deposits, which are river sediments that were exposed when the level of the river was lowered due to the removal of the Fort Edward Dam, in 1973.

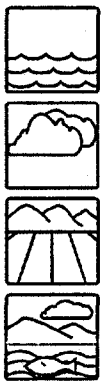
In 1976, because of the concern over the bioaccumulation of PCBs in fish and other aquatic organisms and their subsequent consumption by people, the State of New York banned fishing in the Upper Hudson River and commercial fishing of striped bass, and several other species, in the Lower Hudson. In August 1995, the Upper Hudson was re-opened to fishing, but only on a catch and release basis.

Albany, the largest city in the basin, has a population of more than 100,000 people; the Town of Fort Edward has a population of 6,480. Land uses in the Hudson River Basin include agriculture, service, and manufacturing, in addition to residential. The Hudson River is an important source of hydroelectric power, public water supplies, transportation, and recreation. The Cities of Waterford, Poughkeepsie, and Rhinebeck, as well as the Highland and Port Ewen Water Districts obtain their water supplies directly from the Hudson River. In addition, a water intake near Chelsea, which is north of Beacon, may be used to supplement New York City's water supply during periods of drought. The Town of Waterford obtains water from the Upper Hudson River, which is the only municipal water supply intake below Fort Edward and above the Troy Dam.

**Site Responsibility:** This site is being addressed through a combination of Federal and potentially responsible party actions.

**NPL LISTING HISTORY**
Proposed Date: 09/08/83
Final Date: 09/21/84

## Threats and Contaminants



The sediments and water in the river are contaminated with PCBs from discharges originating from two capacitor manufacturing plants. Elevated concentrations of PCBs have been found in the air and the soil at the remnant areas and the former dump sites for dredged sediments. Fish in the Hudson River have been contaminated with PCBs. Eating contaminated fish could affect the health of individuals. In addition, a minimal risk may also be associated with the contaminated sediment and soil for individuals who may accidentally ingest or touch it.

## Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at cleanup of the entire site, including the river sediments.

### Response Action Status

**Immediate Actions:** In 1977 and 1978, an estimated 180,000 cubic yards of contaminated sediments were dredged from the east channel at Fort Edward to clear the navigational channel. These dredged sediments, along with approximately 14,000 cubic yards of highly contaminated sediments from one of the remnant areas, were placed in a clay-lined containment cell. A 40-mile stretch of the Upper Hudson River is open only to catch and release fishing, and the Lower Hudson River has a commercial fishing ban on striped bass and advisories for other species.

**Remnant Deposits:** The party potentially responsible for the contamination has conducted an interim cleanup of the remnant deposits, selected in the 1984 Record of Decision for the site. The remedy chosen for this portion of the site was in-place containment of shoreline remnant deposits. This includes covering the affected areas with a geosynthetic clay liner and a 2-foot layer of soil, followed by grading and revegetating to minimize erosion. The river banks were stabilized with rock to prevent scouring. Cap construction and the erection of gates to limit site access was completed in 1991.

**River Sediments:** The EPA is reassessing the interim "no-action" decision for the contaminated river sediments and is evaluating cleanup alternatives. The study has been divided into three phases. The first phase, consisting mainly of the review of existing data, was completed in August 1991. Phase 2, which includes the collection of new data and the

analysis of that data, is underway. The Phase 2 Report has been divided into 6 volumes of which the first three have been released; the Database Report, the Preliminary Model Calibration Report and the Data Evaluation and Interpretation Report. The other Phase 2 reports, the Baseline Modeling Report, the Ecological Risk Assessment and the Human Health Risk Assessment will be released during the next two years. The Phase 3 Report, the Feasibility Study, and EPA's proposed remedy for the site is estimated for late in the year 2000. As a part of this study, the EPA has established an extensive community interaction program for the site.

In 1991, investigations at Bakers Falls, in the vicinity of the General Electric Hudson Falls facility (a separate New York State listed hazardous waste site) showed elevated PCB concentrations in the water column. General Electric signed a consent agreement with the State of New York to further investigate this area and to conduct interim remedial measures to prevent PCB contamination from this source from entering the river. Numerous measures have been implemented, including: preventing flow of river water through seep areas in an abandoned mill building, installation of seep collection systems, removal of contaminated sediment from the mill building, pressure grouting of bedrock in areas where seeps were observed in the riverbed, and oil phase PCB collection wells. Further investigations will determine the effectiveness of the interim remedial measures, and whether any additional actions may be necessary. Information collected for the Hudson Fall Plant site investigation has been incorporated as appropriate into the study to reassess alternatives for addressing the contaminated river sediments.

## Enforcement Status

General Electric was sent a notice letter as a party potentially responsible for the contamination.

General Electric agreed to implement the in-place containment remedy for the remnant deposits and to reimburse the EPA for any costs incurred for that portion of the site remedy.

EPA decided not to allow GE to conduct the Reassessment, instead EPA is conducting the study itself.

## Cleanup Progress  (Threat Mitigated by Physical Clean-up Work)

Cap construction was completed at the remnant deposits area of the Hudson River PCBs site, which prevents exposure to contaminants by direct contact or inhalation. In addition, the capping along with bank stabilization should minimize the amount of PCBs entering the river from the remnant deposits. Further studies to evaluate alternatives to address the river sediments are underway.

After the implementation of interim remedial measures at the Hudson Falls Plant site, PCB concentrations in the water-column have decreased to levels which are similar or below those measured before the 1991 peak PCB levels. Additional studies are being conducted to evaluate if additional control measures can further reduced contributions to the water column from the Hudson Falls Plant site.

## Site Repositories

Adriance Memorial Library, 93 Market Street, Poughkeepsie, NY 12601
Catskill Public Library, 1 Franklin Street, Catskill, NY 12414
County Clerk's Office, Washington County Office Bldg., Upper Broadway, Ft. Edward, NY 12818
Crandell Library, City Park, Glens Falls, NY 12801
Cornell Cooperative Extension, Sea Grant Program, 74 John Street, Kingston, NY 12401
New York State Library, CEC Empire State Plaza, Albany, NY 12230
Ossining Public Library, 53 Croton Avenue, Ossining, NY 10562
Saratoga County EMC, 50 W. High Street, Ballston Spa, NY 12020
Saratoga Springs Public Library, 49 Henry Street, Saratoga Springs, NY 12866
SUNY-New Paltz, Sojourner of Truth Library, Government Documents Sect., New Paltz, NY 12561
Troy Public Library, 100 Second Street, Troy, NY 12180
White Plains Library, 100 Martine Avenue, White Plains, NY
NYSDEC, Div. of Hazardous Waste Remediation, 50 Wolf Road, Albany, NY 12233
U.S. Environmental Protection Agency Records Center, 290 Broadway, 18th Floor, NY, NY 10007