Hudson River PCBs SUPERFUND SITE

Region 2: NJ, NY, PR, VI • 290 Broadway, New York, NY 10007

Lower Hudson River Sampling and Investigations to Begin this Spring

Hudson River PCBs Superfund Site

May 2023

Beginning this spring, the General Electric Company (GE) will sample water, fish and sediment as part of an investigation of the Lower River portion of the Hudson River PCBs Superfund site under a legal agreement with the U.S. Environmental Protection Agency (EPA).

The Lower Hudson River extends from the Troy Dam to the southern tip of Manhattan bordering New York and a portion of New Jersey. Data collection will focus on polychlorinated biphenyls (PCBs), but other contaminants will be evaluated as well.

The results of the sampling will be used to improve EPA's understanding of the Lower River and inform EPA's investigations moving forward. GE remains legally responsible for its PCBs in the Hudson River, including the lower portion of the river. EPA is continuing to evaluate whether others may also be responsible for PCBs, as well as other contamination in the Lower Hudson.

The new data will supplement information collected during EPA's investigation of the Lower Hudson River in the 1990s and GE's periodic monitoring of Lower Hudson River fish and water since 2004. EPA has also been gathering additional information and data about the Lower River in coordination with New York State and other project stakeholders since 2019 to support these efforts.

Hudson River vista (Bear Mountain Bridge)

Boat-based fish collection (netting)

Sampling Workplan

Under the terms of the legal agreement with EPA, GE developed a plan for extensive water, fish, and sediment sampling of the Lower Hudson River. EPA approved the workplan and will oversee all of the work performed by GE and its contractors under the plan.

The Upper Hudson River is freshwater and non-tidal. The entire Lower River is a tidal estuary which means it is influenced by ocean tides. Because the Lower River is tidal, it has distinctly different characteristics, water flows and ecological habitats.

Water Column Sampling

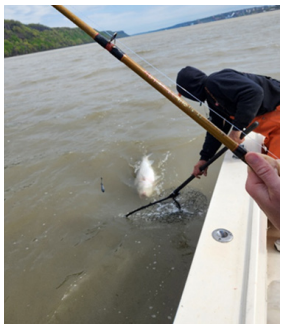
Field staff will sample the water to evaluate the concentration of PCBs and other water quality indicators throughout the Lower River. This will help EPA understand the relationship between water, fish, and sediment in the Lower Hudson.

Field staff will collect water samples from five monitoring stations (Albany/Troy, Catskill, Poughkeepsie, Newburgh, and Tappan Zee) on a monthly basis beginning in June 2023. The program targets three freshwater sampling stations and two brackish water stations (where fresh water is mixed with salt water). After one year, EPA will evaluate the data collected to determine where and how often to continue sampling.

Fish Tissue Sampling

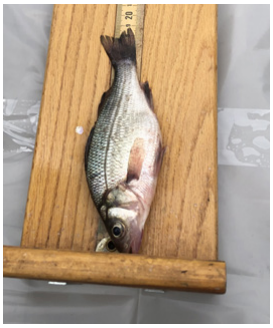
The laboratory will measure PCB concentrations from tissue samples of 14 species of fish and crab collected throughout the Lower River. The stations will be located approximately 30 miles apart. They will also collect blue crabs from two of the monitoring stations located closer to New York Harbor.

EPA will evaluate the data after the first full round of fish collection to determine if sampling at additional locations is necessary.



Fish collection

Preparing a Striped Bass



White Perch

652506

Sediment Sampling Programs

Field staff will collect samples from different locations and ranges of depths of the river bottom to understand where contamination is present and has deposited over time. The first sampling will take place in 2023. Field staff will collect three different types of samples: recently deposited sediment, shallow sediment, and deep sediment samples.

Recently Deposited Sediment

Field staff will collect the first round of samples in the top portion of river sediment to evaluate PCB concentrations in sediment that has recently deposited in the main stem of the Lower Hudson, as well as 12 major tributaries. The results will be used to evaluate the natural recovery of the Lower River over time.

Field staff will use a shallow sediment sampler to collect sediment samples. In the main stem, they will take 30 to 50 samples of recently deposited sediment, located approximately three to five miles apart.

In the each of the 12 major tributaries, they will take seven to ten samples.

Supplemental Sediment Coring

During the second round of sampling in 2024, GE will evaluate the PCB concentrations using equipment that can take core samples deeper into the river bottom, which will provide information about the relationships among fish, water and sediment. As part of this program, field staff will collect sediment using hollow tubes in the same areas where they have collected fish. They will collect a total of 200 sediment samples to a depth of three feet. The cores will be analyzed for PCBs and other contaminants.

High Resolution Sediment Coring

In the third round of sampling, field staff will collect some even deeper samples based, in part, on the results of the first two rounds, to further evaluate how PCBs have deposited in the Lower River over time and to evaluate the rate of recovery in the sediment.

Field staff will collect sediment cores from six initial locations spread throughout the Lower Hudson at a depth of 4-8 feet below the river bottom. Four of the six cores will be collected at the same locations where high-resolution cores were collected in 1992. The laboratory will analyze the samples for PCBs along the length of the core. After EPA evaluates the data from the initial six locations, the agency will decide whether additional cores are needed.

(Top and Bottom) Surface sediment sampling

Lower River Sampling and Investigations Schedule

2023

- **Water sampling**
- **Fish/crab sampling**
  - Salt and freshwater species
  - Migratory, local and forage fish
  - Blue crab and eel
- **Recently deposited sediment sampling**
- **Evaluate data**

2024

- **Water sampling** (continued)
- **Fish/crab sampling** (continued)
- **Sediment sampling**
  - Supplemental sediment sampling
  - High resolution coring
- **Evaluate data**

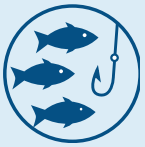
2025

- **Collect additional samples as necessary** to suport the objectives and purpose of the sampling work
- **Further data evaluation**
- **Develop next steps**

Site Background

Between the 1940's and 1970's, GE discharged PCBs into the Hudson River from its two former manufacturing plants in Fort Edward and Hudson Falls, New York. These PCBs impacted the river and its sediment from the GE Hudson Falls plant to the New York Harbor, and certain areas of the floodplain along the banks of the river during high water and flood events.

The Hudson River PCBs Superfund site includes the 200-mile stretch from Hudson Falls to the southern tip of Manhattan in New York City. EPA's 2002 cleanup plan addressed the sediment in the 40-mile stretch of the Upper Hudson River between Fort Edward and Troy, New York. Under EPA oversight, GE did extensive dredging and capped some areas in a 40-mile stretch of the Upper Hudson River between 2009 and 2015.



The New York State Department of Health's (NYSDOH) fish consumption advisories remain in place throughout the Lower Hudson River. More information about the advisories is available on the NYSDOH Hudson River Fish Advisory Outreach Project webpage.

EPA continues to monitor how the river is recovering after the dredging in the upper portion and is evaluating PCB contamination in the Upper Hudson River floodplain. The investigation of the floodplain is being done under a separate legal agreement with GE under EPA oversight.

For more information, contact the EPA Region 2 Hudson River Office. Additional information is also available on the EPA site webpage.

To receive the latest news and updates, you can also sign up for the EPA's Hudson River PCBs site email Listserv. To join the email group, send an email to romanowski.larisa@epa.gov.

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