Hudson River
PCBs SUPERFUND SITE

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

Phase 1 Dredging Factsheet

November 2009

Highlights

The first phase of the Hudson River dredging project was conducted by General Electric Co. (GE), and overseen by EPA, from May 15 to Nov. 15 to remove PCB-contaminated sediment from a six-mile stretch of the Upper Hudson River near Fort Edward, New York. In this phase, GE removed approximately 10 percent of the contamination to be dredged during the six-year project.

Environmental Dredges

Mechanical dredges with environmental buckets scooped contaminated sediment from the river bottom and loaded it into 195-foot-long, 35-foot-wide hopper barges. Dredge operators used computer software programmed to identify where to dig. Depth and location of digging was determined by satellites.

Forty, or more, sediment cores were collected after dredging in each five acre area and were analyzed for PCB concentrations. High concentrations called for additional sampling and more dredging, while low concentrations allowed for backfilling with clean material. The project was designed to remove as much PCB-contamination as possible, but it is impossible to remove all of the PCBs from the river.

Purpose of Phase 1

This phase allowed EPA and GE to evaluate project progress and make program adjustments to improve compliance with EPA's project performance standards. These standards were designed to ensure dredging operations were done safely and public health was protected at all times. Three engineering performance standards were created to protect water intakes and the environment: resuspension (transport of PCBs down river), residuals (PCBs left behind), and productivity (complete the project in six years). Five quality of life performance standards were developed (air quality, noise, lighting, odor, and navigation) for the purpose of reducing the effects of dredging on people, businesses, and communities.

Phase 1 Statistics

- Dredging took place 24 hours a day, six days a week
- 265,000 cubic yards were targeted, but nearly 300,000 cubic yards of sediment and debris were removed
- 18 areas of approximately five acres each were originally identified for dredging, 10 were completed
- In the 10 areas dredged, 152,000 cubic yards of sediment was removed, as well as an additional 130,000 cubic yards that was unexpected
- Depth of contamination was greater than expected and included dense logging debris
- Up to 12 dredges ran at a time
- 626 barges were processed at the project's dewatering facility
- More than 500 people worked on the project, many local people were hired
- 81-car unit trains transported dredged sediment to a disposal facility in Texas
- 150,000 tons of backfill will cover or cap dredged areas

In-River Monitoring

The Federal Safe Drinking Water Act standard of 500 parts per trillion (ppt) was used as the resuspension standard for the project. There were three exceedances of this standard during Phase 1, and dredging was halted on those occasions when data showed PCB levels at the first monitoring station were above the 500 ppt standard. Challenges contributing to the exceedances were heavy rains, tug propeller wash, and dredging in several highly contaminated areas at a time.

Communicating Data Results

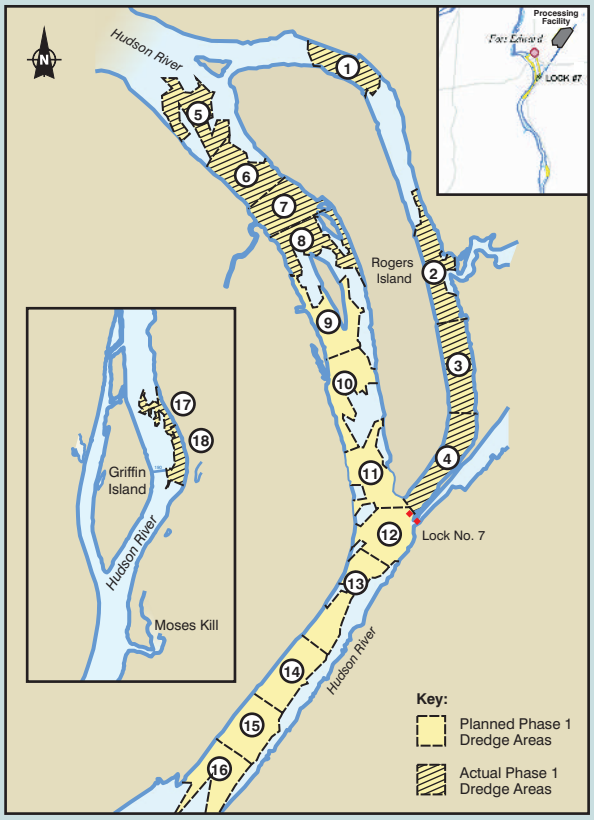
EPA established a Website to provide the public with access to data generated by the project: **www.hudsondredgingdata.com**. There were more than 4,000 visits to this Website.

Next Steps

During late 2009 and early 2010, EPA and GE will evaluate whether the engineering performance standards need to be changed for Phase 2. Evaluation reports prepared by EPA and GE will be provided to the public and to an independent peer review panel for recommendations about possible changes to make the project more effective and efficient. Dredging is targeted to start for Phase 2 in May of 2011.

Areas Dredged

- Eighteen areas of approximately five acres each were planned for dredging in Phase 1
- Dredging actually occurred in areas 1-8, 17 and 18
- Due to extra PCB-contaminated sediment found in excess of original estimates in areas dredged, no dredging occurred in areas 9-16
- Phase 2 dredging will begin with the areas that could not be completed during Phase 1



Visit, call, or write to the Hudson River Field Office at the address below or log on to **www.epa.gov/hudson.**

EPA Contact

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The Field Office hours are Monday – Friday, 8:00 am – 4:30 pm, with evening hours by appointment.

EPA Regional Public Liaison
EPA Region 2 has designated a public liaison as a point-of-contact for community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number that the public can call to request information, express concerns, or register complaints about Superfund. The public liaison for EPA's Region 2 office is: George H. Zachos, U.S. EPA, Region 2, 2890 Woodbridge Avenue MS-211, Edison, New Jersey 08837, (732) 321-6621, Toll-free (888) 283-7626.