

**THE FRIENDS OF A CLEAN HUDSON:
AN INDEPENDENT REVIEW OF EPA'S
UPPER HUDSON RIVER PCB DREDGING REMEDY**

**Hudson River PCBs Superfund Site
Operable Unit 2 (Upper Hudson)**

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EXECUTIVE SUMMARY

Beginning in 1947 and continuing for decades, General Electric (“GE”) dumped its toxic PCB waste into the Hudson River. PCBs are known carcinogens that have also been linked to neurological damage, asthma, and diabetes. **One of the original “forever chemicals” (persistent organic pollutants), PCBs do not readily break down once in the environment and are able to easily cycle between air, water, and soil.**

GE’s waste turned the Hudson – home to diverse fish and other wildlife species, world-class views, treasured parks, and fertile farmland – into the largest Superfund site in the nation. Today, eight years after GE completed a targeted cleanup of hotspots in a 40-mile stretch of the Upper Hudson, and 40 years after the Hudson River was identified as a Superfund site, the risk-reduction dredging remedy chosen by the U.S. Environmental Protection Agency (“EPA”) to protect human health and the environment is not achieving the goals set by the agency in its 2002 Record of Decision (“ROD”), the legal agreement between the EPA and GE governing the cleanup action. **This will, in effect, continue an environmental injustice legacy on the most vulnerable populations living along the shores of the river – subsistence fishermen from communities of color and impoverished families who rely on the river for food.**

As part of its upcoming third Five-Year Review (“FYR”) of the cleanup action, EPA must determine whether the dredging remedy is proving to be protective of human health and the environment. In anticipation of this decision, the Friends of a Clean Hudson (“FOCH”) worked with technical experts to conduct an independent analysis of the remedy’s protectiveness. The conclusion: The dredging remedy has missed key targets deemed necessary to protect human and ecological health, as such **EPA must acknowledge the cleanup is “Not Protective of Human Health and the Environment.”**

This analysis of publicly available project data shows that PCB concentrations in Upper Hudson sediment and fish **are much higher than EPA predicted in the selection of remedial alternatives in the 2002 ROD. Neither fish nor sediment are recovering at the rates needed to achieve key goals laid out in the 2002 ROD.**

Specifically:

- Human health and ecological risk are still well above EPA’s “acceptable risk range” and will remain so for the foreseeable future;
- Fish consumption advisories are not effective at protecting human health and place the burden on the public to avoid contaminated fish. In addition, such advisories do nothing for the ecological receptors that depend on the Hudson’s ecosystem;
- Fish data show minimal reduction of PCB contamination in most species at most locations;
- The first preliminary remediation target, to achieve average concentrations of 0.4 mg/kg of PCB in fish within five years after the completion of dredging (i.e., by 2020), was not met;

- Sediment data show little recovery in the uppermost layer of sediment; and
- Post-dredging sediment recovery rates to date are likely not sufficient to allow the ongoing slow natural recovery in fish to reach the second preliminary remediation target of 0.2 mg/kg of PCB in fish within 16 years after the completion of dredging (i.e., by 2031).

Under the Superfund law, EPA is charged with protecting people and the natural environment from toxic pollution at our country’s most contaminated sites. At Superfund sites like the Hudson River, where EPA identifies pollution that “may present an imminent and substantial danger to the public health and welfare,” **the agency must select an appropriate remedy that will “attain a degree of cleanup [that] . . . at a minimum assures protection of human health and the environment.” 42 U.S.C. § 9621(d)(1).**

To date, EPA has performed two FYRs to determine whether the remedy is “protective of human health and the environment.” In both reviews, EPA essentially ignored the warning signs the data trends were showing. Even as GE was completing its six-year dredging project in 2015, analysis of project data warned that a significant amount of contaminated sediment would remain in the Hudson River at levels that likely would not allow for “unlimited use and unrestricted exposure after cleanup.” **At this point, the data are clear: The remedy is “not protective of human health and the environment.”**

The FiveYear Review process allows and encourages EPA to address potential problems with remedies as they become apparent, but unless and until EPA acknowledges the failure of the remedy to meet the goals and objectives in the expected timeframes, the opportunities to “fix” the remedy and take additional steps to address PCB contamination in the Hudson River will be lost. For low-income families and disadvantaged communities who subsist on the river’s tainted fish, **the continued delay by EPA has essentially placed the burden of “protection of human health” squarely on the people themselves – essentially turning the Hudson Superfund Site into a “risk-avoidance” remedy that is neither acceptable nor just.**

The complex nature of PCBs ensures GE’s toxic waste will continue to travel throughout the Hudson River ecosystem, resisting degradation, biomagnifying in food chains, and bioaccumulating in human and animal tissue. Stalled waterfront economic development planning, warnings against fish consumption, and ongoing damage to the unique ecosystem of the Hudson River are just a few of the limitations PCB pollution has forced on people living along the river for decades. Without additional actions, **the health risks and generational impacts of living, working, and playing within a heavily polluted Superfund site along a nearly 200-mile stretch of the Hudson River will exist for the foreseeable future.**