



The River That Ignited Environmental Action

Clearwaters is rightly focusing on the Hudson River. So much of historic importance in our state and nation started here on the Hudson – from Henry Hudson’s voyage of discovery, to New Amsterdam, to Fulton’s steamship, to the Erie Canal and the opening of the American West. The Hudson is also the birthplace of the modern environmental activist movement, a movement that took serious action to address serious

concerns revealed by science. Indeed, at one point in the 1960s some had categorized a significant stretch of the lower Hudson as merely a conduit for industrial waste, and Interstate 787 was situated between the City of Albany and the river, in part, I’m told, to serve as a “buffer” from what was then a foul-smelling, biologically deadened, portion of the Hudson.

The battle over the proposed Storm King Mountain pump-storage electric facility in the ‘60s in many ways ignited the modern citizen’s movement that led to the first Earth Day and the sweeping environmental laws, agencies and construction programs of the ‘70s and ‘80s.

We have come a long way, together, to improve the Hudson River. We at the New York State Department of Environmental Conservation greatly appreciate all of the good work that the members of the New York Water Environment Association have done positively to

transform the Hudson River and so many other waters of this great state (under able administrative leadership, currently President Robert Kukenberger and Executive Director Patricia Cerro-Reehil). As the articles in this issue of *Clearwaters* demonstrate, however, we still have very much yet to accomplish.

Second Wave

Indeed, today we appear to be at the start of a second wave of the modern environmental movement, as we just now begin to grapple with the massive implications of oncoming climate change. To address climate change impacts – many of which will severely affect water quality, aquatic habitat, water infrastructure and water supply resources – we will likely have to make fundamental changes in the way we operate as a society. So it is perhaps fitting that we revisit, reassess and renew our collective efforts toward the stated “objective” of the Clean Water Act: “to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”

The steps necessary to meet the Clean Water Act’s objective will change with the times and circumstances, even as the Hudson River and so many of New York’s waters remain timeless. The accelerating pace of climate change and the new discoveries of scientists and public health experts will assure that our efforts to protect our waters are never finished, and in fact, need to accelerate significantly.

The Hudson River itself embodies the natural beauty and bounty of the water environment, the tremendous success of environmental restoration efforts to date, and the serious challenges ahead. If we stay committed to careful thought, scientific investigation, close partnerships and aggressive action, further progress is assured.

—James Tierney, Assistant Commissioner for Water Resources
NYS Department of Environmental Conservation



Health, Safety and PCBs

Polychlorinated biphenyls (PCBs) were produced over 100 years ago and became more widely manufactured in the 1930s. PCB is a dielectric fluid and insulator, has excellent fire resistance, is thermally stable, has a high flashpoint and low flammability, and can function as a heat exchanger. It was even in such products as upholstery fabrics, paint, asphalt, caulking and certain hydraulic fluids. In the 1960s, scientists investigated the environmental effects of DDT and

recognized that PCBs had a similar negative effect. It is somewhat ironic that PCBs, not unlike asbestos, were first used due to their beneficial aspects and only later were detrimental characteristics identified. It is additionally ironic that the desirable characteristic of PCB, such as basic inertness, is also a characteristic which affects human health and the environment (inertness leads to bioaccumulation and persistence).

The use of PCBs is dramatically less than in the 1970s when PCB regulations were enacted. Some occupational environments will need to work with the compound, and will need to protect their workers.

Exposures to PCBs occur through ingestion (wiping one’s mouth or transfer to food), inhalation (vapors from high temperature PCBs) or absorption (not wearing protective gloves or clothing). The health effects of PCB exposure are described on page 45.

The best protection from PCBs, other than complete avoidance, is to use proper personal protective equipment (PPE), especially gloves and disposable coverings. Also, good hygiene practices such as hand washing, disposable PPE, and prohibitions on eating, drinking, smoking and cosmetic application in the work areas, will limit PCB exposure. Because of the personal health effects and potential legal PCB exposure work, any disposal or remediation activities should have safety plans.

Outside the environmental remediation arena, the most likely exposure may be through a fluorescent light fixture. Fluorescent light ballasts made prior to July 1, 1978, unless marked “non-PCB,” should contain PCBs. When replaced, they should be handled as hazardous waste and properly disposed (even the “green” ballasts) whether in occupational settings or in households. Many communities offer special household hazardous waste disposal days.

As with many chemicals, common sense goes a long way to protect oneself and the environment – don’t touch, don’t smell, don’t get in your eyes, don’t run it down the drain, and don’t toss it in the trash. Safety is usually just good common sense – if we have the sense to follow it.

—Eileen Reynolds, CSP (Certified Safety Professional)
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