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# Fishing for Cancer

A disastrous ruling by the EPA offers a cautionary tale about environmentalists--and about the press.

by **David Schoenbrod**

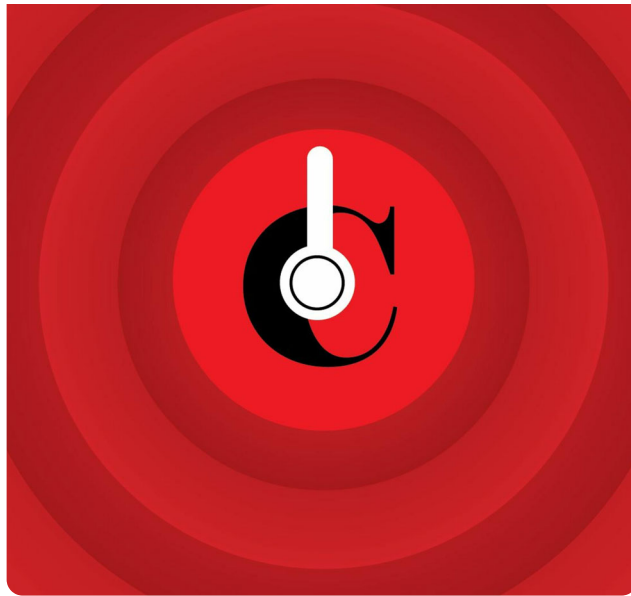
Among President Bush's critics during his first two years in office—setting aside the area of foreign policy—none has been more vocal or more effective than the environmental movement. On one issue after another, from the Kyoto protocol on global warming to the permissible levels of arsenic in drinking water, the administration has been put on the defensive, fending off charges that it is a tool of corporate America and a reckless steward of public health no less than of imperiled nature.

Given its reputation, it might come as a surprise to learn that in fact the Bush administration has time and again acted in conformity with the environmental movement's strictures and against its own putative predilections. Thus, it decided in the end to reaffirm the Clinton administration's standards on arsenic as well as its strict new standards for ozone pollution, called for strengthening the Clean Air Act, imposed stiff penalties on truck manufacturers, and more. Most strikingly of all, Christine Todd Whitman, the Bush appointee who now heads the Environmental Protection Agency (EPA), announced in August 2001 that General Electric (GE) would have to foot the bill for ridding the upper reaches of the Hudson River of the PCB's—polychlorinated biphenyls—that the company discharged into the waterway over the course of several decades. And thereby hangs a most instructive tale.

Since first discovered in the Hudson in the 1970's, PCB's have been accused of causing cancer, birth defects, infertility, and nervous-system disorders. The clean-up was necessary, Whitman declared, to reduce "risks to humans and ecological receptors" in the Hudson River Valley all the way from GE's facilities to New York City 200 miles to the south. Although the EPA is still pondering the exact scope of the operation, it will entail, at a minimum, dredging up 2.65 million cubic yards of sediment along a 40-mile stretch of the river. The EPA expects the project to take five years and cost GE close to a half-billion dollars; the eventual cost could well be much higher.

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But even at this late date, with GE having ended its protracted legal battle against the decision, the largest and most basic question remains: is cleansing the Hudson of PCB's worth doing?

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General Electric began using PCB's at its two plants north of Albany in the 1940's. The plants made capacitors: metal cans, some as large as barrels, whose electrical innards had to be submerged in a coolant. Mineral oil had served this purpose, but it was dangerously flammable; as a safety measure, GE switched to the more expensive but nonflammable PCB's.

Located on low cliffs above the Hudson, the plants operated according to the lax environmental standards of the day. Workers would send the dregs from a container of PCB's out with the waste water. The oily chemical often spilled out onto the factory's rock floor and disappeared into the interstices of the cliffs. No one at the plants gave much thought to where the PCB's were going; they did not come marked with a skull and crossbones, and at the time, chemicals were presumed innocuous unless labeled otherwise. A neighbor of mine in upstate New York worked at one of the GE plants during this era, and he and his colleagues toiled up to their elbows in PCB's all day long, sometimes not bothering to wash the stuff off before sitting down for lunch.

When the EPA began regulating water pollution in the early 1970's, GE informed the agency that it was discharging PCB's into the Hudson and received permits to continue doing so. Because the chemical is heavier than water and clings to soil particles, most of it had come to rest in sediment piled up behind a dam just downstream from the GE plants. When the owner of the dam tore it down in 1973 with the approval of federal and state agencies, more than a million cubic yards of PCB-contaminated sediment spread down the river. Two years later, an environmental investigator detected high levels of the substance in fish caught far downstream.

With the environmental movement now in full swing, scientists made it a priority to investigate the health effects of exposure to PCB's, which have a chemical structure similar to that of DDT (dichloro-diphenyl-trichloro-ethane), the insecticide that Rachel Carson had declared public enemy number one in her influential 1962 book, *Silent Spring*. One of the first studies, by Renate Kimbrough, then a scientist at the federal Centers for Disease Control, showed that rodents heavily dosed with PCB's developed liver tumors. Not long after, Congress banned the use of the chemical, and then in 1980 passed the Superfund law, giving the EPA sweeping authority to force polluters, even those who had no reason at the time to know they were doing anything dangerous, to clean up toxic-waste sites.

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Why, then, did it take the EPA another twenty years to reach a decision about the PCB's in the Hudson? A large part of the problem was the scientific evidence, which turned out to be less ironclad than it at first had appeared. No one questioned that PCB's produced cancer in laboratory animals. But such tests are often poor predictors of the threat to humans, not only because of obvious biological differences but also because the dose given to laboratory animals usually far exceeds what people are exposed to. The typical procedure is to administer to a set of rodents as much of a chemical as possible without killing them outright. Such a test cannot prove that a chemical causes cancer—as researchers point out, chronic inflammation from extreme doses can cause cancer even if a particular chemical is not carcinogenic at normal doses—but it can help to exclude from further study those that most likely do not.

Far more conclusive for gauging the threat posed by a chemical, especially as a potential cause of cancer, is information about its long-term impact on a large human population. But here the data on PCB's told a very different story. Because of her reputation for independence, Renate Kimbrough, the researcher whose findings suggested that PCB's were a carcinogen, was funded by GE in the mid-1990's to do an epidemiological survey of the employees who, more than twenty years earlier, had worked with the chemical at its plants on the Hudson. She found that they died from cancer no more often than other Americans. Only one abnormality was uncovered in the many studies of GE workers: a small percentage of those exposed to massive doses of PCB's developed chloracne, a temporary, acne-like skin condition. Taken as a whole, studies of workers exposed to PCB's elsewhere also showed no greater incidence of cancer (or other serious diseases) than would be expected randomly.

As for the EPA's own scientists, although they concluded that PCB's in general may be the cause of serious diseases, they were unwilling to say that PCB's in the Hudson threatened the public. In a formal assessment of the potential health problems, they wrote in a crucial passage:

Cancer risks and noncancer health hazards from being exposed to PCB's in the river through skin contact with contaminated sediments and river water, incidental ingestion of sediments, inhalation of PCB's in air, and *consumption of river water as a drinking water source* are generally within or below [EPA's] levels of concern [emphasis added].

In other words, it was safe to drink the river water all day, every day.

What did concern the EPA's scientists was the consumption of contaminated fish from the river. Though the level of PCB's in the fish had dropped over the previous quarter-century, it was still high. But even here, the threat was hardly dire. As the EPA itself put it, the risk was acceptable for those who ate fish caught in the upper Hudson (where the PCB concentrations are highest) up to six times a year. Dredging would make the fish in these upper reaches safe to eat again, according to the EPA, but not until new deposits of sediment covered the PCB's stirred up by the dredging itself. This would take about four decades. New York State, it should be noted, already bans the consumption of fish caught in the Hudson north of Albany.

And yet, despite the evidence of research, and despite the EPA's own scientific analysis, the agency told the public that PCB's in the Hudson were a grave danger. In an address to the New York State legislature, Carol Browner, the EPA administrator under Bill Clinton, stated that although "we don't have every single piece of data, . . . clearly, the science has spoken. PCB's [in the Hudson] are a serious threat." When the risk assessment cited above was issued under her auspices, the accompanying press release omitted any mention that the water had been found safe to drink by the agency's own scientists. And when Browner formally proposed that the river be dredged, the EPA's press release failed to mention that the only unacceptable risk came from regularly eating the fish caught north of Albany in defiance of a state ban.

Browner's successor, Christine Whitman, has similarly omitted any mention of this critical fact. EPA press releases label PCB's a "probable human carcinogen," a classification that does not require evidence based on human exposure.

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Put in its best light, the EPA's insistence that GE dredge the Hudson can be seen as an application of what environmentalists call the "precautionary principle." The basic idea is both simple and sound: even when dealing with imperfect information, regulators are obliged to protect the public from serious potential threats. Certainly my own career as an environmental activist was inspired by this notion. Working as a litigator for the Natural Resources Defense Council in the 1970's, I led a campaign to force refiners to add less lead to gasoline. Though we (rightly) suspected, on the basis of emerging scientific evidence, that these additives were causing permanent brain damage to children, we could not prove it. But to its credit the EPA decided not to wait, and it was upheld by a federal court, which ruled that "the statutes and common sense demand regulatory action . . . even if the regulator is less than certain that harm is otherwise inevitable."

Such precaution makes particular sense in the case of chemicals for which no data exist concerning their effects on humans over several decades. PCB's, however, are one of the few sets of chemicals for which we do have such data, and we know the effects are not grave. This does not mean that they should go altogether unregulated. The chemical does cause chloracne, and there is reason to think it has interfered with the breeding habits of mink. Moreover, there is no avoiding the fact that, however extraordinary the

experimental conditions, PCB's have caused cancer in laboratory animals. Though no link to cancer rates in humans has been established, one cannot be ruled out; perhaps it exists at a level too slight to be detected by the research that has been conducted so far.

The problem lies not in identifying such remote threats, but in treating them with a sense of proportion. After all, PCB's are hardly the only substances that, delivered in sufficiently large quantities, have produced cancer in laboratory animals. The same is true of about half of all "natural" substances in foods, and of slightly more than half of their synthetic counterparts. Banning all of these substances would leave a lot of empty shelves, including at the organic-food store.

Among the best discussions of what happens when one applies the precautionary principle too rigidly, and without a sense of proportion, is *Breaking the Vicious Circle: Towards Effective Risk Regulation* (1993), a book written by Stephen Breyer shortly before his appointment to the Supreme Court. As Breyer notes, the EPA has increasingly focused its regulatory attention on cancer risks that scientists consider minor, without adequate consideration of the burdens imposed by these measures. Indeed, in a textbook case of unintended consequences, regulators may have increased the risk of cancer by harping on the supposed dangers of various pesticides, thus deterring some people from eating the fruits and vegetables that are thought to play a far, far greater role in preventing the disease than pollutants do in causing it.

A better-known example of precaution run amok is the federal government's 1986 mandate that asbestos, a known carcinogen, be removed from every school building in the country. No one disputed that it made sense to clear away any loose asbestos that children might inhale. But as administered by EPA, the regulation mainly affected intact, encapsulated asbestos in school basements—a relatively minor threat. As a study published in *Science* pointed out, the risks from this source were "magnitudes lower than commonplace risks in modern society"; moreover, the effort to remove every last particle of asbestos was dangerous in itself, often "lead[ing] to increases in airborne concentrations." For no obvious net gain in public health, the regulation diverted billions of dollars from schools to environmental contractors.

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General Electric has long maintained that the EPA would be making a monumental mistake in ordering the Hudson to be dredged. But after years of fighting the agency, the company has decided, for prudential reasons, to throw in the towel. Under the Superfund law, the price for failure in a legal challenge to the EPA order would be steep—a penalty three times higher than the already enormous cost of the dredging operation itself.

But GE is not the only interested party here. The dredging will also affect the people who live in this 40-mile stretch of the Hudson Valley. Of course, they will also reap the greatest benefits—such as they are likely to be. After the year 2040, locally caught fish will be safe to eat. Since, however, there has been no local commercial fishery in modern times, the only beneficiaries will be the area's amateur anglers, the great majority of whom favor catch-and-release fishing at least as much as the catch-and-keep variety.

As for the local burdens, they will be heavy. The dredging will remove from the river bottom enough sediment to fill a line of rail cars stretching from New York to Chicago. The massive excavation project will center on the river front, which is to the local communities what Central Park is to Manhattan. Indeed, were such a massive construction project to be proposed in Manhattan, environmentalists invoking the precautionary principle would be taking to the barricades, for, exactly as with its program of asbestos removal, the EPA cannot prove that the dredging will not create more hazardous conditions than it abates. Those who live nearby oppose dredging by a margin of 63 percent to 30 percent.

In light of the history of this case, the real question is why the Bush administration has gone along with so profoundly ill-considered and locally unpopular a decision. The answer, one suspects, has nothing to do with the merits of the issue and everything to do with a desire to deprive environmentalists, and their friends in the Democratic party, of political ammunition. As a former official in Clinton's Department of the Interior observed, in true partisan fashion, "Environmental issues are sapping the life out of Bush's political viability, and the White House is trying to stop the bloodletting by allowing the dredging in the Hudson."

After President Bush took office, major environmental groups fixed on a single strategy—crying murder—whenever the administration failed to fall into line, regardless of whether the matter at hand was large or small. For example, when the administration announced its intention to reconsider the Clinton administration's last-minute decision to

tighten the standards for arsenic in drinking water—not retract, but reconsider, just as the incoming Clinton administration had announced that it would reconsider the last-minute regulations of *its* predecessor—environmental groups projected maximum distress (even though they had uttered scarcely a peep during the eight years the Clinton administration temporized on this issue). The idea was that any explanations offered by the Bush administration would be drowned out by the vociferous charge that the President was killing people to enrich his corporate contributors.

The strategy worked, from the case of arsenic standards to the case of PCB's in the Hudson. But it is also important to stress that, in implementing this strategy, the environmental organizations knew they could not act alone; they had to rely on the leading organs of the media to *report* “murder” whenever they cried it. And so they could: the press has regularly fed the public a grossly exaggerated picture of the environmental risks it faces, and PCB's in the Hudson are once again a perfect exhibit.

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From the discovery of PCB's in the Hudson in 1975 until the EPA's final decision on dredging, the *New York Times* published 210 articles and editorials linking the chemicals' presence in the river to one or another serious disease. Of these 210 items, fully 147 mentioned cancer, and not a single one of them tried to disabuse the presumption of most readers that chemicals causing cancer in lab animals pose a serious cancer threat to people. Of the 210 articles, only 26 mentioned that the science on PCB's is inconclusive. Only one, concerning Renate Kimbrough's critically important study of GE workers, mentioned up front the possibility that PCB's in the river might not be dangerous, and then it added the insinuation that this was “not the first time that the cancer risks of PCB's . . . have been played down by scientific studies.” Most startling of all, none of the articles in the *Times* mentioned that the EPA's own risk assessment found the water in the river safe for swimming and drinking.

It is no secret that, as a class, journalists tend to be sympathetic to the agenda of environmental advocates, or that “Cancer Scare” makes a more arresting headline than “Carcinogen Debunked.” In polling done for their illuminating book, *Environmental Cancer: A Political Disease?* (1999),<sup>1</sup> S. Robert Lichter and Stanley Rothman found that mainstream cancer researchers disagreed sharply with the view that pollution is a major cause of cancer, and blamed the press for spreading this misconception. Asked to name

the organized interests that were least credible on the issue of environmental cancer, the researchers gave the lowest ratings to the Tobacco Institute, environmental advocacy organizations, TV networks, and the *New York Times*.

The paper's scandalously poor reporting thus helped to produce a decision based on bad science and worse politics. In 1980, Congress voted for a proposition with immense popular support: that the EPA should rely on scientific analysis to identify dangerous toxic wastes and clean them up at the expense of those who caused them. The legislation instructed the agency to assess honestly what science showed was necessary to protect public health and the environment. In the case of PCB's in the Hudson, EPA's own scientific analysis showed no need to dredge.

The EPA compounded the damage by falsely suggesting that dredging was necessary to protect not only the locals who opposed it but the tens of millions of people living downstream. The *Times*'s own signature contribution to this situation was to picture local opposition as reflecting little more than a knee-jerk rejection of big government and a know-nothing refusal to come to grips with the EPA's findings. The upshot was a purely political decision, dressed up as a scientific decision in order to silence critics.

Environmentalists and their sympathizers are not alone in misleading the public; nor do all environmental decisions qualify as abuses of the precautionary principle. But the combination of politicized science and media bias, which has already resulted in the expensive, disruptive, and wholly unnecessary decision to dredge the Hudson, is a real and growing danger. Precaution in environmental matters is a good idea, but one that makes sense for its advocates too.

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<sup>1</sup> Reviewed by Dan Seligman in COMMENTARY, May 1999.