SCIENCE FOR LAWYERS



Better Chemistry Through Lawsuits

hen we founded our particular democracy, we built into its design a system of restraints so no traditional seat of tyranny could gain the upper hand. We called it 'the balance of powers' among the judiciary, the executive, and legislative branches of government," says the great environmental author Barry Lopez. Referring to corporations, Lopez says, "Our modern predicament . . . grows out of the failure to check or balance a force this powerful." A perfect example of what Lopez was talking about is Dow Chemical in Midland, Michigan.

I write this column on the day that the Michigan Supreme Court heard oral arguments in *Gary and Kathy Henry, et al., v. The Dow Chemical Company,* in which the plaintiffs seek medical monitoring as an equitable remedy in the form of a mandatory injunction for the pervasive dioxin contamination of the Tittabawassee River watershed. Medical monitoring means observing the health of an exposed person to detect and deter illness resulting from contamination.

The Michigan Department of Environmental Quality found concentrations of dioxin as high as 7,300 parts per trillion contaminating the river and floodplain along with about 2,000 properties downstream from Dow's Midland plant. The state residential cleanup standard is 90 ppt. MDEQ demonstrated conclusively that the dioxin came from Dow. Dioxin is a carcinogen that also causes neurodevelopmental, immune, reproductive, and endocrine disorders at very low levels of exposure.

Dow has had a manufacturing plant in Midland since 1897. Its production

line sounds like a litany of chlorine chemistry: mustard gas, Agent Orange, solvents, and pesticides like 2,4,5-trichlorophenol, 2,4-D, and chlorpyrifos. Several of the pesticides, including 2,4-D, remain in production.

Dow incinerates much of its waste at the plant. When chlorinated compounds are burned they produce dioxin as a by-product that is released into the air. Dow also holds permits to discharge waste, including dioxin, into the Tittabawassee River. Onsite, Dow maintains landfills and treatment ponds. Flooding is believed to have occasionally carried some of this waste downstream, adding to the contamination of the entire floodplain, moving it into the Saginaw River, and then Lake Huron.

As a result, fish and wildlife from the Tittabawassee to Lake Huron have elevated levels of dioxin. The Michigan Department of Community Health has issued fish advisories for carp, catfish, white bass, and smallmouth bass. A new advisory released in September warned against eating wild turkey meat or deer liver and suggests limiting consumption of venison and squirrel hunted or trapped in the floodplain. Advisories against eating land animals have been so rare that this is only the second in the state's history. Dow's tepid response as reported in the *Detroit Free Press* was that "they agreed with part of the advisory but contended state regulators have overstated the risks from venison."

Dow's response has been equally problematic with regard to the soil concentration standards for dioxin, claiming that Michigan's 90 ppt should be raised to the federal 1,000 ppt threshold. Physicians Ted Schettler and Peter Orris demonstrated the flaws in Dow's position: "Michigan's 90 ppt soil criterion for dioxin is a level that is meant to be protective of public health in properties for unrestricted residential use. . . . The federal 1,000 ppt threshold serves a very different purpose. It is a level at which there is significant concern about health effects. In fact, the lead federal agency for public health research and education, the Centers for Disease Control, advises that soil levels exceeding 50 ppt should be a cause of concern, necessitating a more thorough analysis."

While Dow is quibbling about soil standards to get out of cleaning up its

mess, it is also vigorously opposing the Henrys' class action lawsuit asking for medical monitoring. The plaintiffs seek an injunction for the 2,000 current and former watershed residents. The court-supervised medical screening program would be offered to those who showed reasonable certainty of exposure.

Because Michigan statutes do not establish medical monitoring, the court is being asked to create a common law remedy. According to David Eggert of the Associated Press, "But Dow argues the Legislature, not the courts, should decide whether to break from what it calls a 'fundamental hallmark' that plaintiffs must show a physical injury to bring suit. Dow and the business community say allowing monitoring claims would encourage widespread frivolous claims, diverting resources from the truly injured."

There are two points about Dow's dioxin. First, the exposure and contamination of humans to dioxin is the physical injury. The cancer or deformed baby is only the manifestation of the injury. Dow is claiming that the exposed residents have to wait for the manifestation. Then when the manifestation occurs they will claim that the plaintiffs can't prove that the specific disease was caused by dioxin.

The second point about Dow's harm is that it is an injury to the state of Michigan, not just a few private parties. The Tittabawassee river basin is contaminated. The land, the water, the people, the fish and wildlife are poisoned. Michigan is the trustee for the turkeys that hunters are warned against eating, for the waters that are no longer fishable, and for the public health of the human residents that has been compromised. Michigan should be bringing a state action against Dow and stand up to this unchecked power of a corporation to pollute, destroy an ecosystem, damage and diminish the property and health of the humans and wildlife living within the state. Michigan should be bringing suit on behalf of those who have been exposed and the taxpayers who will ultimately have to pay the bill — to restore the balance of power.

Carolyn Raffensperger is Executive Director of the Science and Environmental Health Network in Ames, Iowa. She can be reached at raffenspergerc@cs.com.