

MAKING POLLUTERS PAY ▶▶▶

**How to Fix State Law and
Policy to Protect Groundwater
and Michigan Taxpayers**

FLOW
FOR LOVE OF WATER

440 W. Front Street, Suite 100
Traverse City, MI 49684

(231) 944-1568
info@flowforwater.org | www.forloveofwater.org



EXECUTIVE SUMMARY



Because of its abundance of groundwater and history of toxic chemical use by business and industry, Michigan has an extraordinary number of contamination sites. In 2022, the state Department of Environment, Great Lakes, and Energy (EGLE) estimated that there are 24,000 such sites, creating an enormous cleanup bill.

Who should pay the multi-billion-dollar cost of cleaning up and restoring contaminated sites? For a short time, from 1991 to 1995, state law was designed to hold polluters accountable for cleaning up the sites for which they were responsible. This netted tens of millions of dollars in private funds for cleanup costs and penalties.

But in 1995, as detailed recently in *Bridge Michigan*, the Michigan Legislature repealed the “polluter pay” policy, forcing taxpayers to shoulder a vastly increased proportion of cleanup costs.¹

At the same time, the Legislature altered state clean up standards, which had been premised on remediating contaminated groundwater to the maximum extent feasible. The new policy allowed polluters to leave contamination in place (in situ) so long as human exposure was controlled -- for example, by banning the drilling of new wells or placing impermeable surfaces such as concrete over contaminated soils and groundwater.

Scientific advancements and understanding, however, have undermined this presumption that leaving contamination in situ adequately protects human health. Newer scientific studies demonstrate that chemicals can volatilize and penetrate so-called impermeable surfaces and threaten residents and businesses alike.

The 1995 changes in policy have transferred \$1.5 billion in cleanup costs

to taxpayers over the past nearly 30 years, while risking human health and the environment at hundreds of sites.²

Michigan should craft a new polluter pay policy, and require cleanup of contaminated groundwater to protect public health and eliminate “dead zones” where Michigan residents of the future will be unable to use groundwater — a resource that belongs to the public.

THE EVOLUTION OF MICHIGAN'S POLLUTER PAY POLICY

Michigan’s groundwater, the source of drinking water for 45 percent of Michigan’s households, is imperiled by chemical contamination and 20th century policies. EGLE reports that there are more than 24,000 sites of contamination within the state, most of which impact groundwater.

Overall, very little is known about these sites as historically, funding to evaluate and understand the nature and extent of the contamination and associated risks has been unavailable. What we do know is that many, if not most, of these

24,000 sites are not static. Groundwater containing chemical contamination will continue to migrate, spreading continuously and impacting greater areas over time.

How did we get here?

In the early 1970s, heightened public awareness of the degradation of water and air quality and uncontrolled disposal of municipal garbage and industrial hazardous waste reduced public tolerance for environmental pollution.

This resulted in the enactment of new, powerful environmental laws like the Clean Air Act amendments in 1970 and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) commonly known as the “Superfund” law in 1980. Numerous other federal environmental laws, including the National Environmental Policy Act (1970), the Clean Water Act (1972), the Endangered Species Act (1973), the Safe Drinking Water Act (1974), and the Toxic Substances Control Act (1976) were enacted to protect the public through more rigorous oversight of pollutants.

By the late 1980s, state officials had discovered a staggering number of chemically contaminated sites across Michigan. Many were “orphan” sites whose owners had gone out of business, but others were or had been owned or operated by corporations still operating and profiting.

For a time the state went after industries that had caused the contamination. Under a 1990 law dubbed “polluter pay” by its original author, State Senator Lana Pollack, the Attorney General, and Department of Natural Resources were given the legal tools of strict, joint and several liability to compel private parties to fund the remedies.³

By the late 1980s, state officials had discovered a staggering number of contaminated sites. Many were “orphan” sites whose owners had gone out of business, but others were owned or operated by corporations still profiting.

The polluter pay legislation was a bold and consequential response to the realization that Michigan had numerous sites of uncontrolled and unregulated toxic waste and contaminated groundwater, some presenting an imminent hazard to human health and the environment. Its passage imposed “strict” and “joint and several” liability; strict liability meaning liability can be imposed even in the absence of negligence and regardless of intent; joint and several liability imposed full, independent responsibility on all individuals or companies for the full cost of remediating contamination.

Accordingly, liability was attached to a broad array of parties, including all past and present owners of property where hazardous substances came to be located, transporters and handlers

Importantly, the 1990 polluter pay law provided a tremendous incentive for industries and commercial enterprises to adopt and implement environmentally benign and protective waste handling practices.

of hazardous substances, as well as anyone who arranged for the disposal of hazardous material. Importantly, the new law provided a tremendous incentive for industries and commercial enterprises to adopt and implement environmentally benign and protective waste handling practices.

The law scored some early successes, resulting in 100 settlements worth more than \$40 million in cleanup costs and penalties.⁴ Although dwarfed by the \$425 million in taxpayer funds that voters had approved for abandoned sites in a 1988 bond proposition, it was an important start on placing responsibility for careless and irresponsible corporate behavior where it belonged.

In 1994, Michigan Attorney General Frank Kelly praised the polluter pay law.

“Polluter pay’ is working and working well,” he said. “We’re recovering money in a much shorter time than before. Your tax dollars won’t have to be used.”

Though many applauded the success of polluter pay, business and industry representatives lobbied hard to weaken the law, arguing that the imposition of strict, joint, and several liability was onerous and unfair, and the cleanup criteria were too stringent. In 1995, Governor John Engler, who had voted for the polluter pay law in 1990 as a state senator, asked the Legislature to roll back the law, changing the liability standard to eliminate strict, joint, and several liability, and requiring proof of causation. The Legislature approved the rollback by votes of 83–21 in the House and 28–7 in the Senate, and the rollback resulted in a significant drop off in enforcement actions.

Instead of requiring active cleanup of hazardous substances that were released into the environment, the amendments allowed responsible parties to rely on “institutional controls” aimed at preventing exposure to toxic chemicals. Responsible parties could use deed restrictions or ordinances to prevent use of the land or groundwater in lieu of removing the contaminants from the environment.

Collections of cleanup funds and penalties from private parties declined steeply with the changes. The state was awarded only \$10.5 million in the first three years after the rollback amendments — 75 percent less than the annual average collected between 1991 and 1995.

Another major blow to Michigan’s cleanup program occurred in December 2018. Without any public notice, and wholly without any public input or public hearings, the legislature dramatically weakened the law again. The new law limited the use of modern scientific methods to determine safe chemical exposure levels, weakened

cleanup criteria, and prohibited the agency from promulgating any rules that were more stringent than federal law. The latter was done at a time when the Trump administration reversed, revoked, or otherwise rolled back nearly 100 environmental rules, and federal environmental requirements were being systematically weakened, repealed, or were unenforced. The agency staff were so disheartened that 80 environmental professional employees cosigned a letter to Governor Rick Snyder advising him of the ill consequences of the legislative changes and requesting that he veto the legislation. He, nonetheless, signed the bill into law.⁵



Contaminated soil in Muskegon County
SOURCE: Andrew Hogarth

THE IMPACTS OF ROLLING BACK POLLUTER PAY

Drawn-out legal battles

Charles Gelman, whose company was locked in a fierce battle with the Department of Natural Resources (DNR) over cleanup of thousands of pounds of a chemical called 1,4-dioxane in the Ann Arbor area, fought for the weakening of the polluter pay standard. Gelman had belittled the state for years for demanding cleanup of a chemical that the DNR had authorized his company to discharge into the groundwater.

Twenty-eight years after the polluter pay rollback, the successor to the company founded by Charles Gelman is still locked in a battle with the state and the U.S. EPA over the firm's spreading pollution. By failing to require a complete cleanup under the polluter pay law, the state had allowed the company to expose residents of the community to toxic 1,4-dioxane. The spreading groundwater plume was one mile wide and four miles long and today continues to threaten Ann Arbor's drinking water supply.⁶

Unanticipated costs

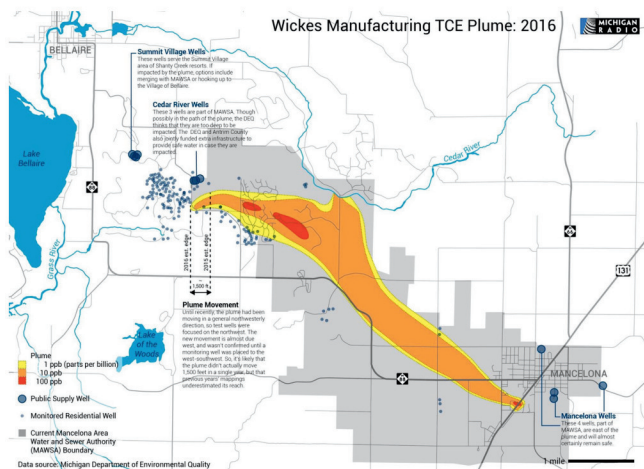
Other complications arose from the new approach of allowing contamination to remain in place instead of relying on a default policy of full feasible cleanup. A Charlevoix Superfund site that relied on an ordinance banning new wells while leaving contamination largely in place proved far more expensive than predicted in 1985, when it was estimated at \$3 million.

At a Charlevoix Superfund site, leaving contamination in place proved far more expensive. The estimated cleanup cost ballooned from \$3 million in 1985 to \$15.4 million in 2023.

Because additional contaminated soils and groundwater were later discovered, and because the contaminant trichloroethylene (TCE)

volatilized into the indoor air of buildings, by 2023 the cleanup cost for the preferred alternative grew to an estimated \$15.4 million over the succeeding 35 years.

The Wickes Manufacturing site in Mancelona is another site demonstrating the consequences of weakening Michigan’s cleanup requirements.



An estimated 13 trillion gallons of groundwater laced with TCE stretches for six miles near Mancelona.
SOURCE: Michigan Radio; Michigan DEQ (now EGLE)

Wickes used TCE in vapor degreasers as part of the manufacture of auto parts in Mancelona from 1947 to 1967. Waste containing TCE was discarded on the ground and in lagoons, where it seeped through the soil and became dissolved into the groundwater. TCE in groundwater extends approximately six miles and is up to 1.5 miles wide and has been detected in groundwater in some locations as deep as 500 feet below the ground. Discovered in 1986,

this plume is the largest TCE plume in the United States. Instead of initially cleaning up the TCE close to its source, the state has spent more than \$25 million extending water lines to residences to replace contaminated wells.

Increased taxpayer burdens

Since fiscal year 1998, when Michigan voters approved an environmental bond that contained \$335 million in public funds to clean up contaminated sites, the state has spent approximately \$1.53 billion in taxpayer money for cleanup. This includes, in addition to former industrial and business sites, cleanup of thousands of leaking petroleum tanks that contaminate groundwater and cleanup of sites owned by the state itself.



Buried drums in Lapeer County
SOURCE: Andrew Hogarth

Threats to human health

Mentioned earlier, vapor intrusion is a major pathway of human exposure to toxic contaminants left in place. When the Legislature in 1995 authorized the practice of restricting use rather than cleaning it up, relatively little was known about volatilization of contaminants.

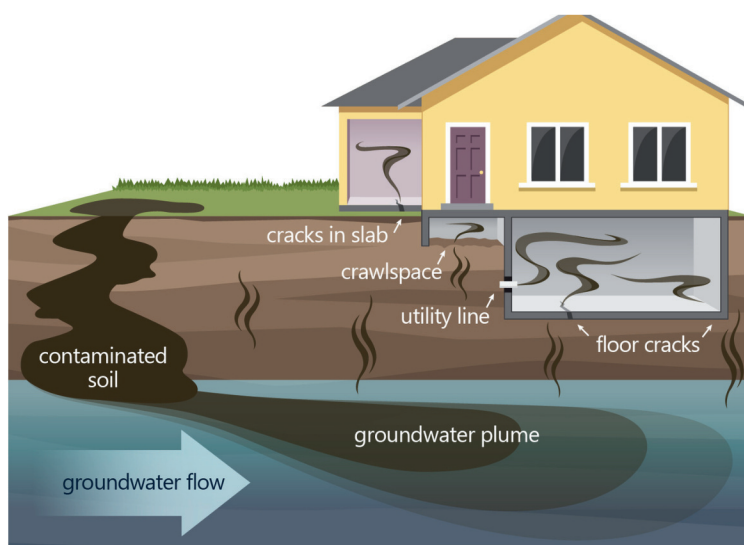
Due to vapor intrusion, state and local authorities have evacuated residences and offices in Petoskey, Grand Rapids, and other locations.

It was assumed that concrete floors and other impervious surfaces would block human exposure to such contaminants. Advances in science have proven that assumption wrong. As a result, state and local authorities have evacuated residences and offices in Petoskey, Grand Rapids, and other locations to protect against inhalation of the chemicals.

Residences and businesses across Michigan have been affected by TCE ambient air pollution. In Howell, test results determined

that TCE-contaminated air had leaked into neighborhoods. The Oakland County Health Division reported that vapor intrusion of TCE had occurred from multiple potential sources: dry cleaning facilities, gas stations, and metal degreasing operations. Franklin, Michigan also reported vapor intrusion in a series of small downtown businesses after health inspectors found an aging and toxic TCE storage container buried underneath a local shop.

Several other properties have had elevated levels of TCE: in southeast Grand Rapids, Detroit, and Sturgis, where toxic fumes may be seeping into buildings from underground contamination. In 2017, former DEQ director Heidi Grether estimated there are 4,000 sites in Michigan where vapor intrusion is a concern.⁷



SOURCE: State of Washington, Department of Ecology

Degraded groundwater

The use of land use restrictions in lieu of full cleanup has left a legacy of contamination in place at locations across the state. As of August 22, 2023, EGLE's Environmental Mapper had recorded 4,244 land-use restrictions at 3,530 sites⁸ (some sites have more than one restriction). The total surface area covered by the restrictions is 66,332 acres – cumulatively more than twice the size of the City of Grand Rapids. Soils and/or groundwater at most of these sites remain polluted.



Chemical site groundwater in Muskegon County
SOURCE: Andrew Hogarth

RESTORING POLLUTER PAY



Contamination cleanup and the need for funds to pay the bill will continue for decades. The cleanup will continue through the remainder of the 21st century. Under current law, taxpayers will fund the bulk of the cost. That must change.

During the 102nd Michigan Legislature, Senator Jeff Irwin (D-Ann Arbor) and Representative Jason Morgan (D-Ann Arbor) introduced bills to restore the principle that polluters should pay to clean up their contamination.

These bills address long-standing deficiencies in Michigan's cleanup program and place the burden and cost of remediating chemical contamination back on those responsible for the release of hazardous substances.

Under current law, Michigan taxpayers will pay to clean up industry's pollution. That must change.

FLOW recommends legislation to accomplish the following:

- Close the gap in the liability provisions by ensuring that both past and present owners and operators are defined as legally responsible parties.
- Establish strict liability for individuals who have authority to exercise control over the act or omission that resulted in the contamination.
- Reset the statutes of limitation by establishing that a claim arises when the plaintiff discovers the existence of the claim or should have discovered the existence of the claim.
- Strengthen the cleanup criteria and allow the use of the best scientific data.
- Increase the maximum civil or criminal fines to 5 percent of annual gross revenue for those corporations having gross revenue exceeding \$5 million.
- Impose an excise tax on chemicals and hazardous substances to be used to fund the state's cleanup program.
- Require financial assurances from companies using polluting materials.
- Create a medical monitoring cause of action for those whose health is impacted by the release of hazardous substances and allows recovering of costs and attorney's fees.
- Authorize the department to require additional cleanup measures if new information becomes available.
- Beef up the "due care" requirements for those who acquire contaminated property.
- Tighten the requirements associated with land use restrictions for those sites that cannot be cleaned up to safe, unrestricted residential standards.



These proposed changes to Michigan law are bold and ambitious but commensurate with the breadth and scope of the environmental burden attributable to the inadequate laws in effect today to address groundwater contamination across Michigan. The proposed amendments place the

responsibility and allocate the risk of future releases on those who control the use of hazardous materials. They provide strong incentives for the proper handling, use, and disposal of hazardous materials while enhancing protection of public health and the environment.

CONCLUSION

It took over a century of industrialization to contaminate a broad swath of Michigan. It may take more than a century to clean up the contamination. Billions of dollars beyond the \$1.5 billion of taxpayer money already spent will be required.

Carefully drafted, polluter pay legislation can relieve some of that burden by assigning it to the polluters who caused it.

Equally important, this legislation will deter future polluters by giving the state the legal tools necessary to hold polluters accountable in Michigan.

**Polluter pay
legislation is not only
common sense,
it is justice.**

End notes

- 1) Kelly House and Paula Gardner, "With thousands of tainted sites, Michigan Dems eye return to 'polluter pay'". Bridge Michigan,
- 2) Department of Environment, Great Lakes and Energy (EGLE), *Fiscal Year 2020 State Environmental Cleanup Programs Report; FY 18-24 RRD Cleanup Appropriations and Expenditures*.
- 3) "Polluters Would Pay for Cleaning Up," *Detroit Free Press*, April 25, 1989.
- 4) Malcolm Johnson, Associated Press, "Polluter pay law praised by state attorney general," March 7, 1994.
- 5) "Request to Veto Senate Bill 1244 Regarding Revisions to the State Cleanup Program and Cleanup Criteria," Letter from Department of Environmental Quality employees to Governor Rick Snyder.
- 6) Kimberly Craig, "'4-mile contamination plume continues to move toward Ann Arbor's primary water source,'" WXYZ-TV, August 10, 2022.
- 7) Michael Gerstein, "Mich. DEQ Chief: 'Vapor Intrusion' Poses Health Threat," *Detroit News*, February 26, 2017.
- 8) The actual number of land use restrictions and affected sites is much larger, according to EGLE. The agency has yet to enter a significant backlog of sites onto the Environmental Mapper, and not all land use restrictions are reported to EGLE.