

# Washington, still a Superfund state

*After 2 decades,  
pollution cleanup  
a work in progress*

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The Associated Press

Two decades ago, when scientists were trying to figure out which of Washington's toxic-waste sites should be cleaned up under the new federal Superfund program, there were no studies showing where the worst health hazards lurked.

There were no two-headed frogs or cancer clusters — just big factories that churned out poisonous chemicals, landfills and waste yards that leaked pollutants into the groundwater, and no simple method to measure the risk.

"We didn't know how to clean up Superfund sites in 1980. Nobody knew how to do a risk assessment," said Mike Gearheard, the U.S. Environmental Protection Agency's cleanup director for Washington, Idaho, Oregon and Alaska.

Twenty years after the EPA listed the state's first Superfund sites, all but one of the original 10 remain works in progress.

The EPA has flagged six of the original sites "construction complete," meaning whatever's needed to treat or contain the waste — say, a groundwater treatment plant or landfill — has been built.

But those sites and more than three dozen others listed in later years are so heavily contaminated it could be a long time before there's any hope they can be taken off the Superfund list for good.

The story's the same at many of more than 1,200 Superfund sites scattered across the country.

Why does it take so long? The answers differ from site to site — and they're complicated — but in many cases, delays are blamed on:

- The sheer volume of contamination.
- Complex ecological and health-risk studies.
- Inadequate funding.
- Drawn-out negotiations, sometimes court battles, among multiple parties.

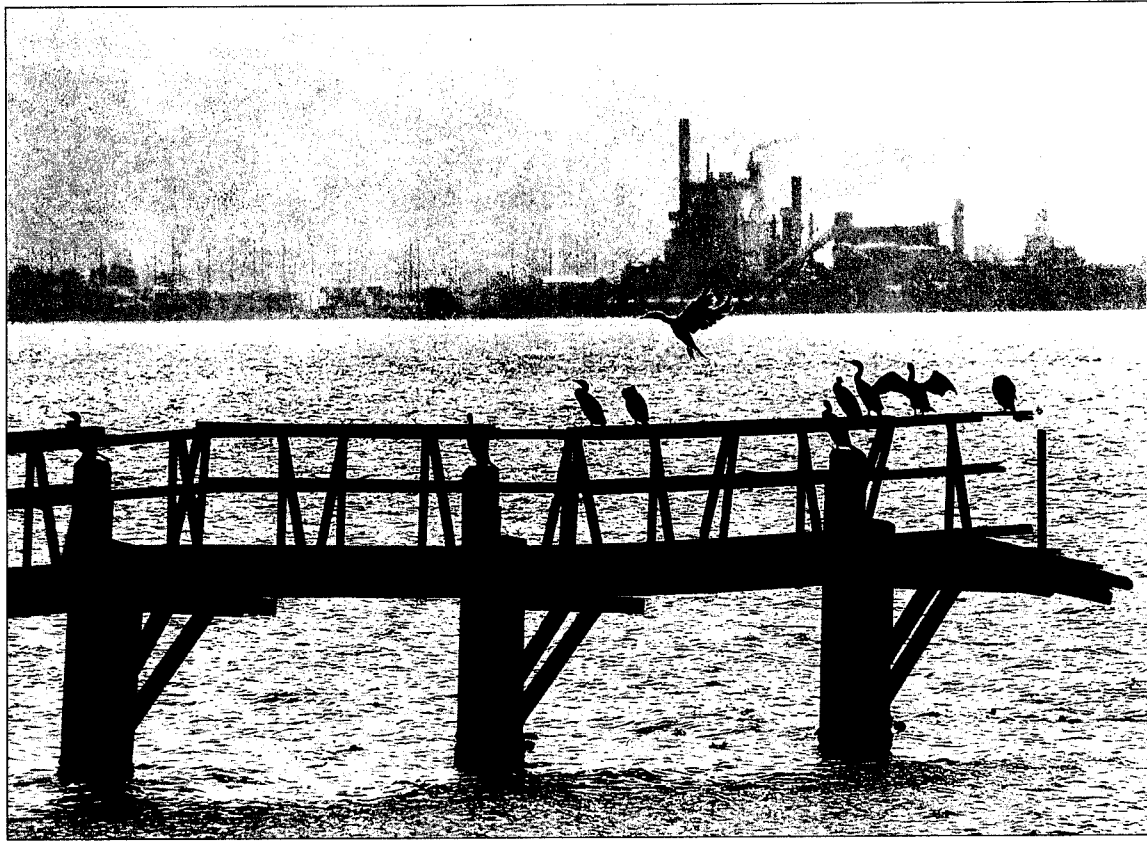
"You have to negotiate and try to figure out who's responsible for what, who's going to do what, and how much it's going to cost. That's a horrible undertaking," said Leslie Ann Rose of Citizens for a Healthy Bay, an environmental-watchdog group in Tacoma.

Congress created the Superfund program in 1980, giving the EPA unprecedented power to force dirty industries to clean up their messes.

The EPA has listed 63 sites in Washington since 1983. Of those, 16 were delisted after tests showed the sites met government cleanup standards. That leaves 47 active Superfund sites in Washington, more than twice those in Oregon, Idaho and Alaska combined. Nationally, Washington ranks seventh in the number of active sites. New Jersey has the most: 113. Since 1983, polluters have agreed to pay more than \$910 million on Superfund cleanups in Washington, according to EPA settlement documents.

The EPA has chipped in more than half a billion dollars in the Northwest — much of it in Washington — since 1989. The state Department of Ecology, which oversees cleanup at several Superfund sites, has paid about \$63 million in the same period. (EPA and Ecology officials said figures dating back to the start of the Superfund program were not available.)

Back when the program started, one of



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the biggest challenges was gauging which sites posed the biggest threats to human health and the environment.

Some people living near a Tacoma-area copper smelter, for instance, had elevated levels of arsenic in their urine. Arsenic, a byproduct of copper smelting, is known to cause several types of cancer, but nobody appeared to be sick or dying because of the contamination.

That didn't matter to the EPA and other agencies keen on ridding landscapes of toxic goo.

"A lot of these risks are based on what would happen if this person lived here for 30 years with this exposure," said Robert Duff, acting director of the state Office of Environmental Health Assessment. "We don't want to wait and count the bodies."

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There's the site of the Tacoma-area smelter, which refined lead in the late 1800s and early 1900s before being converted into a copper smelter. There are ship-maintenance shops, oil refineries, pulp and paper mills, log yards, chemical manufacturers and one of the West Coast's largest ports.

Things are simpler when there's just one main source of contamination.

On the eastern edge of Bainbridge Island, for example, no one disputes that about 1 million gallons of creosote is stuck underground because of a wood-treating plant that operated from the early 1900s until the late '80s.

But even when there's less infighting, other pitfalls can bog things down. Wyckoff, the last company that owned the old Bainbridge Island wood-treating plant, went out

of business in the mid-1990s, and it took several years to set up a trust to pay for cleanup.

Once the EPA drafted a plan to contain all the creosote — a tarlike mix of chemicals that preserves wood and can cause skin cancer — state officials and island residents remained dissatisfied. So the EPA committed to a \$10 million pilot project using a high-tech steam-injection technique aimed at sucking all the creosote out of the ground and treating it.

It worked in some ways, getting the goop out of the ground more easily than the standard nonthermal, pump-and-treat method.

It failed in other, unforeseen ways: The creosote contained a chemical that clogged the system's vapor-collection pipes with crystals. Plus, a wastewater-treatment plant at the site couldn't handle the huge volume of contaminants.

The EPA hasn't decided to go ahead with the steam-injection cleanup, which would take 12 to 15 years and cost about \$70 million.

"Obviously, if after the end of all this elaborate steaming you still have to contain the whole site," said Gearheard, the EPA cleanup director, "then, well, why did you do it?"

Then there are sites where the bulk of cleanup wrapped up years ago, but they're still on the Superfund list because they don't meet cleanup standards.

At Western Processing, a former hazardous-waste recycling facility in Kent, it took two years to lay out the cleanup plan, then six years and tens of millions of dollars to get rid of the worst part of the mess. The work included digging up and hauling away truckloads of paint sludge, recycled solvents, battery acids, flue dust from steel mills, pesticides and other industrial pollutants.

A trust, set up by Boeing and other businesses that sent waste there, is paying for the cleanup. Cost to date: about \$110 million.

Lee Marshall, EPA project manager for the site, said pumping and treating contaminated groundwater that has been contained at the site is expected to cost another \$18 million over the next 30 years.

Will it ever make it off the Superfund list? Marshall said that's a question he can't answer.

"We'd have to dig up more soil than half the city of Seattle, and we'd have to find a place to dispose of it," he said. "And I guess if you wanted to spend all kinds of money and do some superhuman engineering, you could clean it up. But I'm not sure that would be a wise expenditure of funds."

Many Superfund critics argue the program is woefully underfunded, particularly since the fund for which the law was named dried up this fall — eight years after the Republican-led Congress killed a special tax on the oil and chemical industries.

Environmentalists like Grant Cope, a former lobbyist for U.S. Public Interest Research Group, say it's high time to reauthorize the tax.

"The longer these sites sit, the greater the threat will be for public health or environmental quality," said Cope, now a Seattle-based attorney for Earthjustice, an environmental public-interest law firm.

"Contaminated groundwater doesn't just sit there," he said. "It can flow into surface water, into lakes, into sensitive ecosystems, wetlands, into drinking-water systems."

EPA officials say they get enough money every year in congressional appropriations — about \$1.3 billion nationally — and note that the Bush administration has asked for an extra \$150 million in Superfund money for next year.