

Cleaning Up

Chemical companies face challenges in repairing legacy chemical sites

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Kevin Wexler/NorthJersey.com

UNDER PROTEST A few demonstrators showed their disapproval of DuPont when the firm opened an information office in Pompton Lakes, N.J., in March 2010.

Long-obsolete manufacturing practices continue to haunt chemical firms. Although some sites have been scrubbed clean and returned to use, others are still a stubborn source of frustration not only for former plant operators but for plant community residents as well.

Think of legacy chemical sites and the former Union Carbide complex in Bhopal, India, comes to mind. It has yet to be cleaned up after a 1984 leak of an insecticide intermediate killed thousands of people. Another legacy site that may also come to mind is the Love Canal chemical dump in upstate New York. Exposed in the late 1970s, it has since been remediated, and most residents' lawsuits against site owners have been settled.

Midway between the stalemate at Bhopal and the completed Love Canal remediation are a large number of contaminated sites that have yet to be cleaned up. The U.S. government's National Priority List now counts nearly 1,300 contaminated sites nationwide.

Many sites where chemical plants once churned out products without much notice are now gaining attention from community residents who claim they have been harmed by wastes that spread beyond the plant gate. Owners of such sites are wrangling with residents over how to adequately clean up the mess outside plant boundaries and compensate those who say they have been harmed. More suits like these are likely on the way, particularly as regulators, chemical companies, and residents learn more about chemical vapor intrusions from underground water plumes.

Martha L. Judy, a professor at [Vermont Law School](#), calls old chemical plant sites "the problem that keeps on giving." In the U.S., laws such as the Comprehensive Environmental Response, Compensation & Liability Act of 1980 and the Superfund Amendments & Reauthorization Act of 1986 established who should be responsible for cleaning up a site, she says. But the legislation doesn't prevent local residents from demanding compensation for property damage or illness from former plant operators.

Three recent examples of residents taking up legal arms against their former corporate neighbors involve [Dow Chemical](#) and [DuPont](#). Last September, Dow subsidiary Rohm and Haas went on trial in a Pennsylvania state court on charges that over the past 50 years its specialty chemical facility in McCullom Lake, Ill., dumped chemicals such as trichloroethylene and vinyl chloride in a lagoon beside the plant. Rohm and Haas acquired the plant, which it closed in 2005, when it bought Morton International in 1999.

Residents charge that the chemicals contaminated the air and water and caused an unusually high number of brain tumors in a community of about 1,000 people. Documents filed before the proceedings were closed show a number of residents and their survivors are seeking compensatory and punitive damages.

According to press reports, the judge declared a mistrial in the first of 31 cases because of concerns over an expert witness' report meant to show the incidences of cancer were linked together. Rohm and Haas won't comment on the McCullom Lake cases because a gag order imposed by the judge is still in effect. The plaintiffs' attorney, Aaron J. Freiwald of Philadelphia-based [Layser & Freiwald](#), did not return calls for comment. The firm's website notes that it has suspended updates on the cases "in accordance with the wishes of the court."



FMC

NOW AND LATER FMC cleared a former pesticide site (top) in Baltimore for a planned waste-to-energy plant.



In another instance, DuPont is facing a third round of environmental lawsuits from residents in Pompton Lakes, N.J., who claim that pollution from a munitions works that operated between 1902 and 1994 threatens their health. In 1997, the firm spent \$38.5 million to settle suits brought by hundreds of local residents because of heavy-metal-contaminated soils around their homes. A second round of suits was settled in 2003 when DuPont agreed to cover the medical-monitoring costs of 1,500 residents.

The latest round of 220 lawsuits covers 400 current and former residents who claim that volatile organic compounds from an underground water plume originating at DuPont's site have been leaking into their homes. According to Lemuel M. Srolovic, an attorney with the law firm of [Weitz & Luxenberg](#), three plaintiffs have kidney cancer and three others suffer from autoimmune diseases because of their exposure to compounds such as trichloroethylene and tetrachloroethylene. Residents' demands include compensation for exposure, property value losses, and cleanup. No trial date has been set.

In an entirely different case, DuPont agreed in December to pay 8,500 class-action lawsuit members a total of \$70 million for cleanup and other costs related to lead, cadmium, and arsenic contamination from a long-shuttered zinc-smelting plant in Spelter, W.Va. Terms also call for DuPont to pay for a 30-year medical-monitoring program covering the current and former residents. In 2001, DuPont bought back the smelting plant it owned between 1928 and 1950. It completed a cleanup of the site under government supervision in 2006.

At a recent conference in Philadelphia hosted by the law firm [Blank Rome](#) on legal developments affecting the chemical industry, Silvio J. DeCarli, DuPont's chief litigation counsel, said DuPont takes its environmental obligations seriously. If buying back a site is the way to ensure a cleanup, then that is what DuPont will do, he pointed out.

However, cleaning up a site is relatively easy compared with dealing with nearby residents who claim chemical contamination from a shuttered plant is causing health problems and lowering property values, DeCarli said. In dealing with suits demanding compensation for medical-monitoring costs and property remediation, companies often find their hands tied.

Old chemical plant sites are "the problem that keeps on giving."

"No one likes a polluter," DeCarli noted. And against such a backdrop, it is difficult to explain to a judge and jury how scientific knowledge changes over time. Accusations that past practices harmed people who happened to live nearby a chemical plant are appealing to plaintiff attorneys, DeCarli said. Fears and emotions underlying residents' perceptions of harm often lead to exorbitant damage claims. "We want to make it a science case, but the other side wants to make it a morality case," he remarked.

Without the threat of a lawsuit, community residents say, big companies would ignore their responsibilities. Lisa Riggiola, executive director and founder of [Citizens for a Clean Pompton Lakes](#), tells C&EN that "litigation only truly happens because things that have to be done won't happen without legal pressure."

Though DuPont has been remediating its Pompton Lakes site for more than 20 years, Riggiola claims the company hasn't revealed all the facts. "We need honest answers," she says. And as important, the owners of about 450 homes want their neighborhood cleaned up. "If they could clean it in five years, then that would be reasonable to me."

Bob Nelson, a DuPont spokesman, says mitigating vapor intrusion from underground sources "is a new science." Researchers and government regulators "are just getting their arms around it and learning to deal with it now," he says. Mark Latham, a professor at Vermont Law School who follows environmental litigation, says government environmental agencies are focusing more often these days on vapor intrusion. So it is no surprise, he says, that lawsuits based on those concerns are turning up more often in private litigation.

For its part in Pompton Lakes, DuPont has so far paid for 217 subslab basement ventilation systems meant to prevent intrusion of vapors into homes there. The firm is also looking into drilling additional wells to treat contaminated groundwater. But Nelson says DuPont can't put a time frame on when the work would be done. "We'll dedicate the human and financial resources to get Pompton Lakes back to where it needs to be," he says. But "it has got to be done in a way that is safe and protects human health."

Chemical firms have had some successes in cleaning former plant sites. For instance, under government supervision [FMC](#) razed, leveled, and capped a 90-acre site in Baltimore where until 2008 it manufactured pesticide intermediates, according to Robert T. Forbes, FMC environment director. The site is in an industrial zone.

Residents were bought out when the city developed a sewage treatment plant in the area in the 1990s, Forbes says.

Recently, FMC leased 20 acres of the site to Energy Answers International, an Albany, N.Y.-based firm that plans to construct a \$1 billion facility that will burn municipal waste to produce electricity and steam. FMC hopes to lease the remaining acreage to manufacturing tenants that will buy energy and steam from Energy Answers.

FMC hasn't calculated whether the payments it receives for use of the land will defray ongoing groundwater mitigation costs at the site. "It wasn't our intent to have the rent offset the cost of remediation. We're committed to doing what needs to be done to remediate the site," Forbes says. He adds that he expects FMC will own the site in perpetuity.

When Vermont law professor Latham was in private practice, he advised his clients to take a proactive approach by investigating and remediating former sites before federal, state, and private-party litigation could get started. He recalls an instance when one client took such a proactive approach. The firm avoided all but one suit and generated mostly positive press and kudos from government regulators.

Many companies are inclined to "let sleeping dogs lie," Latham notes. But he advises them to "keep abreast of the science and assess their sites for liabilities down the road." Such actions can avoid a lot of heartache and suffering, he notes, and create trust with the people who live nearby.

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