

History of Toxic Waste

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I. Executive Summary

This brief outlines the history and policy landscape of toxic waste disposal in the United States. Starting with identifying the historical context of hazardous waste disposal over the last decade, following with an analysis of their effects on BIPOC communities through different socioeconomic lenses. The brief also examines past and current policies addressing toxic waste disposal, breaking down logistics and their effectiveness and closes with recommended policy options that strengthen accountability while creating a more sustainable future.

II. Overview

A. Causes

After the World War II industrial boom, hazardous waste became a widespread policy and public health issue. Rapid growth in chemical and manufacturing sectors produced large amounts of under-regulated waste, posing significant risks to human health and the environment. For decades, the environmental movement centered on white middle and upper-class concerns, contributing to disproportionate negative impacts on BIPOC communities.

The 1970s marked a turning point for environmental awareness. Before then, it is believed that scientific knowledge could not have predicted those consequences; however, some parts of the scientific community had debated the safety of waste disposal and by the 1980s the environmental justice movement gained traction.

B. Examples

- Love Canal (Niagara Falls, New York): A planned residential community that became a chemical dumpsite. In 1953, the Hooker Chemical Company covered the canal and sold the land to the city. For years, residents reported severe public health problems, such as miscarriages and birth defects. Eventually, the federal government intervened and created the Superfund program under the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) to investigate and clean sites contaminated with hazardous waste.
- "Cancer Alley" (Louisiana): An 85-mile corridor that accounts for 25% of the petrochemical production in the United States. Named "Cancer Alley" for alleged increased cancer risks in the predominantly Black local community, this region is considered by environmentalists to be a "sacrifice zone." The land, and therefore, the people, are devalued. This environmental injustice is at the expense of the local BIPOC community's health and safety. Sharon Lavigne, an environmental justice activist focused on Cancer Alley describes it like "a death sentence. Like we are getting cremated, but not getting burnt."

C. Stances

Some argue that building hazardous-waste facilities will spark economic development. However, long-term costs of clean up and health risks would outweigh any short-term economic benefits. Given the public health dimensions and evidence of disproportionate burdens, transparency and inclusive decision-making are key considerations.

III. Impact of Communities

The National Resources Defense Council defines environmental racism as “the intentional siting of polluting and waste facilities in communities primarily populated by African Americans, Latines, Indigenous People, Asian Americans and Pacific Islands, migrant farmworkers, and low-income workers” (Ihejirka 2023). The issue gained broader recognition in Warren County, North Carolina during the 1970s. The rural, poor, and primarily black county, was designated by the state government as a dumping location for “6,000 truckloads of soil laced with toxic PCBs” (Miller and Lee 2023). PCBs, or polychlorinated biphenyls, are man-made chemicals that were popularly used in manufacturing throughout the 20th century. It was banned from manufacturing in 1979 after being found to cause numerous health issues in humans. Community protests led to more than 500 arrests, the first in U.S. history over toxic waste in a landfill. While the protests ultimately failed, the protests elevated environmental justice within the general Civil Rights Movement.

In Flint, Michigan, for example, the residents—primarily black and low-income—have suffered from lead-contaminated drinking water since 2014. In 2016, residents sued city and state officials, succeeding in November of that year. Since then, plaintiffs have had to continuously return to court in order to ensure the city “properly managed its lead service line replacement program and that every Flint resident had the opportunity to participate” (Denchak 2025). The residents of Flint succeeded in getting the city to take action, progress has been slow, and they are still seeing major health effects from the use of contaminated water.

Why impacts are so disproportionate:

1. **Historical and Structural Inequality:** Housing segregation and redlining have concentrated marginalized groups near industrial zones, leaving them to face the immediate effects of pollution. Political disempowerment of BIPOC has also historically had less ability to resist and advocate against hazardous projects. However, through building coalitions and spreading awareness, communities have had more recent success in resisting these projects.
2. **Economic Vulnerability:** Lower property value surrounding these communities attract the industrial sector. Residents often also end up reliant on these industries for income, weighing health risks against income stability.
3. **Public Health and Access Issues:** Limited healthcare access impedes early treatment for exposure, increasing long-term risks such as cancer. The lack of access to clean water or clean air, only exacerbates the issue and makes it nearly impossible for them to not be exposed.

IV. History

Resource Conservation and Recovery Act (RCRA) (1976):

The RCRA, authorizes the EPA to regulate hazardous waste from its creation to disposal, known as the “cradle to grave” approach. This includes tracking waste through labeling, manifests, and proper disposal in supervised facilities. While RCRA aims to protect health and encourage recycling, enforcement remains uneven. Some facilities in marginalized neighborhoods face limited oversight, leaving communities exposed. Also, the act was created with input from BIPOC residents directly affected by the toxic waste, which limits its effectiveness.

Superfund Law (1980):

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as the Superfund law, allows the EPA to remediate abandoned or uncontrolled hazardous waste sites and recover costs of operation from the responsible parties. If the parties are unknown, the cleanup is financed by the Superfund trust. If a neighborhood is discovered to be built on a past waste site, the EPA can add it to the National Priorities List for cleanup and remediation. However, CERCLA faces challenges in limited funding and slow progress. Many contaminated sites remain unaddressed for years, leaving residents, often in low-income and BIPOC communities, living in unsafe conditions while awaiting government action.

Toxic Substance Control Act (TSCA) (1976):

TSCA authorizes the EPA to evaluate and regulate chemical substances that pose health or environmental risks. It oversees the production, distribution, and disposal and has led to restrictions and bans on certain substances, including PCBs (polychlorinated biphenyls). Despite this, TSCA's broad guidelines and weak enforcement leave gaps in protection. Many toxic chemicals continue to be used without thorough evaluation, and industries are often allowed to self-report data. This lack of transparency and supervision has led to ongoing exposure risks, particularly for BIPOC and low-income communities near chemical plants. Together, these policy gaps show the need for stronger enforcement, community inclusion, and accountability to ensure environmental safety for all.

Stakeholders:

- BIPOC communities that live near hazardous waste disposal sites, landfills, chemical plants, etc. Youth in these communities are impacted as they face increased health risks leading to potential health issues cognitively and behaviorally.
- Waste producing facilities such as chemical plants that dispose of hazardous waste, these facilities/companies are usually more focused on efficiency and cost rather than community health.
- Government agencies such as the U.S. Environmental Protection Agency (EPA), these agencies help regulate these waste sites and oversee cleanup. EPA struggles with getting these companies to understand and implement new rules.
- Environmental organizations/advocacy groups that help push for environmental justice for these affected BIPOC communities.
- Youth are also affected as they will suffer from the long-term consequences of poor hazardous waste management. They also have the power to mobilize and advocate for environmental action.

V. Policy Options

Legal Inclusion:

Ensure environmental laws and policies explicitly address risks to BIPOC communities, as well as expanding BIPOC participation of legal and technical professionals. Doing so will allow for laws and policies to account for these individuals and communities in the decisionmaking process. Guidance from environmental justice professionals are essential in cases like this. For example, Dr. Robert Bullard, often referred to as the "father of environmental justice," first worked in a 1979 case where an African American community fought against a landfill being built in the neighborhood (The Nature Conservancy, 2025). He then carried out further research in Houston and found that toxic waste sites were being placed more frequently in BIPOC communities (The Nature Conservancy, 2025). With more professionals like Bullard involved in research and law, BIPOC communities will have a better chance at fighting for environmental justice.

Environmental Education:

Invest in education and capacity-building within affected communities so residents can identify risks, organize, and pursue remedies. This will equip BIPOC communities with the knowledge to recognize when they are being exploited or taken advantage of, as well as allowing them to rally together to find solutions and legal justice, as well as bring attention to these issues. In a 2021 interview, Denise Patel, U.S. Program Director at the Global Alliance for Incinerator Alternatives (GAIA) stated that she thinks “there is an incredible opportunity to allow EJ and BIPOC communities to lead and inform policy. They’ve been at the forefront for decades, generating solutions to improve health and reduce pollution in their own communities” (EESI, 2021). Additionally encouraging BIPOC to pursue careers in STEM through educational grants, will bring more perspectives and will also allow for attention to be brought to very pressing environmental issues (Elum, 2024).

Impact Tracking:

Strengthen oversight and monitoring of how environmental policies and laws are potentially negatively impacting BIPOC communities. This allows for holding companies who are unfairly treating the community accountable, and for tracking which companies/industries are choosing to build discriminately in areas where there are BIPOC. Research has shown that there are correlations between environmental hazards and socioeconomic and racial disparity (Michigan News, 2016). Studies by Paul Mohai of Michigan’s School of Natural Resources and Environment, and Robin Saha of the University of Montana have further shown these patterns with their research. They found that companies were “placing hazardous waste facilities in neighborhoods where poor people and people of color live”

over a 30-year period (Michigan News, 2016). These communities are seen as a “path of least resistance,” making them easier targets for waste facilities to be built (Michigan News, 2016).

VI. Conclusion

Inappropriate hazardous waste disposal remains an urgent challenge with documented negative impacts on health, the environment and BIPOC communities. While RCRA, CERCLA and TSCA have advanced oversight and remediation, additional targeted policies and programs are needed to improve protection and accountability while supporting a more sustainable and healthy future for affected communities.