

Environmental Justice Case Studies

The following pages contain examples of environmental justice issues, problems, and solutions in the United States, and the world. Read the case study and answer the associated questions.

Bayview Power Plant in San Francisco

Residents of the Bayview district of San Francisco began a legal battle to prevent the location of a 240-megawatt electric and steam co-generation plant in the area. The plant was expected to release up to 350 tons of airborne toxics into an area which already has an incredible amount of hazards and toxins. Bayview is a predominantly African-American community that is the poorest area of the San Francisco metropolitan area. Bayview also has a history of environmental problems. During World War II, the Hunter's Point Naval Shipyard was located in the district. It was closed in 1974 due to severe chemical and radioactive contamination, but low-income African-American residents continue to live in the housing projects nearby. Bayview is also home to two PG&E power plants, a sewage treatment plant, and a hazardous materials waste disposal plant. All told, the district has reported 58 leaking storage facilities and 73 hazardous waste sites in the area. And now the San Francisco Energy Commission wants to build another waste-emitting power plant in the district. The Bayview case is another example of the lack of parity in the location of hazardous waste sites. According to studies, three out of five black and Hispanic Americans live in communities with uncontrolled toxic waste sites. The federal government also reacts more slowly to protests about hazardous waste sites in minority communities, so it may be a long time before this group fighting back against their environmental inequality sees any results.

Source: James Whooley "Bayview fights the power"

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Methyl Parathion Use in the Detroit Area

Detroit area environmental officials are initiating a crackdown on methyl parathion use. Methyl parathion is an insecticide used as a roach killer and used to combat pests of cotton, corn, and soy bean crops since 1954. Due to numerous farm worker poisonings, however, the Environmental Protection Agency (EPA) severely restricted the use of the chemical in 1978 and banned its use indoors. Methyl parathion can cause rapid, fatal poisoning through skin contact, inhalation, and eating or drinking. Due to its nature, it can linger in homes for years after its application. EPA officials in Michigan and Ohio have spent more than five million dollars in decontamination efforts and residents must relocate for four to six weeks during the decontamination process.

The crackdown on methyl parathion began after a child's death in Detroit in 1994 was linked to the chemical. Hundreds of residents in Ohio have also been forced to leave their homes because of the presence of methyl parathion. Residents of low-income housing projects are the ones disproportionately affected by methyl parathion. Because of cockroach problems, these inner-city dwellers buy the chemical even though it is illegal, because it is the only way they can deal with the pests. These residents are then forced to deal with the sickness and possible death associated with methyl parathion. The use of this chemical is another example of how poor inner-city residents, usually African-Americans, shoulder unfair environmental burdens.

Source: Daniel Johnson "Illegal Use of Methyl Parathion Endangers Detroit Area Residents" Michigan Toxics Watch Summer 1995

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Sable v. General Motors Corp., et al.

This case involved a suit brought forth by Richard Sable, representative of the estate of Leonard Forster, against General Motors Corporation, Chrysler, Ford Motor Company, Sherwin-Williams, and the Warner-Lambert Company. Forster's estate sued these corporations over the hazardous waste they had dumped in a landfill he owned. Leonard Forster had owned the G&H Landfill in Macomb County, Michigan, where from 1956 until 1974, the companies had dumped their industrial waste and chemicals. In 1982, the Environmental Protection Agency notified Forster of contamination problems at his landfill site. The site was placed on the National Priority List of CERCLA (the Comprehensive Environmental Response, Compensation, and Liability Act) in 1983. Forster died in 1985 and in 1986, the EPA sent Forster's estate a letter informing it that it was a responsible party for the contamination at the site. The estate sued the companies claiming that their disposal of hazardous waste on the property marked a continuing trespass. The estate wanted the companies to pay restitution to it for the 1.5 billion dollar price tag put on cleaning up the site. The case was decided in favor of the companies because they had ceased dumping waste at the landfill in 1974. Therefore, they had not been continuously dumping waste and were not responsible for continuing trespass.

This case is representative of two main problems in environmental justice. The first problem deals with property rights. When a consumer purchases a piece of land, they become responsible for the cost of cleaning it up if it has been found to be contaminated, even if they are not responsible for the contamination. For example, if someone bought a house on top of a former landfill site and this site was found to be contaminated, he would have to pay for the clean-up costs even though he did not pollute the site. Even though Forster did not directly pollute the land, his estate was responsible for cleaning it up because it was his property. This system is often unfair and many people are forced to pay great sums of money to clean up land they did not pollute. Many have called for reform in this area and it will be a hot topic in environmental justice in the years to come.

Another aspect of environmental justice that this case deals with is the actual site of the landfills. Landfills are much more likely to be located in poorer communities comprised mainly of minorities. It is very likely that these minorities were the ones living nearby Forster's landfill that suffered the adverse effects of the contamination. The disproportionate location of landfills is another area of environmental justice which needs to be addressed in years to come.

Source: <http://vlex.com/vid/sable-forster-ppg-sherwin-trw-lambert-36120213>

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Hazardous Waste Deep Injection Well in Romulus

As humans have produced more and more waste, an issue of growing importance has been where to dispose of it. One method of disposing of hazardous waste has been the deep injection well. They are approximately 4,500 feet deep and about 96 million gallons of hazardous waste can be injected into them a year. There are currently 172 of these deep injection wells in the United States, with a new one being proposed for Romulus, Michigan. The Romulus well would be Michigan's ninth.

There are many hazards associated with these wells. Twenty-two out of the 172 wells in America have leaked or suffered holes and workers were unable to detect substantial leakage from holes in well casing in six other situations. Greenpeace has stated that "in at least 2 states, deep well injection of hazardous wastes has been linked to multiple earthquakes, caused by elevated pressures and reduced friction over large areas...Injected wastes have entered groundwater through cracks, fissures, and abandoned oil and gas wells in the U.S."

The environmental organization Romulus Environmentalists Care About People (RECAP) has led the opposition to the injection well in Romulus. This group makes many statements about the detrimental effect the well would have on the city. Among other things, the group claims the well would contain 96 million gallons of hazardous waste a year that would be serviced by 19,200 trucks. Not only American hazardous waste, but also Canadian would be stored there and Canadians would own 20% of the well. The EPA and Michigan Department of Natural Resources would not have the funds or the manpower to regulate it such a commercial facility. The lack of regulations may allow the well to grow out of control. The well would be located less than 500 yards from a residential neighborhood. The group also states the facility would attract other waste facilities to Romulus and cause reduced property values. RECAP also cited the failure of a similar injection well in Vickery, Ohio, in which owners recently paid out 30 million dollars worth of claims to property owners within a five mile radius of the well. There have been numerous other documented failures of injection wells throughout the country.

In June of 1994, Romulans voted on whether or not to levy one mil to set up an environmental protection fund which would thwart any efforts to locate a hazardous waste injection well within the city. The proposal lost 2,000 votes to 929. Residents did not want the injection well, but they did not want to pay the mil for protecting against it either. As the environmental justice movement grows in the next few years, residents such as those in Romulus will have to decide between the negative side-effects of the lack of regard for the environment by industry and the costs of fixing or preventing these problems.

Source: Melissa Marra. "Downriver Digest." July/August 1994.

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Incinerator in Moss Point, Mississippi

On the banks of the Escatawpa River on Mississippi's Gulf Coast, there are two cities; Moss Point and Pascagoula. Moss Point is a poor, black, middle-class town, while Pascagoula is mostly white and more affluent. In the late 1970's, Pascagoula experienced waste disposal problems, so its city council decided to build an incinerator. But Pascagoula residents vehemently protested the proposed location of the incinerator in their community, and a chemical company in Moss Point eventually was awarded the rights to the incinerator. The incinerator was located in Moss Point, but owned by Pascagoula. Within three miles of the site are a number of schools and homes. For many years the situation between the two cities was peaceful, but in December of 1991, the Pascagoula City Council voted to send medical waste to be burned at the Moss Point incinerator in addition to the other waste. That sent Moss Point residents into an uproar and claims of environmental racism resounded throughout the Mississippi Gulf Coast.

The most striking problem about the incinerator now is its odor. Although not hazardous, the smell is extremely bothersome to local residents. But there are other, more serious, concerns as well and that is why Moss Point filed suit to prevent any more medical waste from being burned at the incinerator. Environmentalists in Moss Point claim the incinerator is antiquated and even if its pollution controls are improved, it would still not be able to eliminate all toxins released into the air. These toxins include dioxin, mercury, and cadmium. Local doctors also worry that the burning of the medical waste will worsen the already high incidence of respiratory ailments and would also cause long-term problems such as birth defects.

The demographics of both cities and the location of the incinerator provide one of the most glaring looks at an area environmental justice needs to address. The white residents of Pascagoula did not want the incinerator, so it was located in the poorer black community of Moss Point instead and Pascagoula merely shipped their waste there. "The people of Pascagoula didn't want the incinerator," says Moss Point physician Dr. Charles Allen. "Look where it is. It is surrounded by poor people with no money for health care or legal bills." But environmental justice has helped minorities stand up for their rights and soon situations like Moss Point may well be a thing of the past.

Source: Marcia Coyle. "Town Fights Waste Plan" The National Law Journal. 21 September 1992.

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Little Village Environmental Justice Organization, Chicago, Illinois

Local organizing around toxic cleanup is often just the beginning of a community's activism for a healthy and sustainable neighborhood. Case in point is the story of one Chicago community, called Little Village, home of the largest Mexican American population in the U.S. outside of East Los Angeles. The Little Village Environmental Justice Organization (LVEJO) has been this community's environmental watchdog group, demanding accountability and better environmental practices from the many polluters in the neighborhood.

For more than a decade, LVEJO has led the struggle to ensure the proper clean up, remediation, and redevelopment of a former Superfund site – a local asphalt plant known as the Celotex site. For over 70 years of its operation, hazardous wastes – including cancer-causing polycyclic aromatic hydrocarbons – crept into the surrounding soil. When flooding occurred in the basements of neighboring homes, contact with the water would cause severe skin rashes for residents. After a 10-year investigation, the EPA found in 1999 that Honeywell Corporation was legally liable for the cleanup of the site and neighboring homes, due to its inherited liability through a series of mergers and buy-outs involving Celotex.

When follow up discussions with the EPA regarding the clean up proved unsatisfactory to LVEJO and the community, LVEJO began direct negotiations with Honeywell, without EPA support. A confluence of grassroots organizing, evidence of extraordinarily high levels of contamination and negative health impacts, and constant pressure from LVEJO and its partners led Honeywell to go above and beyond the federal levels of remediation federally required from them. To date, Honeywell has cleaned up more than 175 homes. Through LVEJO's agreement with Honeywell, the company also agreed to an open bidding process for cleanup related service contracts.

Little Village resident Martha Castellon expressed what many felt: "my life is different because for the first time in over 10 years my grandchildren can play outside in the yard and I don't have to worry about them playing in the dirt. I can plant in the ground and eat what I grow. I don't have to worry about my basement flooding and getting rashes on my skin when I touch the water."

Yet, despite these near term victories, the fight for a thorough clean up continues. While the City of Chicago and the Chicago Park District announced in 2007 that they would build a park on the Celotex site, full remediation of the underlying site remains uncertain. As Lorena Lopez, a community organizer for LVEJO said, "The Little Village Community is glad the City of Chicago and the Park District have finally decided on a park site. However, we will not accept a park that could put our health and environment at risk."

The community continues to negotiate with the EPA over cleanup standards and remediation methods for the future park. Residents believe that the EPA's proposal to cover the Celotex site with a gravel cap will not safely contain the toxins which, due to elevated land levels, can run off down to street level. LVEJO and the community have demanded that the entire industrial site be leveled properly, back to street level, so that the recently remediated homes will not run the risk of being re-contaminated. This street-level clean up would also allow the park to house a field house, swimming pool, and gym.

Source: http://www.weact.org/Portals/7/Publications/EJGE_Report_English.pdf

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Environmental Health Coalition, San Diego, California

In their fights against disproportionate toxic burdens, environmental justice communities have steadily exposed the true costs of pollution on health and the environment. Now, these communities are also advancing their own plans for a clean energy future.

In one such example, a coalition led by one of the nation's oldest environmental justice organizations, San Diego based Environmental Health Coalition (EHC) successfully blocked the expansion of a fossil fuel power plant in Chula Vista, California, where over 80% of residents are people of color and 16% of all residents fall below the poverty line. This proposed plant expansion would have more than doubled the size of the existing plant to produce 100 megawatts of electricity to meet peak demands and prevent blackouts. It would have been sited 1,300 feet from a local elementary school and only 350 feet from the nearest home in that community.

The proposed plant expansion had blatantly contravened the Chula Vista General Plan, a policy that had taken EHC more than two years to pass. The lesson therefore appeared to be that "you can't protect people even if you get the policies right," said Laura Hunter, Co-Director of EHC's Clean Bay/Sustainable Energy Campaign, and, according to Hunter, EHC was not "willing to accept this."

EHC mounted a community-wide protest that led to California Energy Commission's denial of the plant permit in June 2009.¹ In its decision, the Commission cited violations of the California Environmental Quality Act and the Chula Vista General Plan for land use. "This is an incredible victory for the community," said Chula Vista resident Diana Vera after the ruling. "The Commission listened and acted to protect our health."

In its campaign against the plant, EHC was also a solution provider. They drafted a detailed energy plan that described the rationale and benefits for alternatives such as solar arrays on rooftops and parking lots, repair of transmission lines, and improvement of residential energy efficiency. EHC also provided expert testimony and analysis showing that these options were not only feasible and cost effective, but could provide three to four times the energy that the proposed plant would provide.

This assertive approach also helped the community to overcome the impression that its activism always implies naysaying. Now, the community's own energy plan has become a positive vision that they can fight for. This solution based approach is also helping communities launch more strategic efforts that link episodic, site specific battles to a long term vision.

To develop their energy alternatives, EHC has had to increase their technical competency on energy issues and collaborate with energy developers. This new capacity has helped to strengthen their organizing work, making their "asks" more relevant and allowing them to proffer detailed alternatives that can gain decision support from decision makers.

EHC has also used the momentum of its Chula Vista victory to build community participation in Stimulus spending discussions. Recently, EHC succeeded in engaging the San Diego community to push for a public process on the allocation of \$12 million of Stimulus funding earmarked for sustainable energy projects. In another example of how sustainability themes are impacting policy discussions on equity generally, the San Diego City Council recently approved using some of the stimulus funds for retrofit programs for low income neighborhoods as a means of creating jobs for that community. It is "easy for decision makers to get excited...if there's 50 community residents in their office," says EHC's Hunter.

EHC efforts demonstrate how community resistance to unsustainable environmental practices can be a first step in building community expertise and greater grassroots capacity for sustained activism around clean energy and equity.

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Asian Pacific Environmental Network, Communities for a Better Environment, and West County Toxics Coalition, Richmond, California

Since the early 1900's the "fenceline" community of Richmond, California, a community made up of 72% people of color,¹ has suffered from the impacts of toxic emissions from the many oil refinery and petrochemical facilities clustered in the area. Toxic spills have occurred over the course of several decades, and Richmond's cancer and child-asthma rates have exceeded area, state, and national averages.

For many years, community and environmental justice groups, including Communities for a Better Environment (CBE), Asian Pacific Environmental Network (APEN), and West County Toxics Coalition (WCTC), have been fighting one particular refinery owner – Chevron, the world's fifth largest corporation by revenue in 2009² – to responsibly clean up its spills and minimize its pollutants. The activists' recent court victory shows that, in this David and Goliath story, David can, in fact, still win.

In the latest round of this battle, these groups have worked together to prevent Chevron from expanding and transforming their Richmond facility into one that can refine dirtier grades of crude oil. Through protest, watchdogging, court actions, and active involvement in the permitting and environmental impact report (EIR) process, this coalition is trying its hardest to usher Chevron and the city of Richmond into a green economy, where the costs of polluting behavior are priced in, accounted for, and made public.

To begin with, this coalition organized the community against the proposed expansion. Hundreds of residents jammed the City Council hearings during which Chevron's EIR was presented. They demanded that the City Council limit the refinery from processing dirtier crude oils and that they re-do their EIR. Community groups also demanded that Chevron pay into a "Fund for Richmond's Future" – a community-controlled fund to support the development of a cleaner and greener economy in Richmond.

But instead of honoring the community's demands, Chevron offered the City Council \$61 million in funding for local projects, which the community groups allege was made in exchange for approval of the project.³ This proposal was preliminarily approved without a public vetting, and presented at the City Council's hearing on the project without public notice.

In response, in 2008, the environmental justice groups filed a lawsuit challenging the Richmond City Council's approval of Chevron's refinery expansion.⁵ "The City Council is selling out our community, but our health is not for sale," said Henry Clark, WCTC Executive Director. In 2009 a judge ruled in favor of the community groups and ordered Chevron to cease work on the oil refinery expansion pending submission of a revised, City-approved environmental impact report (EIR). The original EIR, the judge stated, did not answer key questions, such as how much added pollution the expanded refinery would produce. ⁶ This was a milestone victory proving that concerned residents, in resisting corporate presumptuousness through all available legal and civic means, can prevail.

The legal victory, however, is only a first step. Now that a new EIR must be drafted, Chevron now has the opportunity to work responsibly and openly with community groups to restructure the project in the greenest, most sustainable way possible. In addition to considering environmental impacts, the new EIR process opens the door for Chevron and the community to explore green development and the creation of green jobs for Richmond residents.

According to Mari Rose Taruc of APEN, making the transition to a green economy in a place like Richmond means that “we have to take on the corporate oil giant. We’ve proven that we can stop their expansion of dirty energy. Now, we need them to work with us to invest in a clean energy future.”

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Diarsenol Company (a/k/a Kingsley Park), Buffalo, New York

The Kingsley Park-Diarsenol Company site is on the grounds of the former Diarsenol Company pharmaceutical manufacturing plant in the Buffalo, New York. The pharmaceutical plant produced an arsenic-based medication from 1930 to 1948 and is alleged to have stored waste materials and unused product on open ground beside the facility. The area was purchased by the City of Buffalo in 1968 and was maintained as a public recreation area until 1988 when the park was closed because of environmental contamination.

The soil on site and off site was contaminated with arsenic, lead and polycyclic aromatic compounds. Arsenic and lead were detected on off-site leafy garden vegetables and in on-site groundwater. Remediation of soil on the Kingsley Park-Diarsenol Company site, including removal of contaminated soil from the site and bordering yards, was completed in December 1991. Methods for investigation of on-site and potential off-site groundwater contamination are currently being evaluated. Kingsley Park is expected to reopen for public recreational use at an unspecified date in the future.

Residents living around Kingsley Park expressed concern that the community may have elevated cancer rates. The New York Department of Health (NYSDOH) is currently conducting a cancer survey by census tract. ATSDR will evaluate that survey to determine if further public health actions are indicated for the community living near the site. Residents are also concerned that other adverse health effects could have resulted from contaminants at the site.

Based on available information, ATSDR has concluded that the Kingsley Park-Diarsenol Company site posed a public health hazard before 1991 remediation of the site and bordering yards. Residents may have been exposed to contaminants when they ingested, inhaled, or absorbed chemicals from contaminated soil, air, or vegetables. However, there is insufficient information to document exposure duration or levels. Current or future exposure to site-related contaminants is unlikely now that contaminated soils have been removed from the site and bordering yards. However, exposure to lead-based paint on private off-site buildings remains a possibility.

Lead contamination of soil appears to be unrelated to the site; lead-contaminated dusts and soils are a problem in many urban areas. ATSDR recommends that residents in the Kingsley Park area be made aware of how to reduce potential exposure to lead in soil, dust, air, and garden produce pathways. Residents should also be educated about the importance and method of removing lead-based paint from buildings.

ATSDR's Health Activities Recommendation Panel (HARP) has reviewed the Kingsley Park/Diarsenol Company site to determine if any follow-up health activities are indicated. The panel has determined that community healthy education activities currently provided by the state of New York are appropriate for the Kingsley Park community. Available programs to assess biological indicators of exposure (blood lead levels) are also appropriate for the community. The ATSDR Division of Health Education will implement a public health education program to advise the public health professional and the local medical community of the nature and possible consequences of exposure to contaminants at the Kingsley Park\Diarsenol Company site. In addition, ATSDR will conduct a health statistics review of relevant health outcome data when it becomes available. ATSDR will also evaluate any additional information it receives about the site to determine if further public health actions are appropriate.

Source: <http://www.atsdr.cdc.gov/hac/pha/pha.asp?docid=181&pg=0>

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Aluminum Company of America (Alcoa, Inc.), Massena, New York

The Aluminum Company of America paid \$7.5 million in fines for an array of state environmental offenses at its plant in the North Country town of Massena.

Among the violations admitted by the company was leaving PCB-contaminated soil piled on its property for more than 90 days in 1989, a violation of state law. When the soil -- enough to fill 33 railroad cars -- eventually was transported to a dump in Alabama, it was mislabeled as nonhazardous material. State prosecutors and environmental officials had also charged the Pittsburgh-based company with illegally disposing of acids and caustic solutions that were used in an aluminum-cleaning process. Since 1983, the solutions were intermittently poured down a manhole, where they mixed with wastewater that eventually drained into the ecologically fragile Grasse River.

As part of a settlement negotiated with the state, Alcoa officials pleaded guilty to misdemeanor charges of improperly possessing, transporting and disposing of hazardous waste and of endangering the environment. They also accepted criminal fines of \$3.75 million. Two plant supervisors also pleaded guilty to misdemeanor counts and were assessed fines totaling \$10,000. No Alcoa officials were sentenced to jail.

The pleas were accepted by a Town Court judge in Massena, an industrial enclave on the St. Lawrence River where three large manufacturers have a long history of polluting a complex network of three rivers -- the St. Lawrence, the Grasse and the Raquette.

Mr. Abrams and Environmental Conservation Commissioner Thomas C. Jorling said the heavy fines for Alcoa were intended to serve as a deterrent. Mr. Jorling said the size of the settlement was "a heavy lift for Alcoa." He commended the company's chairman, Paul H. O'Neill, for notifying the state about the violations as soon as they were discovered by the plant's operations manager.

The Commissioner said the fines could have been much steeper -- up to \$41 million in civil penalties alone -- if Alcoa had not cooperated so willingly with the state's investigation. The Mayor of the village of Massena, Charles R. Boots, said that while residents were concerned about pollution, they remained supportive of the area's largest employer. "Without Alcoa," he said, "there wouldn't have been a Massena in the first place."

Alcoa, Reynolds and General Motors are involved in a web of lawsuits and enforcement procedures by the state and Federal governments concerning the cleanup of the rivers and their own sites. At the Alcoa plant alone, there are seven on-site hazardous waste sites.

As part of the settlement announced today, Alcoa agreed to reduce its discharge of wastewater into the Grasse River from 13 million gallons a day to six million gallons a day by the end of the year. The company also agreed to reduce its PCB discharges into the river in three phases, starting this year with the installation of a carbon filtration system on two wastewater pipes. PCB's, or polychlorinated biphenyls, were used for decades as industrial fire retardants but were banned by the Federal Government in the 1970's after being linked to cancer.

The agreement settled a longstanding legal battle over Alcoa's PCB discharges that had been waged by the state and Federal governments, environmental groups, and the Mohawks living at the nearby St. Regis Reservation.

In addition to the criminal offenses, which involved the PCB-contaminated soil and the improper disposal of acid, the company faced civil penalties for hundreds of charges of exceeding

wastewater discharge limits and failing to report wastewater sampling results to the State Department of Environmental Conservation.

"Alcoa has entered into this agreement because it was clear that employees of the company had, in fact, violated the law and company policy," he said. "Under the law, the company is responsible for wrongful acts by its employees. Alcoa has accepted that responsibility."

Michael Cooper, an Alcoa spokesman, said the employees involved in the incidents had been reassigned.

Source: <http://www.nytimes.com/1991/07/12/nyregion/alcoa-to-pay-new-york-state-7.5-million-in-waste-fines.html>

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