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Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making

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A growing body of evidence reveals that people of color and low-income persons have borne greater environmental and health risks than the society at large in their neighborhoods, workplace, and playgrounds. Over the last decade or so, grassroots activists have attempted to change the way government implements environmental, health, and civil rights laws. Grassroots groups have organized, educated, and empowered themselves to improve the way government regulations and environmental policies are administered. A new movement emerged in opposition to environmental racism and environmental injustice. Over the last 2 decades or so, grassroots activists have had some success in changing the way the federal government treats communities of color and their inhabitants. Grassroots groups have also organized, educated, and empowered themselves to improve the way health and environmental policies are administered. Environmentalism is now equated with social justice and civil rights.

Despite significant improvements in environmental protection over the past several decades, millions of Americans continue to live in unsafe and unhealthy physical environments. Many economically impoverished communities and their inhabitants are exposed to greater health hazards in their homes, on the jobs, and in their neighborhoods when compared to their more affluent counterparts (Bryant & Mohai, 1992; Bullard, 1994a).

Hardly a day passes without the media discovering some community or neighborhood fighting a landfill, incinerator, chemical plant, or some other polluting industry. This was not always the case. Just 3 decades ago, the concept of environmental justice had not registered on the radar screens of environmental, civil rights, or social justice groups (Bullard, 1994b). Nevertheless, it should not be forgotten

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that Martin Luther King, Jr., went to Memphis in 1968 on an environmental and economic justice mission for the striking Black garbage workers. The strikers were demanding equal pay and better work conditions. Of course, Dr. King was assassinated before he could complete his mission.

Another landmark garbage dispute took place a decade later in Houston, when African American homeowners began a bitter fight to keep a sanitary landfill out of their suburban middle-income neighborhood (Bullard, 1983). Residents formed the Northeast Community Action Group (NECAG). NECAG and its attorney, Linda McKeever Bullard, filed a class action lawsuit to block the facility from being built. The 1979 lawsuit, *Bean v. Southwestern Waste Management, Inc.*, was the first of its kind to challenge the siting of a waste facility under civil rights law. The landmark Houston case occurred 3 years before the environmental justice movement was catapulted into the national limelight in rural and mostly African American Warren County, North Carolina.

The environmental justice movement has come a long way since its humble beginning in 1982 in Warren County, North Carolina, where a PCB landfill ignited protests and over 500 arrests. The Warren County protests provided the impetus for a U.S. General Accounting Office (1983) study, *Siting of Hazardous Waste Landfills and Their Correlation With Racial and Economic Status of Surrounding Communities*. That study revealed that three out of four of the off-site commercial hazardous waste landfills in Region 4 (which comprises eight states in the South) happen to be located in predominantly African American communities, although African Americans make up only 20% of the region's population. More important, the protesters put "environmental racism" on the map. Fifteen years later, the state of North Carolina is spending over $25 million to clean up and detoxify the Warren County PCB landfill.

The protests also led the Commission for Racial Justice (1987) to produce *Toxic Wastes and Race in the United States*, the first national study to correlate waste facility sites and demographic characteristics. Race was found to be the most potent variable in predicting where these facilities were located—more powerful than poverty, land values, and home ownership. In 1990, *Dumping in Dixie: Race, Class, and Environmental Quality* chronicled the convergence of two social movements—social justice and environmental movements—into the environmental justice movement (Bullard, 1994a). This book highlighted African Americans' environmental activism in the South, the same region that gave birth to the modern civil rights movement. What started out as local and often isolated community-based struggles against toxics and facility siting blossomed into a multi-issue, multiethnic, and multiregional movement.

The 1991 First National People of Color Environmental Leadership Summit in Washington, D.C., was probably the most important single event in the movement's history. The summit broadened the environmental justice movement beyond its antitoxics focus to include issues of public health, worker safety, land

use, transportation, housing, resource allocation, and community empowerment (C. Lee, 1992). The meeting also demonstrated that it is possible to build a multiracial grassroots movement around environmental and economic justice (Alston, 1992).

The four-day summit was attended by over 650 grassroots and national leaders from around the world. Delegates came from all 50 states, including Alaska and Hawaii, as well as from Puerto Rico, Chile, Mexico, and as far away as the Marshall Islands. People attended the summit to share their action strategies, redefine the environmental movement, and develop common plans for addressing environmental problems affecting people of color in the United States and around the world.

On September 27, 1991, summit delegates adopted 17 "principles of environmental justice." These principles were developed as a guide for organizing, networking, and relating to government and nongovernmental organizations (NGOs). By June 1992, Spanish and Portuguese translations of the principles were being used and circulated by NGOs and environmental justice groups at the Earth Summit in Rio de Janeiro.

The publication of the *People of Color Environmental Groups Directory* in 1992 and 1994 further illustrates that environmental justice organizations are found in the United States from coast to coast, in Puerto Rico, in Mexico, and in Canada. Groups have come to embrace a wide range of issues, including children's health, pollution prevention, housing, brownfields (sites that have actual or perceived contamination and may be used as redevelopment sites), community reinvestment, urban sprawl, transportation, land use, and worker safety.

The Environmental Justice Paradigm

Despite significant improvements in environmental protection over the past several decades, millions of Americans continue to live in unsafe and unhealthy physical environments (Institute of Medicine, 1999). Many economically impoverished communities and their inhabitants are exposed to greater health hazards in their homes, on their jobs, and in their neighborhoods when compared to their more affluent counterparts (Bullard, 1994a, 1994b; Bryant, 1995; Bryant & Mohai, 1992; Calloway & Decker, 1997; Collin & Collin, 1998; U.S. EPA, 1992b).

From New York to Los Angeles, grassroots community resistance has emerged in response to practices, policies, and conditions that residents have judged to be unjust, unfair, and illegal. Some of these conditions include (1) unequal enforcement of environmental, civil rights, and public health laws; (2) differential exposure of some populations to harmful chemicals, pesticides, and other toxins in the home, school, neighborhood, and workplace; (3) faulty assumptions in calculating, assessing, and managing risks; (4) discriminatory zoning and land use practices; and (5) exclusionary practices that prevent some individuals and groups from

participation in decision making or limit the extent of their participation (Bullard, 1993b; C. Lee, 1992).

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies (U.S. EPA, 1998).

During its 30-year history, the U.S. Environmental Protection Agency (EPA) has not always recognized that many government and industry practices (whether intended or unintended) have an adverse impact on poor people and people of color. Growing grassroots community resistance emerged in response to practices, policies, and conditions that residents judged to be unjust, unfair, and illegal. The EPA is mandated to enforce the nation's environmental laws and regulations equally across the board. It is required to protect all Americans, not just individuals or groups who can afford lawyers, lobbyists, and experts. Environmental protection is a right, not a privilege reserved for a few who can "vote with their feet" and escape or fend off environmental stressors.

The current environmental protection apparatus manages, regulates, and distributes risks (Bullard, 1996). The dominant environmental protection paradigm institutionalizes unequal enforcement; trades human health for profit; places the burden of proof on the "victims" and not the polluting industry; legitimates human exposure to harmful chemicals, pesticides, and hazardous substances; promotes "risky" technologies; exploits the vulnerability of economically and politically disenfranchised communities; subsidizes ecological destruction; creates an industry around risk assessment and risk management; delays cleanup actions; and fails to develop pollution prevention as the overarching and dominant strategy (Austin & Schill, 1991; Bullard, 1992, 1993c).

A growing body of evidence reveals that people of color and low-income persons have borne greater environmental and health risks than the society at large in their neighborhoods, workplaces, and playgrounds (Institute of Medicine, 1999; Johnson, Williams, & Harris, 1992; National Institute for Environmental Health Sciences, 1995). On the other hand, the environmental justice paradigm embraces a holistic approach to formulating environmental health policies and regulations; developing risk reduction strategies for multiple, cumulative, and synergistic risks; ensuring public health; enhancing public participation in environmental decision making; promoting community empowerment; building infrastructure for achieving environmental justice and sustainable communities; ensuring interagency cooperation and coordination; developing innovative public-private partnerships and collaboratives; enhancing community-based pollution prevention strategies;

ensuring community-based sustainable economic development; and developing geographically oriented community-wide programming.

The question of environmental justice is not anchored in a debate about whether or not decision makers should tinker with risk assessment and risk management. The environmental justice framework rests on developing tools and strategies to eliminate unfair, unjust, and inequitable conditions and decisions (Bullard, 1996). The framework also attempts to uncover the underlying assumptions that may contribute to and produce differential exposure and unequal protection. It brings to the surface the *ethical* and *political* questions of "who gets what, when, why, and how much." General characteristics of this framework include the following:

- The environmental justice framework adopts a public health model of prevention (i.e., elimination of the threat before harm occurs) as the preferred strategy.
- The environmental justice framework shifts the burden of proof to polluters/dischargers who do harm, who discriminate, or who do not give equal protection to people of color, low-income persons, and other "protected" classes.
- The environmental justice framework allows disparate impact and statistical weight or an "effect" test, as opposed to "intent," to be used to infer discrimination.
- The environmental justice framework redresses disproportionate impact through "targeted" action and resources. In general, this strategy would target resources where environmental and health problems are greatest (as determined by some ranking scheme but not limited to risk assessment).

Dismantling Environmental Racism

In the real world, all communities are not created equal. All communities do not receive equal protection. Economics, political clout, and race play an important part in sorting out residential amenities and disamenities. Racism is alive and well in the United States (Doob, 1993). Environmental racism is as real as the racism found in housing, employment, education, and voting (Bullard, 1993a). *Environmental racism* refers to any environmental policy, practice, or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color. Environmental racism is one form of environmental injustice and is reinforced by government, legal, economic, political, and military institutions. Environmental racism combines with public policies and industry practices to provide *benefits* for Whites while shifting

costs to people of color (Bullard, 1993a; Collin, 1992; Colquette & Robertson, 1991; Godsil, 1990).

The impetus behind the environmental justice movement did not come from within government, academia, or largely White, middle-class, nationally based environmental and conservation groups. The impetus for change came from people of color, grassroots activists, and their "bottom-up" leadership approach. Grassroots groups organized themselves, educated themselves, and empowered themselves to make fundamental change in the way environmental protection is administered in their communities.

Government has been slow to ask the questions of who gets help and who does not, who can afford help and who cannot, why some contaminated communities get studied whereas others get left off the research agenda, why industry poisons some communities and not others, why some contaminated communities get cleaned up whereas others do not, why some populations are protected and others are not protected, and why unjust, unfair, and illegal policies and practices are allowed to go unpunished.

Struggles for equal environmental protection and environmental justice did not magically appear in the 1990s. Many communities of color have been engaged in life-and-death struggles for more than a decade. In 1990, the Agency for Toxic Substances and Disease Registry (ATSDR) held a historic conference in Atlanta. The ATSDR National Minority Health Conference focused on contamination (Johnson, Williams, & Harris, 1992). In 1992, after meeting with community leaders, academicians, and civil rights leaders, the EPA (under the leadership of William Reilly) acknowledged there was a problem and established the Office of Environmental Equity (the name was changed to the Office of Environmental Justice under the Clinton administration).

In 1992, the EPA produced one of the first comprehensive documents to examine the whole question of risk, environmental hazards and their equity: *Environmental Equity: Reducing Risk for All Communities* (U.S. EPA, 1992a). The report and the resulting Office of Environmental Equity were initiated only after prodding from people of color, environmental justice leaders, activists, and a few academicians.

In 1993, EPA also established a 25-member National Environmental Justice Advisory Council (NEJAC) under the Federal Advisory Committee Act. The NEJAC is comprised of stakeholders representing grassroots community groups; environmental groups; nongovernmental organizations; state, local, and tribal governments; academia; and industry. The NEJAC divides its environmental justice work into six subcommittees: Health and Research, Waste and Facility Siting, Enforcement, Public Participation and Accountability, Native American and Indigenous Issues, and International Issues.

In February 1994, seven federal agencies, including the ATSDR, the National Institute for Environmental Health Sciences, the EPA, the National Institute of

Occupational Safety and Health, the National Institutes of Health, the Department of Energy (DOE), and the Centers for Disease Control and Prevention sponsored a national health symposium, "Health and Research Needs to Ensure Environmental Justice," in Arlington, Virginia. The conference planning committee was unique in that it included grassroots organization leaders, residents of affected communities, and federal agency representatives. The goal of the February conference was to bring diverse stakeholders and those most affected to the decision-making table (National Institute for Environmental Health Sciences, 1995). Recommendations from the symposium included the following:

- Conduct meaningful health research in support of people of color and low-income communities.
- Promote disease prevention and pollution prevention strategies.
- Promote interagency coordination to ensure environmental justice.
- Provide effective outreach, education, and communications.
- Design legislative and legal remedies.

In response to growing public concern and mounting scientific evidence, President Bill Clinton on February 11, 1994 (the second day of the national health symposium), issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This order attempts to address environmental injustice within existing federal laws and regulations.

Executive Order 12898 reinforces the 35-year-old Civil Rights Act of 1964, Title VI, which prohibits discriminatory practices in programs receiving federal funds. The order also focuses the spotlight on the National Environmental Policy Act (NEPA), a 25-year-old law that set policy goals for the protection, maintenance, and enhancement of the environment. NEPA's goal is to ensure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing environment. NEPA requires federal agencies to prepare a detailed statement on the environmental effects of proposed federal actions that significantly affect the quality of human health (Council on Environmental Quality, 1997).

The order calls for improved methodologies for assessing and mitigating impacts and health effects from multiple and cumulative exposure and collection of data on low-income and minority populations who may be disproportionately at risk and impacts on subsistence fishers and wildlife consumers. It also encourages participation of the affected populations in the various phases of assessing impacts, including scoping, data gathering, alternatives, analysis, mitigation, and monitoring.

The order focuses on "subsistence" fishers and wildlife consumers. Not everyone buys the fish they consume at the supermarket. There are many people who are

subsistence fishers, who fish for protein, who basically subsidize their budgets, and their diets, by fishing from rivers, streams, and lakes that happen to be polluted. These subpopulations may be underprotected when basic assumptions are made using the dominant risk paradigm.

Communities Under Siege

Numerous studies reveal that low-income persons and people of color have borne greater health and environmental risk burdens than the society at large (Cooney, 1999; Goldman, 1992; Goldman & Fitton, 1994; Institute of Medicine, 1999; Mann, 1991). A recent study from the Institute of Medicine (1999) concluded that government, public health officials, and the medical and scientific communities need to place a higher value on the problems and concerns of environmental-justice communities. The study also confirmed what most affected communities have known for decades, that is, that minority and low-income communities are (1) exposed to higher levels of pollution than the rest of the nation and (2) experience certain diseases in greater number than the more affluent, White communities (Institute of Medicine, 1999).

Elevated public health risks have been found in some populations even when social class is held constant. For example, race has been found to be independent of class in the distribution of air pollution, contaminated fish consumption, location of municipal landfills and incinerators, abandoned toxic waste dumps, cleanup of Superfund sites, and lead poisoning in children (Agency for Toxic Substances and Disease Registry, 1988; Bryant & Mohai, 1992; Commission for Racial Justice, 1987; Goldman & Fitton, 1994; Lavelle & Coyle, 1992; Pirkle et al., 1994; Stretesky & Hogan, 1998; West et al., 1990).

Childhood lead poisoning is another preventable disease that has not been eradicated. Figures reported in the July 1994 *Journal of the American Medical Association* in the Third National Health and Nutrition Examination Survey (NHANES III) revealed that 1.7 million children (8.9% of children aged 1–5) are lead-poisoned, defined as having blood lead levels equal to or above 10 micrograms per deciliter. The NHANES III data found African American children to be lead-poisoned at more than twice the rate of White children at every income level (Pirkle et al., 1994). Over 28.4% of all low-income African American children were lead-poisoned, compared to 9.8% of low-income White children. During the time period between 1976 and 1991, the decrease in blood lead levels for African American and Mexican American children lagged far behind that of White children.

In 1992 in California, a coalition of environmental, social justice, and civil libertarian groups joined forces to challenge the way the state carried out its screening of poor children for blood lead levels. The Natural Resources Defense Council, the National Association for the Advancement of Colored People Legal Defense and

Education Fund, the American Civil Liberties Union, and the Legal Aid Society of Alameda County, California, won an out-of-court settlement worth $15 million to $20 million for a blood lead-testing program. The lawsuit, *Matthews v. Coye*, involved the failure of the state of California to conduct federally mandated testing for lead on some 557,000 poor children who receive Medicaid (B. L. Lee, 1992). This historic agreement triggered similar lawsuits and actions in several other states that failed to live up to the federal mandates.

Federal, state, and local policies and practices have contributed to residential segmentation and unhealthy living conditions in poor, working-class, and people-of-color communities (Bullard & Johnson, 1997). Several recent California cases bring this point to light (B. L. Lee, 1995). Disparate highway siting and mitigation plans were challenged by community residents, churches, and the NAACP Legal Defense and Education Fund in *Clean Air Alternative Coalition v. United States Department of Transportation* (N.D. Cal. C-93-0721-VRW), involving the reconstruction of the earthquake-damaged Cypress Freeway in West Oakland. The plaintiffs wanted the downed Cypress Freeway (which split their community in half) rebuilt farther away. Although the plaintiffs were not able to get their plan implemented, they did change the course of the freeway in their out-of-court settlement.

The NAACP Legal Defense and Education Fund filed an administrative complaint, *Mothers of East Los Angeles, El Sereno Neighborhood Action Committee, El Sereno Organizing Committee, et al. v. California Transportation Commission, et al.* (before the U.S. Department of Transportation and U.S. Housing and Urban Development), challenging the construction of the 4.5-mile extension of the Long Beach Freeway in East Los Angeles through El Sereno, Pasadena, and South Pasadena. The plaintiffs argued that the state agencies' proposed mitigation measures to address noise, air, and visual pollution discriminated against the mostly Latino El Sereno community. For example, all of the planned freeway in Pasadena and 80% in South Pasadena will be below ground level. On the other hand, most of the freeway in El Sereno will be above ground. White areas were favored over the mostly Latino El Sereno in allocation of covered freeway, historic preservation measures, and accommodation to local schools (Bullard & Johnson, 1997; B. L. Lee, 1995).

Los Angeles residents and the NAACP Legal Defense and Education Fund have also challenged the inequitable funding and operation of bus transportation used primarily by low-income and people-of-color residents. A class action lawsuit was filed on behalf of 350,000 low-income, people-of-color bus riders represented by the Labor/Community Strategy Center, the Bus Riders Union, Southern Christian Leadership Conference, Korean Immigrant Workers Advocates, and individual bus riders. In *Labor/Community Strategy Center v. Los Angeles Metropolitan Transportation Authority* (Cal. CV 94-5936 TJH Mcx), the plaintiffs argued that the Los Angeles Metropolitan Transit Authority (MTA) used federal

funds to pursue a policy of raising costs to bus riders (who are mostly poor and people of color) and reducing quality of service in order to fund rail and other projects in predominately White suburban areas (Mann, 1996).

In the end, the Labor/Community Strategy Center and its allies successfully challenged transit racism in Los Angeles. The group was able to win major fare and bus pass concessions from the Los Angeles MTA. It also forced the Los Angeles MTA to spend $89 million on 278 new clean-compressed natural gas buses.

Many of the nation's environmental policies distribute costs in a regressive pattern while providing disproportionate benefits for Whites and individuals who fall at the upper end of the education and income scale. A 1992 study reported in the *National Law Journal* uncovered glaring inequities in the way the federal EPA enforces its laws. Lavelle and Coyle (1992) found the following:

> There is a racial divide in the way the U.S. government cleans up toxic waste sites and punishes polluters. White communities see faster action, better results and stiffer penalties than communities where blacks, Hispanics and other minorities live. This unequal protection often occurs whether the community is wealthy or poor. (pp. S1–S2)

The *National Law Journal* study reinforced what many grassroots activists have known for decades: All communities are not treated the same (Lavelle & Coyle, 1992). Communities that are located on the "wrong side of the tracks" are at greater risk from exposure to lead, pesticides (in the home and workplace), air pollution, toxic releases, water pollution, solid and hazardous waste, raw sewage, and pollution from industries (Goldman & Fitten, 1994).

Relocation From "Mount Dioxin"

Margaret Williams, a 73-year-old retired Pensacola, Florida, schoolteacher, led a 5-year campaign to get her community relocated from the environmental and health hazards posed by the nation's third largest Superfund site. The Escambia Wood Treating site was dubbed "Mount Dioxin" because of the 60-foot-high mound of contaminated soil dug up from the neighborhood. The L-shaped mound holds 255,000 cubic yards of soil contaminated with dioxin, one of the most dangerous compounds ever made (Olinger, 1996). Williams led Citizens Against Toxic Exposure (CATE), a neighborhood organization formed to get relocation, into battle with EPA officials, who first proposed to move only the 66 households most affected by the site (U.S. EPA, 1996). After prodding from CATE, EPA then added 35 more households, for a total cost of $7.54 million.

The original government plan called for some 257 households, including an apartment complex, to be left out. CATE refused to accept any relocation plan unless everyone was moved. The partial relocation was tantamount to partial justice. CATE took its campaign on the road to EPA's NEJAC and was successful in getting NEJAC's Waste Subcommittee to hold a Superfund relocation roundtable in Pensacola. At this meeting, CATE's total neighborhood relocation plan won the

backing of more than 100 grassroots organizations. EPA nominated the Escambia Wood Treating Superfund site as the country's first pilot program to help the agency develop a nationally consistent relocation policy that would consider not only toxic levels but welfare issues such as property values, quality of life, health, and safety.

On October 3, 1996, EPA officials agreed to move all 358 households from the site at an estimated cost of $18 million. EPA officials deemed the mass relocation as "cost efficient" after city planners decided to redevelop the area for light industry rather than clean the site to residential standards (Escobedo, 1996; Washington Post, 1996). This decision marked the first time that an African American community had been relocated under EPA's Superfund program and was hailed as a landmark victory for environmental justice (Escobedo, 1996).

From Dumping in Dixie to Corporate Welfare

The southern United States has become a "sacrifice zone" for the rest of the nation's toxic waste (Schueler, 1992, p. 45). A colonial mentality exists in Dixie through which local government and big business take advantage of people who are both politically and economically powerless. The region is stuck with a unique legacy: the legacy of slavery, Jim Crow, and White resistance to equal justice for all. This legacy has also affected race relations and the region's ecology.

The South is characterized by "look-the-other-way environmental policies and giveaway tax breaks" and as a place where "political bosses encourage outsiders to buy the region's human and natural resources at bargain prices" (Schueler, 1992, pp. 46–47). Lax enforcement of environmental regulations has left the region's air, water, and land the most industry-befouled in the United States.

Toxic waste discharge and industrial pollution are correlated with poorer economic conditions. In 1992, the Institute for Southern Studies' "Green Index" ranked Louisiana 49th out of 50 states in overall environmental quality. Louisiana is not a rich state by any measure. It ranks 45th in the nation in spending on elementary and secondary education, for example.

Ascension Parish typifies the toxic "sacrifice zone" model. In two parish towns of Geismar and St. Gabriel, 18 petrochemical plants are crammed into a 9.5-square-mile area. In Geismar, Borden Chemicals has released harmful chemicals into the environment that are health hazardous to the local residents, including ethylene dichloride, vinyl chloride monomer, hydrogen chloride, and hydrochloric acid (Barlett & Steele, 1998, p. 72).

Borden Chemicals has a long track record of contaminating the air, land, and water in Geismar. In March 1997, the company paid a fine of $3.5 million—the single largest in Louisiana history—for storing hazardous waste, sludges, and solid wastes illegally; failing to install containment systems; burning hazardous waste

without a permit; neglecting to report the release of hazardous chemicals into the air; contaminating groundwater beneath the plant site (thereby threatening an aquifer that provides drinking water for residents of Louisiana and Texas); and shipping toxic waste laced with mercury to South Africa without notifying the EPA, as required by law (Barlett & Steele, 1998).

Louisiana could actually improve its general welfare by enacting and enforcing regulations to protect the environment (Templet, 1995). However, Louisiana citizens subsidize corporate welfare with their health and the environment (Barlett & Steele, 1998). A growing body of evidence shows that environmental regulations do not kill jobs. On the contrary, the data indicate that "states with lower pollution levels and better environmental policies generally have more jobs, better socioeconomic conditions and are more attractive to new business" (Templet, 1995, p. 37). Nevertheless, some states subsidize polluting industries in the return for a few jobs (Barlett & Steele, 1998). States argue that tax breaks help create jobs. However, the few jobs that are created come at a high cost to Louisiana taxpayers and the environment.

Nowhere is the polluter-welfare scenario more prevalent than in Louisiana. Corporations routinely pollute the air, ground, and drinking water while being subsidized by tax breaks from the state. The state is a leader in doling out corporate welfare to polluters (see Table 1). In the 1990s, the state wiped off the books $3.1 billion in property taxes owed by polluting companies. The state's top five worst polluters received $111 million dollars over the past decade (Barlett & Steele, 1998). A breakdown of the chemical releases and tax breaks includes

- Cytec Industries (24.1 million pounds of releases/$19 million tax breaks)
- IMC-Agrico Co. (12.8 million pounds/$15 million)
- Rubicon, Inc. (8.4 million pounds/$20 million)
- Monsanto Co. (7.7 million pounds/$45 million)
- Angus Chemical Co. (6.3 million pounds/$12 million)

Not only is subsidizing polluters bad business, but it does not make environmental sense. For example, nearly three-fourths of Louisiana's population—more than 3 million people—get their drinking water from underground aquifers. Dozens of the aquifers are threatened by contamination from polluting industries (O'Byrne & Schleifstein, 1991). The Lower Mississippi River Industrial Corridor has over 125 companies that manufacture a range of products, including fertilizers, gasoline, paints, and plastics. This corridor has been dubbed "Cancer Alley" by environmentalists and local residents (Beasley, 1990a, 1990b; Bullard, 1994a; Motavalli, 1998).

Table 1. Corporate Welfare in Louisiana

The biggest recipients: Companies ranked by total industrial-property tax abatements, 1988–97			
	Company	Jobs created	Total taxes abated
1.	Exxon Corp.	305	$213,000,000
2.	Shell Chemical/Refining	167	$140,000,000
3.	International Paper	172	$103,000,000
4.	Dow Chemical Co.	9	$ 96,000,000
5.	Union Carbide	140	$ 53,000,000
6.	Boise Cascade Corp.	74	$ 53,000,000
7.	Georgia Pacific	200	$ 46,000,000
8.	Willamette Industries	384	$ 45,000,000
9.	Procter & Gamble	14	$ 44,000,000
10.	Westlake Petrochemical	150	$ 43,000,000
The costliest jobs: Companies ranked by net cost of each new job (abatements divided by jobs created).			
	Company	Jobs created	Cost per job
1.	Mobil Oil Corp.	1	$29,100,000
2.	Dow Chemical Co.	9	$10,700,000
3.	Olin Corp.	5	$ 6,300,000
4.	BP Exploration	8	$ 4,000,000
5.	Procter & Gamble	14	$ 3,100,000
6.	Murphy Oil USA	10	$ 1,600,000
7.	Star Enterprise	9	$ 1,500,000
8.	Cytec	13	$ 1,500,000
9.	Montell USA	31	$ 1,200,000
10.	Uniroyal Chemical Co.	22	$ 900,000

Winning in Court: The Case of *CANT v. LES*

Executive Order 12898 was put to the test in rural Northwest Louisiana in 1989. Beginning that year, the Nuclear Regulatory Commission (NRC) had under review a proposal from Louisiana Energy Services (LES) to build the nation's first privately owned uranium enrichment plant. A national search was undertaken by LES to find the "best" site for a plant that would produce 17% of the nation's enriched uranium. LES supposedly used an objective scientific method in designing its site selection process.

The Southern United States, Louisiana, and Claiborne Parish ended up being the dubious "winners" of the site selection process. Residents from Homer and the nearby communities of Forest Grove and Center Springs—two communities closest to the proposed site—disagreed with the site selection process and outcome. They organized themselves into a group called Citizens Against Nuclear Trash (CANT), which charged LES and the NRC staff with practicing environmental

racism. CANT hired the Sierra Club Legal Defense Fund (which later changed its name to Earthjustice Legal Defense Fund) and sued LES.

The lawsuit dragged on for more than 8 years. On May 1, 1997, a three-judge panel of the NRC's Atomic Safety and Licensing Board issued a final initial decision on the case. The judges concluded that "racial bias played a role in the selection process" (Nuclear Regulatory Commission, 1997). A story in the *London Sunday Times* proclaimed the environmental justice victory by declaring "Louisiana Blacks Win Nuclear War" (1997). The precedent-setting federal court ruling came 2 years after President Clinton signed Executive Order 12898. The judges, in a 38-page written decision, also chastised the NRC staff for not addressing the provision called for under Executive Order 12898. The court decision was upheld on appeal on April 4, 1998.

A clear racial pattern emerged during the so-called national search and multistage screening and selection process (Bullard, 1995). For example, as shown in Table 2, African Americans comprise about 13% of the U.S. population, 20% of the Southern states' population, 31% of Louisiana's population, 35% of Louisiana's northern parishes, and 46% of Claiborne Parish. This progressive narrowing of the site selection process to areas of increasingly high poverty and African American representation is also evident from an evaluation of the actual sites that were considered in the "intermediate" and "fine" screening stages of the site selection process. As noted in Table 3, the aggregate average percentage of Black population for a one-mile radius around all of the 78 sites examined (in 16 parishes) is

Table 2. Percentage of African American Population by Geographic Location, National Search for Privately Owned Uranium Enrichment Plant

Geographic location	Percentage African American (1990)
United States	13
Southern states	20
State of Louisiana	31
Louisiana's northern parishes	35
Claiborne Parish	46

Note. See U. S. Census Bureau, 1990 U.S. Census Data, PL 94-171 (visited May 10, 1999), http://www.census.gov

Table 3. Population by Race Living Within One-Mile Radius of LES Candidate Sites During Winnowing Process

Candidate sites	Total population	Black population	Percentage Black
Initial (78 sites)	18,722	5,321	28.35
Intermediate (37 sites)	8,380	3,082	36.78
Fine-screening (6 sites)	1,160	752	64.74
Final selection (1 site)	138	134	97.10

Note. See U. S. Census Bureau, 1990 U.S. Census Data, PL 94-171 (visited May 10, 1999), http://www.census.gov

28.35%. When LES completed its initial site cuts and reduced the list to 37 sites within nine parishes, the aggregate percentage of Black population rose to 36.78%. When LES then further limited its focus to six sites in Claiborne Parish, the aggregate average percentage Black population rose again, to 64.74%. The final site selected, the LeSage site, has a 97.10% Black population within a one-mile radius.

The LES plant was proposed to be built on Parish Road 39 between two African American communities—just one-quarter mile from Center Springs (founded in 1910) and one and one-quarter mile from Forest Grove (founded in the 1860s just after slavery). The proposed site is in a Louisiana parish that has per capita earnings of only $5,800 per year (just 45% of the national average of almost $12,800) and where over 58% of the African American population is below the poverty line. The two African American communities were rendered "invisible," since they were not even mentioned in the NRC's draft environmental impact statement (Nuclear Regulatory Commission, 1997).

Only after intense public comments did the NRC staff attempt to address environmental justice and disproportionate-impact implications, as required under the NEPA and called for under Executive Order 12898. For example, NEPA requires that the government consider the environmental impacts and weigh the costs and benefits of any proposed action. These include health and environmental effects, the risk of accidental but foreseeable adverse health and environmental effects, and socioeconomic impacts.

The NRC staff devoted less than a page to addressing environmental justice concerns of the proposed uranium enrichment plant in its final environmental impact statement (FEIS). Overall, the FEIS and Environmental Report (ER) are inadequate in the following respects: (1) they inaccurately assess the costs and benefits of the proposed plant, (2) they fail to consider the inequitable distribution of costs and benefits of the proposed plant to the White and African American population, and (3) they fail to consider the fact that the siting of the plant in a community of color follows a national pattern in which institutionally biased decision making leads to the siting of hazardous facilities in communities of color and results in the inequitable distribution of costs and benefits to those communities.

Among the distributive costs not analyzed in relationship to Forest Grove and Center Springs include the disproportionate burden of health and safety, diminished property values, fire and accidents, noise, traffic, radioactive dust in the air and water, and dislocation by closure of a road that connects the two communities. Overall, the CANT legal victory points to the utility of combining environmental and civil rights laws and the requirement of governmental agencies to consider Executive Order 12898 in their assessments.

In addition to the remarkable victory over LES, a company that had the backing of powerful U.S. and European nuclear energy companies, CANT members and their allies won much more. They empowered themselves and embarked on a path of political empowerment and self-determination. During the long battle,

CANT member Roy Mardris was elected to the Claiborne Parish Jury (i.e., county commission), and CANT member Almeter Willis was elected to the Claiborne Parish School Board. The town of Homer, the nearest incorporated town to Forest Grove and Center Springs, elected its first African American mayor, and the Homer town council now has two African American members. In fall 1998, LES sold the land on which the proposed uranium enrichment plant would have been located. The land is going back into timber production, for which it was used before LES bought it.

Winning on the Ground: *St. James Citizens v. Shintech*

Battle lines were drawn in Louisiana in 1991 in another national environmental justice test case. The community is Convent and the company is Shintech. The Japanese- owned Shintech, Inc., applied for a Title V air permit to build a $800 million polyvinyl chloride (PVC) plant in Convent, Louisiana, a community that is over 70% African American; over 40% of the Convent residents fall below the poverty line. The community already has a dozen polluting plants and yet has a 60% unemployment rate. The plants are so close to residents' homes, they could walk to work. The Black community is lured into accepting the industries with the promise of jobs, but in reality, the jobs are not there for local residents.

The Shintech case raised similar environmental racism concerns as those found in the failed LES siting proposal. The EPA is bound by Executive Order 12898 to ensure that "no segment of the population, regardless of race, color, national origin, or income, as a result of EPA's policies, programs, and activities, suffer disproportionately from adverse health or environmental effects, and all people live in clean and sustainable communities." The Louisiana Department of Environmental Quality is also bound by federal laws (e.g., Title VI of the Civil Rights Act of 1964) to administer and implement its programs, mandates, and policies in a nondiscriminatory way.

Any environmental justice analysis of the Shintech proposal will need to examine the issues of disproportionate and adverse impact on low-income and minority populations near the proposed PVC plant. Clearly, it is African Americans and low-income residents in Convent who live closest to existing and proposed industrial plants and who will be disproportionately impacted by industrial pollution (Wright, 1998). African Americans comprise 34% of the state's total population. The Shintech plant was planned for the St. James Parish, which ranks third in the state for toxic releases and transfers. Over 83% of St. James Parish's 4,526 residents are African American. Over 17.7 million pounds of releases were reported in the 1996 *Toxic Release Inventory* (*TRI*). The Shintech plant would add over 600,000 pounds of air pollutants annually. Permitting the Shintech plant in Convent would add significantly to the toxic burden borne by residents, who are mostly low-income and African American.

After 6 months of intense organizing and legal maneuvering, residents of tiny Convent and their allies convinced EPA administrator Carol M. Browner to place the permit on hold. A feature article in *USA Today* bore the headline "EPA Puts Plant on Hold in Racism Case" (Hoversten, 1997). A year later, the Environmental Justice Coalition forced Shintech to scrap its plans to build the PVC plant in the mostly African American community. The decision came in September 1998 and was hailed around the country as a major victory against environmental racism. The driving force behind this victory was the relentless pressure and laser-like focus of the local Convent community.

Radioactive Colonialism and Native Lands

There is a direct correlation between exploitation of land and exploitation of people. It should not be a surprise to anyone to discover that Native Americans have to contend with some of the worst pollution in the United States (Beasley, 1990b; Kay, 1991; Taliman, 1992; Tomsho, 1990). Native American nations have become prime targets for waste trading (Angel, 1992; Geddicks, 1993). More than three dozen Indian reservations have been targeted for landfills, incinerators, and other waste facilities (Kay, 1991). The vast majority of these waste proposals have been defeated by grassroots groups on the reservations. However, "radioactive colonialism" is alive and well (Churchill & LaDuke, 1983).

Radioactive colonialism operates in energy production (mining of uranium) and disposal of wastes on Indian lands. The legacy of institutional racism has left many sovereign Indian nations without an economic infrastructure to address poverty, unemployment, inadequate education and health care, and a host of other social problems.

Some industry and governmental agencies have exploited the economic vulnerability of Indian nations. For example, of the 21 applicants for the DOE's monitored retrievable storage (MRS) grants, 16 were Indian tribes (Taliman, 1992a). The 16 tribes lined up for $100,000 grants from the DOE to study the prospect of "temporarily" storing nuclear waste for a half century under its MRS program.

It is the Native American tribes' sovereign right to bid for the MRS proposals and other industries. However, there are clear ethical issues involved when the U.S. government contracts with Indian nations that lack the infrastructure to handle dangerous wastes in a safe and environmentally sound manner. Delegates at the Third Annual Indigenous Environmental Council Network Gathering (held in Cello Village, Oregon, on June 6, 1992) adopted a resolution of "No nuclear waste on Indian lands."

Transboundary Waste Trade

Hazardous waste generation and international movement of hazardous waste pose some important health, environmental, legal, and ethical dilemmas. It is unlikely that many of the global hazardous waste proposals can be effectuated without first addressing the social, economic, and political context in which hazardous wastes are produced (industrial processes), controlled (regulations, notification and consent documentation), and managed (minimization, treatment, storage, recycling, transboundary shipment, pollution prevention).

The "unwritten" policy of targeting Third World nations for waste trade received international media attention in 1991. Lawrence Summers, at the time he was chief economist of the World Bank, shocked the world and touched off an international scandal when his confidential memorandum on waste trade was leaked. Summers writes: "'Dirty' Industries: Just between you and me, shouldn't the World Bank be encouraging *more* migration of the dirty industries to the LDCs?" (Quoted in Greenpeace, 1993, pp. 1–2).

Consumption and production patterns, especially in nations with wasteful "throw-away" lifestyles like the United States, and the interests of transnational corporations create and maintain unequal and unjust waste burdens within and between affluent and poor communities, states, and regions of the world. Shipping hazardous wastes from rich communities to poor communities is not a solution to the growing global waste problem. Not only is it immoral, but it should be illegal. Moreover, making hazardous waste transactions legal does not address the ethical issues imbedded in such transactions (Alston & Brown, 1993).

Transboundary shipment of banned pesticides, hazardous wastes, toxic products, and export of "risky technologies" from the United States, where regulations and laws are more stringent, to nations with weaker infrastructure, regulations, and laws smacks of a double standard (Bright, 1990). The practice is a manifestation of power arrangements and a larger stratification system in which some people and some places are assigned greater value than others.

In the real world, all people, communities, and nations are *not* created equal. Some populations and interests are more equal than others. Unequal interests and power arrangements have allowed poisons of the rich to be offered as short-term remedies for poverty of the poor. This scenario plays out domestically (as in the United States, where low-income and people of color communities are disproportionately affected by waste facilities and "dirty" industries) and internationally (where hazardous wastes move from OECD states flow to non-OECD states).

The conditions surrounding the more than 1,900 maquiladoras (assembly plants operated by American, Japanese, and other foreign countries) located along the 2,000-mile U.S.-Mexico border may further exacerbate the waste trade (Sanchez, 1990). The maquiladoras use cheap Mexican labor to assemble imported

components and raw material and then ship finished products back to the United States. Nearly a half million Mexican workers are employed in the maquiladoras.

A 1983 agreement between the United States and Mexico required American companies in Mexico to return their waste products to the United States. Plants were required to notify the U.S. EPA when returning wastes. Results from a 1986 survey of 772 maquiladoras revealed that only 20 of the plants informed the EPA that they were returning waste to the United States, even though 86% of the plants used toxic chemicals in their manufacturing process (Juffers, 1988). In 1989, only 10 waste shipment notices were filed with the EPA (Center for Investigative Reporting, 1990).

Much of the wastes end up being illegally dumped in sewers, ditches, and the desert. All along the Lower Rio Grande River Valley, maquiladoras dump their toxic wastes into the river, from which 95% of the region's residents get their drinking water (Hernandez, 1993). In the border cities of Brownsville, Texas, and Matamoras, Mexico, the rate of anencephaly—babies born without brains—is four times the national average. Affected families have filed lawsuits against 88 of the area's 100 maquiladoras for exposing the community to xylene, a cleaning solvent that can cause brain hemorrhages and lung and kidney damage.

The Mexican environmental regulatory agency is understaffed and ill-equipped to adequately enforce its laws (Barry & Simms, 1994; Working Group on Canada-Mexico Free Trade, 1991). Only time will tell if the North American Free Trade Agreement (NAFTA) will "fix" or exacerbate the public health and the environmental problems along the U.S.-Mexico border.

Conclusion

The environmental protection apparatus in the United States does not provide equal protection for all communities. The environmental justice movement emerged in response to environmental inequities, threats to public health, unequal protection, differential enforcement, and disparate treatment received by the poor and people of color. The movement redefined environmental protection as a basic right. It also emphasized pollution prevention, waste minimization, and cleaner production techniques as strategies for achieving environmental justice for all Americans without regard to race, color, national origin, or income.

The poisoning of African Americans in Louisiana's "Cancer Alley," Native Americans on reservations, and Mexicans in the border towns all have their roots in the same economic system, a system characterized by economic exploitation, racial oppression, and devaluation of human life and the natural environment. Both race and class factors place low-income and people-of-color communities at special risk. Although environmental and civil rights laws have been on the books for more than 3 decades, all communities have not received the same benefits from their application, implementation, and enforcement.

Unequal political power arrangements also have allowed poisons of the rich to be offered as short-term economic remedies for poverty. There is little or no correlation between proximity of industrial plants in communities of color and the employment opportunities of nearby residents. Having industrial facilities in one's community does not automatically translate into jobs for nearby residents. Many industrial plants are located at the fence line with the communities. Some are so close that local residents could walk to work. More often than not, communities of color are stuck with the pollution and poverty, while other people commute in for the industrial jobs.

Similarly, tax breaks and corporate welfare programs have produced few new jobs by polluting firms. However, state-sponsored pollution and lax enforcement have allowed many communities of color and poor communities to become the dumping grounds. Louisiana is the poster child for corporate welfare. The state is mired in both poverty and pollution. It is no wonder that Louisiana's petrochemical corridor, the 85-mile stretch along the Mississippi River from Baton Rouge to New Orleans dubbed "Cancer Alley," has become a hotbed for environmental justice activity.

The environmental justice movement has set out clear goals of eliminating unequal enforcement of environmental, civil rights, and public health laws; differential exposure of some populations to harmful chemicals, pesticides, and other toxins in the home, school, neighborhood, and workplace; faulty assumptions in calculating, assessing, and managing risks; discriminatory zoning and land use practices; and exclusionary policies and practices that limit some individuals and groups from participation in decision making. Many of these problems could be eliminated if existing environmental, health, housing, and civil rights laws were vigorously enforced in a nondiscriminatory way.

The call for environmental and economic justice does not stop at the U.S. borders but extends to communities and nations that are threatened by the export of hazardous wastes, toxic products, and "dirty" industries. Much of the world does not get to share in the benefits of the United States' high standard of living. From energy consumption to the production and export of tobacco, pesticides, and other chemicals, more and more of the world's peoples are sharing the health and environmental burden of America's wasteful throwaway culture. Hazardous wastes and "dirty" industries have followed the path of least resistance. Poor people and poor nations are given a false choice of "no jobs and no development" versus "risky, low-paying jobs and pollution."

Industries and governments (including the military) have often exploited the economic vulnerability of poor communities, poor states, poor nations, and poor regions for their unsound and "risky" operations. Environmental justice leaders are demanding that no community or nation, rich or poor, urban or suburban, Black or White, be allowed to become a "sacrifice zone" or dumping grounds. They are also pressing governments to live up to their mandate of protecting public health and the environment.

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