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Omar Saleem
omar.saleem@famu.edu

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Overcoming Environmental Discrimination: The Need for a Disparate Impact Test and Improved Notice Requirements in Facility Siting Decisions

Omar Saleem*

This article explores the phenomenon of “environmental discrimination” within the spectrum of current laws and policies and posits that such laws and policies are narrowly construed to the detriment of their intended beneficiaries. The article’s major premise is that low-income racial minorities bear the brunt of environmental assaults and subsidize overall economic growth with their health and lives. While available data support no “genocidal conspiracy” of the state or private industry, they highlight these parties’ failures which make discrimination inevitable. Specifically, they depict how federal and state environmental practices lack sufficient organization, data, planning and communication. This results in adverse effects upon low-income racial minorities.

Typically, the policies behind environmental laws have been to promote public health and welfare. For example, Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) largely in response to the Love Canal incident.¹ CERCLA was amended and reauthorized in 1986

* Assistant Professor of Law, St. Thomas University School of Law — Miami. B.A. 1985, City University of New York at Queens College; J.D. 1988, North Carolina Central University School of Law; LL.M. 1991, Columbia University School of Law. The author thanks Professors Steven Plass and Lundy Langston for helpful comments on earlier drafts of this article.

1. CERCLA was enacted by Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended in scattered sections of the I.R.C. and 33, 42 and 29 U.S.C. (1988)). For a discussion of the origins of this legislation, see WILLIAM TUCKER, *PROGRESS AND PRIVILEGE* (1982); Michael B. Gerrard, “Overview of the Law of Hazardous Materials,” in *ENVIRONMENTAL LAW PRACTICE GUIDE* 25-1 (1992). Love Canal was an area in Niagara Falls, New York, where industrial waste was buried in the 1940’s and early 1950’s. The area was covered and a residential community was later built. However, the drums underneath the community began to corrode and leak. On August 7, 1978, 240 families were evacuated because the community was declared a disaster area after some residents became ill. MICHAEL ALLABY, *DICTIONARY OF THE ENVIRONMENT* 239 (1989).

by the Superfund Amendments and Reauthorization Act (SARA).² Title III of SARA—the Emergency Planning and Community Right to Know Act³ was a reaction to the 1984 chemical disaster in Bhopal, India.⁴ The Medical Waste Tracking Act of 1988⁵ resulted from medical wastes washing ashore on beaches. Congress enacted the Hazardous Materials Transportation Act⁶ in response to public concerns over the dangers of transporting hazardous waste materials. These laws' policy concerns for protection of the general public should also be reflected in the interpretation of environmental laws and of doctrines originally intended for other non-environmental situations when these doctrines are applied in an environmental context. For example, the public notice requirements for siting a hazardous waste facility should be broadly interpreted to include individual notice and English translations.

Part I of this article traces the evolution of the "environmental justice" movement. It explores the forces giving rise to the movement and the movement's impact on the legal profession and the traditional environmental movement. Part II discusses efforts to measure environmental discrimination using both economic and physical indicators, showing how the latter constitutes a more reliable mode of measurement and analysis. A physical measurement is often gauged by proximity to the pollutant as found in the reports that have examined the correlation between race and income and the siting of hazardous waste facilities. Environmental discrimination claimants have often taken this approach in alleging an equal protection violation. This part also examines the shortcomings of the traditional construction of the Equal Protection Clause. It then proposes and discusses how a legislative solution might overcome the obstacles inherent in using an intent-based inquiry into disparate impacts by race resulting from unequal enforcement of environmental laws and from facility siting decisions. Part III discusses federal and state notice requirements for siting a hazardous waste

2. Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. No. 99-499, 100 Stat. 1613 (1986) (codified in scattered sections of the I.R.C. and 10, 29, 33 at 42 U.S.C. (1988)).

3. 42 U.S.C. §§ 9601-9675 (1988).

4. On December 3, 1984, a Union Carbide-owned pesticide factory accidentally released a cloud of methyl isocyanate gas. Approximately 2,500 people died, and 200,000 were injured. ALLABY, *supra* note 1, at 48.

5. 42 U.S.C. § 6992 (1988).

6. 49 U.S.C. §§ 1801-1813 (1988). See Stephen D. Strauss, *Transporting Hazardous Materials*, 88 CASE & COM. 24 (1983).

facility and illustrates how the current narrow construction of such notice requirements tends to undermine public participation in the siting process. This part concludes that to be effective and fair, notice requirements must be more broadly construed to provide appropriate means tailored to reach affected low-income racial minority communities and in particular to respond to the dearth of education in such communities. Such appropriate use of notice provisions should go far in helping to alleviate environmental discrimination and in keeping public attention on the problems of hazardous waste which ultimately confront all Americans.

I. BACKGROUND

A. *Warren PCB Facility*

In 1982, a predominately African-American community in Warren County, North Carolina, became the proposed site for a polychlorinated biphenyl (PCB) disposal facility.⁷ The decision to site the facility in Warren County ushered forth the first national African-American protest against hazardous waste siting practices.⁸ The local community, along with civil rights leaders, protested the siting of the facility. Despite efforts by the National Association for the Advancement of Colored People (NAACP) to secure a preliminary injunction to prohibit the siting of the facility—on the ground of racial discrimination—the facility was approved. The protest, however, led to a statewide review of hazardous waste siting procedures. North Carolina then passed a law barring additional sites in Warren County.⁹

B. *GAO Report*

In response to the siting of the proposed facility in Warren County, Congressman Walter E. Fauntroy asked the Government Accounting Office (GAO) to determine the correlation between the location of hazardous waste landfills and the racial and eco-

7. ROBERT D. BULLARD, *DUMPING IN DIXIE: RACE, CLASS AND ENVIRONMENTAL QUALITY* (1990).

8. The most widespread use of PCB's is in electrical equipment such as transformers. Because it is a possible neurotoxin, it has been illegal to produce in this country since 1979. See *Village of Wilsonville v. SCA Services, Inc.*, 426 N.E.2d 824, 828 (1981); M.J. Motter, *PCBs: The Risk Beyond Regulatory Compliance*, ENSR NEWSLETTER, (1989) (newsletter of ENSR Consulting and Engineering, Canton, Ohio).

9. Desda Moss, *Green Movement Needs More Color*, USA TODAY, Oct. 24, 1991, at 2A.

conomic status of the surrounding communities.¹⁰ The GAO did so and found in pertinent part:

There are four off-site hazardous waste landfills in [EPA] Regions IV's eight States. Blacks make up the majority of the population in three of the four communities where the landfills are located. At least 26 percent of the population in all four communities have income below the poverty level and most of this population is Black.¹¹

An unrelated 1983 study presented similar data on the siting of solid waste facilities in Houston, Texas. The findings revealed solid waste facilities tended to be located in predominantly African-American neighborhoods.¹² Four years after the GAO report, the United Church of Christ Commission for Racial Justice (CRJ) published the report on Toxic Wastes and Race in the United States.¹³ The CRJ report, similar to the GAO report, examined the correla-

10. U.S. GENERAL ACCOUNTING OFFICE, SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES, GAO/RCED-83-168 (June 1, 1983) [hereinafter GAO REPORT] (providing information on the racial and economic characteristics of communities surrounding hazardous waste landfills in three southeastern states). In support of the Superfund Protection Act, Representative Fauntroy underscored his concern about the location of hazardous waste landfills and the racial and economic status of surrounding communities. 130 CONG. REC. H8815-16 (daily ed. Aug. 9, 1984).

11. GAO REPORT, *id.*, at 1. A sample size of four is too small to yield statistically significant results; nevertheless the figures are suggestive and politically charged. The eight southeastern states comprising the Environmental Protection Agency's Region IV are Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee. Alabama has one of the nation's oldest commercial hazardous waste land disposal facilities in the country. *Chemical Waste Management, Inc. v. Hunt*, 112 S. Ct. 2009, 2011 (1992). The State of Florida has undergone a recent study, conducted by the University of Central Florida, which indicates government is the "primary cause of racist pollution practices." Dave Newport, *Governments Pollute Black Areas*, FLA. ENV'TS, Mar. 1994, at 17.

12. Robert D. Bullard, *Solid Waste and the Black Houston Community*, 53 SOC. INQUIRY 273 (1983). Professor Bullard, a sociologist, has been involved in issues concerning environmental racism for approximately 14 years. He was appointed to President Clinton's transition team to address issues concerning race and the environment. The effectiveness and precise roles of the Clinton Administration and its outside advisors from the Environmental Justice Movement are yet to be seen. Marianne Lavelle, *Clinton Pushes on Race and Environment*, NAT. L. J., Dec. 6, 1993, at 1. Prof. Bullard's writings have been pivotal in facilitating congressional hearings and other workshops. See Marianne Lavelle, *Transition Meets with Minorities*, NAT. L. J., Dec. 14, 1992, at 1; Marianne Lavelle, *Activist Tapped for Transition*, NAT. L. J., Dec. 21, 1992, at 3; Marianne Lavelle, *Environmental Racism Targeted*, NAT. L. J., Mar. 1, 1993, at 3; Marianne Lavelle & Cris Carmody, *EPA Mulls Civil Rights Law at Hill Hearing*, NAT. L. J., Mar. 15, 1993, at 5. See also BULLARD, *supra* note 7 (1990) (presenting data showing that noxious facilities in the South are primarily in African-American communities).

13. UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES (1987) [hereinafter CRJ REPORT]. The

tion between the location of hazardous waste landfills and the racial and economic status of surrounding communities. While the GAO report examined only the southeastern United States, the CRJ report examined the entire nation. The CRJ report concluded: "Race proved to be the most significant among variables tested in association with the location of commercial hazardous waste facilities. This represented a consistent national pattern."¹⁴ The location of a hazardous waste facility is primarily based on the racial composition of the surrounding community.¹⁵ Such facilities are disproportionately located in low-income racial minority communities.¹⁶ Race is the most important factor, more important than socio-economic status.¹⁷ The CRJ report further found:

Three out of every five Black and Hispanic Americans lived in communities with uncontrolled toxic waste sites. More than 15 million Blacks lived in communities with one or more uncontrolled toxic waste sites. More than 8 million Hispanics lived in communities with one or more uncontrolled toxic waste sites. Blacks were heavily over-represented in the populations of metropolitan areas with the largest number of uncontrolled toxic waste sites. These areas include: Memphis, [Tennessee] (173 sites); St. Louis, [Missouri] (160 sites); Houston, [Texas] (152 sites); Cleveland, [Ohio] (106 sites); Chicago, [Illinois] (103 sites); Atlanta, [Georgia] (94 sites). Approximately half of all Asian/Pacific Islanders and American Indians lived in communities with uncontrolled toxic waste sites.¹⁸

The GAO and CRJ reports nurtured a burgeoning movement that has been examining the functional relationship between race, poverty, and environmental hazards. The movement is called the "environmental justice movement." The term denotes an effort to broaden the goals of environmental protection to include providing a clean and safe environment where racial minorities and low-income people live and work.¹⁹ The movement seeks to identify and address "environmental racism" which has been defined to in-

Commission for Racial Justice is the racial justice agency for the United Church of Christ. Its goal is to provide leadership in working for justice in the area of race.

14. CRJ REPORT, *supra* note 13, at xiii.

15. *Id.*

16. *Id.*

17. *Id.*

18. *Id.* at xiv.

19. John M. Cushman, Jr., *Environmental Hazards to Poor Gain New Focus at EPA*, N. Y. TIMES, Jan. 21, 1992, at C4. For a brief history of the Environmental Justice movement see BENJAMIN A. GOLDMAN, *THE TRUTH ABOUT WHERE YOU LIVE: AN ATLAS FOR ACTION ON TOXINS AND MORTALITY* 281 (1991). See also Dick Russel, *The Rise of the Grass Roots Toxic Movement*, 12 THE

clude "any policy, practice, or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color [as well as] exclusionary and restrictive practices that limit participation by people of color in decision-making boards, commissions, and regulating bodies."²⁰

C. *EPA Actions and Reports*

As part of their efforts, members of the environmental justice movement met with William K. Reilly, the U.S. Environmental Protection Agency [EPA] Administrator, in September 1990.²¹ The members called themselves "The Michigan Group."²² As a result of this meeting the EPA subsequently formed the "Environmental Equity Workgroup" to "assess the evidence that racial minority and low-income communities bear a higher environmental burden than the general population, and consider what EPA might do about any identified disparities."²³ The Workgroup consisted of senior-level officials from EPA regional offices and EPA headquarters; it agreed to report to the Michigan Group within a year.

In October 1991, the environmental justice movement held the First National People of Color Environmental Leadership Summit. The Summit convened in Washington, D.C., and declared "A Call to Justice" and "Principles of Environmental Justice."²⁴ Collectively, the "Call to Justice" and "Principles of Environmental Justice" outline the goals, aspirations and theoretical framework for the movement. The Principles call for: freedom from ecological destruction; mutual respect and freedom from discrimination; responsible use of land and renewable resources; the fundamental right to clean air, land, water and food; self-determination; accountability of hazardous waste producers; involvement in decision-making; worker safety; compensation and reparations; cleanup of cities; and in-

AMICUS J., (1990); Hawley Traux, *Minorities at Risk*, ENV'TL ACTION (Jan.-Feb. 1990); Keith Schneider, *Minorities Join to Fight Polluting Neighborhoods*, N.Y. TIMES, Oct. 25, 1991, at A20.

20. Robert Bullard, *The Threat of Environmental Racism*, 7 NAT. RESOURCES & ENV'T 23 (1993).

21. 1 U.S. EPA, ENVIRONMENTAL EQUITY—REDUCING RISK FOR ALL COMMUNITIES 2 (June 1992).

22. This name developed because the group had met earlier that year at the University of Michigan, Ann Arbor.

23. ENVIRONMENTAL EQUITY, *supra* note 21.

24. Sharon Sahid, *Environmental Group Agrees on Need for More Diversity*, USA TODAY, Oct. 24, 1991, at 11A.

formed consent and education about social and environmental issues.²⁵ The "Call to Justice" seeks: an end to "environmental genocide"; discontinuance of environmental racism; bans on hazardous waste exports; full reparations; restructuring of environmental organizations; a right to a healthy community; embodiment of principles of environmental justice; and an end to war, violence, and militarism as causes of environmental destruction.²⁶

Although the GAO and CRJ reports were focal points, the movement is not limited to the siting of hazardous waste facilities. Other areas of concern include proposals to site incinerators, landfills, and nuclear waste facilities on Indian lands; farmworkers' exposure to pesticides; discharges from chemical plants; air pollution problems in minority communities; lead poisoning; workplace conditions; the exportation of hazardous waste to developing countries; placement of homes for the homeless; and international trade.²⁷ Its rallying cry has been that the problem of environmental racism is pervasive and deeply entrenched in American culture and nationwide.²⁸

25. *A Call to Justice and Principles of Environmental Justice* (2 page photoduplicated document, distributed at the First National People of Color National Environmental Leadership Summit, Washington, D.C., Oct. 27, 1991).

26. *Id.*

27. See Judith Murakami, Comment, *Dances with Waste: Criminal Prosecution of Midnight Dumping in Indian Country*, 19 W. ST. U. L. REV. 541 (1992); Michael Satchell, *Trashing the Reservation?*, U.S. NEWS & WORLD REPORT, Jan. 11, 1993, at 24; Jackie Halifax, *Early Seminole Village Snags a Waste-Site Plan*, MIAMI HERALD, Sept. 27, 1992, at 7B; Dick Russel, *Sacred Lands—Dances with Waste*, 13 THE AMICUS J. 28 (1991); Conger Beasley, Jr., *Of Pollution and Poverty: Part 3: Deadly Threat On Native Lands*, 2 BUZZWORM 39 (Sept.-Oct. 1990); Conger Beasley, Jr., *Of Pollution and Poverty: Part 1: Reaping America's Unseemly Harvest*, 2 BUZZWORM 40 (May-June 1990); Luke Cole & Susan Bowyer, *Pesticides and the Poor*, 23 ENVTL. ACTION 22 (Sept.-Oct. 1991); Conger Beasley, Jr., *Of Pollution and Poverty: Part 2: Keeping Watch In Cancer Alley*, 2 BUZZWORM 38 (July-Aug. 1990); Hugh Hamilton, *Uptown Eco Blues*, *Environmental Woes in Harlem*, CITY SUN (New York), Jun. 5-11, 1991, at A5; Michel Gelobter, *The Distribution of Air Pollution by Income and Race* (paper presented at Second Symposium on Social Science in Resource Management, Urban, Illinois, June 1988); Tom Yulsman, *Lead Hazards at Home*, N.Y. TIMES, Apr. 28, 1991, § 6 (Magazine), at 28; Dan Baron, *Lead Poisoning: Communities Focus on #1 Environmental Disease*, THE NEIGHBORHOOD WORKS (Oct.-Nov. 1991); Tracy Freedman & David Weir, *Polluting The Most Vulnerable*, THE NATION (1983); Barbara Ruben, *Growing up at Risk*, 20 ENVTL. ACTION (1991); James C. Robinson, *Racial Inequality and the Probability of Occupation-Related Injury or Illness*, 62 MILBANK MEMORIAL FUND Q. 567 (1984); Karen Rafinski, *Lauderdale Vote to Move Homeless Camp Stirs Outcry*, MIAMI HERALD, Oct. 22, 1993, at 1. The North American Free Trade Agreement (NAFTA) addresses issues of trade and the environment between the United States, Canada and Mexico. Critics of NAFTA allege it, coupled with other trade agreements, adversely affects the United States economy in such areas as textile and apparel industry, commodities (peanuts, tobacco, etc.) and environmental health and safety standards.

28. Steven Keeva, *A Breath of Justice*, 1994 ABA J., 88.

In mid-1992 the EPA released its finding, which stated:

1. There are clear differences between racial groups in terms of disease and death rates. There are also limited data to explain the environmental contribution to these differences. . . The notable exception is lead poisoning.
2. Racial minority and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste facilities, contaminated fish, and agricultural pesticides in the workplace. Exposure does not always result in an immediate or acute health effect. High exposures, and the possibility of chronic effects, are nevertheless a clear cause for health concerns.
3. Environmental and health data are not routinely collected and analyzed by income and race. Nor are data routinely collected on health risks posed by multiple industrial facilities, cumulative and synergistic effects, or multiple and different pathways of exposure. . . . However, risk assessment and risk management procedures can be improved to better take into account equity considerations.
4. Great opportunities exist for EPA and other government agencies to improve communication about environmental problems with members of low-income and racial minority groups. . . .
5. Since they have broad contact with affected communities, EPA's program and regional offices are well suited to address equity concerns. . . .
6. Native Americans are a unique racial group that has a special relationship with the federal government and distinct environmental problems.²⁹

D. National Law Journal *Findings*

Beside government agencies, others were sparked into action by the efforts and advocacy of the environmental justice movement. For example, the *National Law Journal* examined the correlation between race and income and the EPA's enforcement of environmental laws. The resulting report revealed that not only are a disproportionate number of hazardous waste facilities located in low-income racial minority communities, but in addition, the EPA discriminates against minority communities in enforcing all federal environmental laws.³⁰ According to the *National Law Journal* report: 1) Penalties under hazardous waste laws at sites having the greatest

29. ENVIRONMENTAL EQUITY, *supra* note 21.

30. Marianne Lavelle & Marcia Loyle, *Unequal Protection—The Racial Divide in Environmental Law*, NAT'L L. J., Sept. 21, 1992, at S1-S12.

proportion of white residents are 500% higher than penalties at sites with the greatest minority population, averaging \$335,566 for white areas compared to \$55,318 for minority areas. 2) The disparity under the toxic waste laws occurs by race alone, not income. 3) For all the federal environmental laws aimed at protecting citizens from air, water, and waste pollution, penalties in white communities are 46% higher than in minority communities. 4) Under the giant Superfund cleanup program, abandoned hazardous waste sites in minority areas take 20% longer to be placed on the national priority list than those in white areas. 5) In more than half of the ten autonomous regions that administer EPA programs around the country, action on cleanup at superfund sites begins 12% to 42% later at minority sites than at white sites. 6) At sites in minority communities, the EPA chooses "containment," the capping or walling off of a hazardous waste dump site, 7% more frequently than the cleanup method preferred under the law permanent "treatment"—to eliminate the waste or rid it of toxins. At sites in white neighborhoods, the EPA orders treatment 22% more often than containment.³¹

E. *Aspen Clean-up Site*

These data are particularly striking when one further considers a particular case where the EPA expended a great deal of effort attempting to clean up a Superfund toxic waste site where the white, middle-class residents objected to the cleanup.³² The EPA designated the city of Aspen, Colorado, as a Superfund toxic waste cleanup site because lead was found in the soil. The residents perceived the federal cleanup proposal as having devastating economic effects on their community and had studies conducted to determine the health risk of certain levels of lead in their water sources. The results revealed that the lead did not necessarily pose a health risk. Six years and seven million dollars later, a panel ruled against the EPA. The EPA expended millions of dollars to dispute the cleanup despite minimal evidence of health-related risk. As a result scarce resources were wasted in middle-class Aspen while the toxic cleanup of minority sites languished.

The current practice of first cleaning the easiest sites or sites in affluent white neighborhoods is flawed as a method of protecting

31. *Id.*

32. *Aspen Resists EPA Lead Clean-Up Program*, National Public Radio, Morning Edition (aired Nov. 20, 1992).

public health, safety, and welfare. The Superfund program would be more effective and less discriminatory if cleanup regulations were health-based or technology-based.³³ Furthermore, the Aspen scenario demonstrates the EPA's poor planning and failure to manage its limited funds effectively. Overall, the problem is substantial, as 700 million tons of hazardous waste are being produced annually in the United States with an estimated cost of cleanup between \$500 million and \$1 trillion.³⁴ By the year 2000, the cost of controlling pollution will be \$160 billion a year, with Superfund costs over \$8 billion.³⁵ And, the EPA has acknowledged that in a tight economy with foreseeable economic restraints, environmental priorities must begin to reflect relative risk to human health and environment.³⁶

F. *The Traditional Environmental Movement*

Before the *National Law Journal* report was published, a substantial portion of the claims raised by the environmental justice movement had been ignored or belittled by mainstream environmentalists in the legal profession. Discussions of hazardous waste were confined to RCRA and CERCLA statutory interpretation discourse on matters concerning transaction costs and potentially responsible parties (PRP's). A discussion of hazardous waste in the context of social concerns and racial discrimination was considered neither proper nor scholarly, since such a connection was deemed tenuous and untenable. When the *National Law Journal* released its report, however, the environmental justice movement gained sudden legitimacy and became a proper intellectual topic of discussion among legal scholars. The initial short sightedness by scholars reflects the reality that: "Almost as color defines vision itself, race shapes the cultural eye, what we do and do not notice, the reach of empathy and the alignment of response."³⁷

33. See *Emissions Fee on Polluters Proposed as Alternative Superfund Liability Scheme*, Nat'l Envtl. Daily (BNA) (Oct. 12, 1993); *Hazardous Waste Public Education Key to Resolving Incinerator Siting Issue, Panel Tells EPA*, Nat'l Envtl. Daily (BNA) (Apr. 16, 1993); see also John Cushman, Jr., *Administration Plans Revision to Ease Toxic Cleanup Criteria*, N.Y. TIMES, Jan. 31, 1994, at A1.

34. Joel S. Hirschhorn, *Toxic Pollution*, 1992 EARTH J. 136; see also JON NAAR, *DESIGN FOR A LIVEABLE PLANET* 38 (1990).

35. U.S. GAO, *Environmental Protection: Meeting Public Expectations with Limited Resources* 8 (June 1991).

36. *Id.* at 15.

37. TAYLOR BRANCH, *PARTING THE WATERS: AMERICA IN THE KING YEARS, 1954-63*, at xii (1988).

G. *Five Hundred Year History of Environmental Discrimination*

The evolution of the environmental justice movement has also impacted the traditional environmental movement. The modern environmental movement was born in the 1960's and led to the enactment of statutes in the 1970's to protect the environment.³⁸ The environmental movement had primarily consisted of middle-class whites³⁹ and was dominated by the "Big Ten" environmental groups, which include: Sierra Club, National Audubon Society, Natural Resources and Defense Council, Environmental Defense Fund, Environmental Policy Institute, National Wildlife Federation, National Parks and Conservation Association, Izaak Walton League, Wilderness Society, and Defenders of Wildlife. However, the 1982 protest in Warren County, North Carolina, infused civil rights organizations into the environmental movement. This coincidence of interest did not mark the start of environmental racism.⁴⁰ The phenomenon of environmental racism in the western hemisphere existed over five hundred years ago, when European settlers first arrived and proceeded to confiscate Native American land and redefine land-use relationships.⁴¹ Dispossession of Native American land and enactment of oppressive laws affecting their land rights along with conflicts over use of natural resources all depict the problem of environmental racism.

H. *Ute Tribe and the Environmental Justice Movement*

The environmental justice movement has had a strained relationship with the environmental movement.⁴² For example, in Towaco,

38. FRANK GRAD, TREATISE ON ENVIRONMENTAL LAW § 1.01 (1992) (indicating industrial growth began to have a noticeable impact on the environment in the sixties); see also GERARD, *supra* note 1, at § 25.2.

39. TUCKER, *supra* note 1; see also *Beyond White Environmentalism: Minorities & the Environment*, ENVTL. ACTION (Jan./Feb. 1990).

40. One scholar notes that environmental justice is the "flip-side" of the municipal services struggle of the 1960's during which poorer communities asserted that the "benefits" were disproportionately placed in other communities. Vicki Been, *What's Fairness Got to Do with It? Environmental Justice and the Siting of Locally Undesirable Land Uses*, 78 CORNELL L. REV. 1001, 1003 (1993).

41. JAMES E. FALKOWSKI, INDIAN LAW/RACE LAW: A FIVE-HUNDRED-YEAR HISTORY (1992).

42. *Minorities Charge Toxic-Dumping Bias*, USA TODAY, Oct. 24, 1991, at 11A; Sahid, *supra* note 24; David Sive, *An Environmentalist's View of Environmental Racism*, 12 ENVTL. L. A.B.A. No.1 (Fall/Winter 1992-93) (coupling of environmental movement and race-justice issues raises question of whose concept of race-justice must be accepted). The environmental justice movement has also demonstrated the diverse views within the African-American community. See Keith Schneider, *Plan for Toxic Dump Pits Blacks Against Blacks*, N.Y. TIMES, Dec. 13, 1993, at A5.

Colorado, the Ute tribe acquired certain water rights and federal development funds. Environmentalists sought to stop the Ute tribe from establishing a project to channel the water to certain ranches, towns, and reservations because of danger to the Colorado squawfish. The Ute tribe argued that: "For 100 years we did not have running water on this reservation. Where were the environmentalists then? They weren't hollering about the terrible conditions of our children. But now, suddenly the squawfish is so important. More important than the Indian people apparently."⁴³ Suspicion toward the environmental movement was also expressed by the Director of the Chicano-based Southwest Organizing Project:

Not only is the management of these organizations devoid of qualified people of color, . . . but their policies are inimical to the social and economic welfare of minorities. . . . The milky complexion of the environmental movement threatens to limit its focus to a single-dimension Bambi perspective It boils down to different viewpoints. . . . We emphasize people rather than wildlife. We believe people of color are themselves an endangered species.⁴⁴

II. MEASURING ENVIRONMENTAL DISCRIMINATION, AND PAST LITIGATION: DIFFERENT MODELS OF RECOVERY INCLUDING THE EPA, TITLE VII, AND CONGRESSIONAL ACTION

Both the GAO and CRJ reports caused considerable discussion and debate.⁴⁵ Additionally, the reports have encouraged hearings, workshops, and possible legislation. However, more data is necessary. Neither the GAO nor the CRJ report discussed how to measure environmental discrimination.⁴⁶ Professor Michel Gelobter

43. Dirk Johnson, *Indians' New Foe: Environmentalist*, N.Y. TIMES, Dec. 28, 1991, at 11.

44. Conger Beasley, Jr., *Moore Takes on All*, 3 BUZZWORM 42 (May-June 1991).

45. Kelly Michele Colquette & Elizabeth A. Henry Robertson, *Environmental Racism: The Causes, Consequences, and Recommendations*, 5 TUL. ENVTL. L.J. (1991); Rachel D. Godsil, *Remedying Environmental Racism*, 90 MICH. L. REV. 394 (1991); Naikang Tsao, *Ameliorating Environmental Racism: A Citizens Guide to Combatting the Discriminatory Siting of Toxic Waste Dumps*, 67 N.Y.U. L. REV. 366 (1992); Symposium, *Race Class and Environmental Regulation* 63 U. COLO. L. REV. 4 (1992); NAT. L. J., Sept. 21, 1992; 12 ENVTL. L. (ABA) No. 1 (Fall/Winter 1992-93); Bullard, *supra* note 20; Rae Tyson, *We're Not Going to Put Up with It*, USA TODAY, Oct. 24, 1991, at 1A.

46. The GAO report indicates, "[W]e did not verify Bureau of the Census supplied data nor determine why the sites were selected, the population-mix of the area when the site was established, the distribution of the population around the landfill, nor how the communities' racial and economic status compared to others in the state. Also, we did not determine whether any of these sites pose a risk to surrounding communities." GAO REPORT, *supra* note 10, at 3.

has offered a model.⁴⁷ This model proves useful in identifying environmental discrimination beyond the hazardous waste siting issue. Gelobter posits that environmental discrimination can be placed within a measurable empirical framework utilizing economic assessment or physical measures.⁴⁸ He offers the following chart for illustrative purposes:

Measures of "environmental discrimination"	
Economic	Physical
Benefits: — reduction times willingness-to-pay Costs: — costs of abatement Net costs/benefits: — costs of abatement minus damages from exposure Property value: — increased rent or housing values as a result of improved environmental quality	Exposure to pollutants: — absolute — relative/rate of improvement — proximity to pollutant sources — cumulative: multi-pollutant or multi-source Aesthetic values: — view — proximity to open space/recreation/nature Health impacts: — individual — community

In his view, physical measures, rather than economic estimates, provide a better basis for pollution abatement strategies.⁴⁹ This approach is preferable because it acknowledges the shortcomings of an exclusively economic analysis, which is often built upon an unstable scenario in which parties bargain for the right to pollute. Ideally, a polluter pays the community for the right to pollute. For example, the U.S. Department of Energy reported that seven communities around the United States are under review as possible sites for multimillion-dollar warehouses to store thousands of tons of nuclear waste. Among the seven proposed sites, five are on Native American reservations. The sites are in Washington State (Yakima Nation); North Dakota (Grant County); Minnesota (Prairie Island Community); Wyoming (Fremont county); Oklahoma (Sac and Fox Nations); New Mexico (Mescalero Apache Tribe); and Oklahoma

47. Michel Gelobter, *Race, Class & Outdoor Air Pollution: The Dynamics of Environmental Discrimination From 1970 to 1990* (1993) (unpubl. Ph.D. dissertation, Univ. of Calif. (Berkeley)).

48. *Id.* Gelobter offers an empirical framework through the study of air pollution and concludes that the benefits derived from regulation of air pollution have accrued to the wealthy.

49. *Id.*

(Chickasaw Nation).⁵⁰ These communities would contract to receive millions of dollars in exchange for industry placing nuclear waste on their lands.

The premise of bargained decision-making, however, ignores the historical relationship of power and socio-economic forces. The Commission for Racial Justice emphasized this point by stating:

Racial and ethnic communities have been and continue to be beset by poverty, unemployment and problems related to poor housing, education and health. These communities cannot afford the luxury of being primarily concerned about the quality of their environment when confronted by a plethora of pressing problems related to their day-to-day survival. Within this context, racial and ethnic communities become particularly vulnerable to those who advocate the siting of a hazardous waste facility as an avenue for employment and economic development. Thus, proposals that economic incentives be offered to mitigate local opposition to the establishment of new hazardous waste facilities raise disturbing social policy questions.⁵¹

Bargains or general economic incentives for pollutants are rarely reached. Generally, low-income racial minority groups lack political power and seldom have input into the decision-making process. Furthermore, such an arrangement does not reduce pollution in such communities, but merely views pollution as the cost of doing business.

In concluding that the location of a hazardous waste facility is primarily based upon the racial composition of the surrounding community and that such policies constitute discriminatory practices, the GAO and CRJ reports embrace the notion that environmental discrimination is measured by "proximity to pollutant sources." A number of cases have followed this rationale in asserting equal protection violations under the U.S. Constitution's Fourteenth Amendment. For example, in *Bean v. Southwestern Waste Management Corp.*,⁵² residents contested a decision by the Texas Department of Health granting a permit to operate a solid waste landfill in their neighborhood. The residents of an 82% African-American neighborhood alleged the decision to allow the permit was motivated by racial discrimination. The court rejected the

50. See Keith Schneider, *Grants Open Door for Nuclear Waste*, N.Y. TIMES, Jan. 9, 1992, at A14. See generally DAVID MORELL & CHRISTOPHER MOGORIAN, SITING HAZARDOUS WASTE FACILITIES: LOCAL OPPOSITION AND THE MYTH OF PREEMPTION (1982); MICHAEL O'HARE ET AL., FACILITY SITING AND PUBLIC OPPOSITION (1983).

51. CRJ REPORT, *supra* note 13, at xii.

52. 482 F. Supp. 673 (S.D. Tex. 1979), *aff'd*, 782 F.2d 1038 (5th Cir. 1986).

equal protection claim, finding that the residents' statistical data failed to prove the decision to grant the permit showed intent to discriminate on the basis of race but nonetheless concluded, "[T]he plaintiffs have established that the decision to grant the permit was both unfortunate and insensitive."⁵³

An equal protection claim arose in another siting case, *East Bibb Twigg's Neighborhood Ass'n v. Macon-Bibb County Planning & Zoning Commission*.⁵⁴ In *East Bibb*, the residents alleged that they were deprived of equal protection of the law by a local planning and zoning commission's decision to allow a landfill in the census tract where they resided. Seventy-six percent of the residents in the census tract were African-American. The Georgia district court applied the factors enunciated in *Arlington Heights*⁵⁵ and held there was insufficient evidence to establish that the commission's decision to allow the landfill was motivated by purposeful race discrimination.

The *Bean* and *East Bibb* cases demonstrate the courts' reluctance to grant relief for siting policies that appear discriminatory on their face.⁵⁶ Despite historical patterns and disproportionate effects, courts have denied relief absent a showing of intentional or purposeful discrimination.⁵⁷ In essence, courts narrowly construe the Equal Protection Clause to the detriment of groups that unfairly bear the brunt of environmental hazards under the guise of economic apportionment.

The Equal Protection Clause declares that no state shall "deny to any person within its jurisdiction the equal protection of the laws."⁵⁸ Courts have construed the clause from an antidiscrimina-

53. 482 F. Supp. at 680.

54. 706 F. Supp 880 (M.D. Ga. 1989), *aff'd*, 896 F.2d 1264 (11th Cir. 1989).

55. In *Village of Arlington Heights v. Metropolitan Housing Development Corp.*, 429 U.S. 252, 266-68 (1977), the Court held that the city's decision not to change zoning from single to multi-family residents to allow integrated housing was not an equal protection violation. The Court established several factors from which discriminatory intent may be inferred: (1) impact of official's action on a particular race; (2) historical background of the decision; (3) sequence of events leading to decision; (4) any departures, substantive or procedural, from the normal decision-making process; and (5) legislative or administrative history of the action challenged.

56. In addition to *Bean* and *East Bibb*, the court in *R.I.S.E., Inc. v. Kay*, 768 F. Supp. 1144 (E.D. Va. 1991), held that the claimants had not demonstrated that a decision to site a landfill in a predominantly African-American community was motivated by purposeful race discrimination even though the community was the site of three prior landfills.

57. See Peter L. Reich, *Greening The Ghetto: A Theory of Environmental Race Discrimination*, 41 KAN. L. REV. 272, 294 (1992).

58. U.S. CONST. amend. XIV, § 1.

tion perspective and from an antijudgment perspective.⁵⁹ The Supreme Court tends to adopt the antidiscrimination approach in applying the Clause.⁶⁰ This approach focuses on the actor or perpetrator. The Court acknowledges a disparate impact on the minority group but goes on to examine the actor's intent—i.e., whether the decision was motivated by race—rather than focus on the impact of the actor's conduct on the victim.⁶¹ Such an approach tends to view racial discrimination as an isolated event by a few deviant individuals. In effect, "[E]qual protection jurisprudence reflects a society that merely rebukes accidental manifestations of prejudice, condemning them as social blunders rather than recognizing them as symptoms of a deeper societal pathology."⁶² The approach implicitly assumes that we live in a color-blind society. Racism is perceived as an abnormal growth of a liberal democracy and something we want to abolish, not something that reinforces American society.⁶³ The antidiscrimination approach ignores the possibility, if not probability, that certain inadvertent or indifferent government conduct—as opposed to purposeful conduct may foster and perpetuate racial subjugation.⁶⁴

The antijudgment approach, on the other hand, focuses not on the mental state of the actor but on the impact of conduct or policies on the victim. The fundamental premise of this approach is recognition of the equal worth of all people. Under this approach, the equal protection analysis examines challenged conduct such as siting hazardous waste facilities in a broader social and historical context and determines whether oppressive conditions persist.

59. See LAURENCE H. TRIBE, *AMERICAN CONSTITUTIONAL LAW* § 16-21, at 1514-21 (2d ed. 1988). For an excellent discussion about competing theories in the context of race and criminal punishment, see Dorothy E. Roberts, *Punishing Drug Addicts Who Have Babies: Women of Color, Equality, and Right of Privacy*, 104 HARV. L. REV. 1419 (1991).

60. David A. Strauss, *Discriminatory Intent and the Taming of Brown*, 56 U. CHI. L. REV. 937 (1989).

61. The Supreme Court articulated this approach in *Washington v. Davis*, 426 U.S. 229 (1976).

62. Donald E. Lively & Stephen Plass, *Equal Protection: The Jurisprudence of Denial and Eviction*, 40 AM. U. L. REV. 1307, 1314 (1991).

63. See DERRICK BELL, *FACES AT THE BOTTOM OF THE WELL* 9 (1992) (discussing the prevailing racial theme in America and quoting the texts of GUNNAR MYRDAL, *AN AMERICAN DILEMMA: THE NEGRO PROBLEM AND MODERN DEMOCRACY* (1944), and JENNIFER MOCHILD, *THE NEW AMERICAN DILEMMA* (1984)).

64. See TRIBE, *supra* note 59, at 1518-19; see also *State v. Stevens*, 54 Crim. L. Rep. (BNA) 21 (Wis. Mar. 2, 1994) (holding that sentencing guidelines for comparable amounts of crack cocaine and powder cocaine which result in a sentence 100 times greater for crack cocaine offenders than for cocaine powder offenders violate equal protection principles).

This approach has solid legal antecedents and is sensitive to the difficulties of proof inherent in an intent-based inquiry. Using this approach, courts would therefore focus on the community, considering the evidence that a disproportionate number of facilities exist in low-income racial minority communities, and examine siting policies in a broader social and historical context. Such an analysis would critically examine siting practices that harm traditionally disfavored communities.

So far, equal protection claims have failed for environmental discrimination claimants. The Supreme Court, in relying upon the antidiscrimination approach, "assures us that the harm to blacks, its 'disproportionate impact, is not irrelevant, but . . . is not the sole touchstone of an invidious racial discrimination forbidden by the Constitution.'"⁶⁵ The Court's focus fails to recognize the Fourteenth Amendment's concern for persons whose humanity has been denied. It ignores the fact that this constitutional provision was enacted in 1868 to provide "citizenship" to former slaves and their offspring.⁶⁶ Consider the statement of Senator Jacob Merritt Howard, an architect of the Fourteenth Amendment, that demonstrates the challenge before the nation:

For weal or for woe, the destiny of the colored race in this country is wrapped up with our own; they are to remain in our midst, and here spend their years and here bury their fathers and finally repose themselves. We may regret it. It may not be entirely compatible with our taste that they should live in our midst. We cannot help it. Our forefathers introduced them, and their destiny is to continue among us; and the practical question which now presents itself to us is as to the best mode of getting along with them.⁶⁷

As Derrick Bell has noted,

[I]t is beyond dispute that the Republicans recognized that unless some action was taken to legitimate the freedmen's status, Southerners would utilize violence to force blacks into slavery, thereby renewing the economic dispute that had led to the Civil War. To avoid this result, the Fourteenth and Fifteenth Amendments and Civil Rights Acts of 1870-1875 were enacted. The Fourteenth Amendment, unpassable as a specific protection for black rights, was enacted finally as a general guarantee of life, liberty, and property of all "persons." Corporations, following a

65. DERRICK BELL, *AND WE ARE NOT SAVED* 170 (1987) (quoting *Washington v. Davis*, 426 U.S. 229, 242 (1976)).

66. BELL, *supra* note 63, at 54.

67. Quoted in *id.* at 168.

period of ambivalence, were deemed persons under the Fourteenth Amendment, and for several generations received far more protection from the courts than did blacks. Indeed, blacks became victims of judicial interpretations of the Fourteenth Amendment and legislation based on it so narrow as to render the promised protection meaningless in virtually all situations.⁶⁸

Congress adopted the Fourteenth Amendment to abrogate the disadvantages that African-Americans experienced as a result of their inferior status as institutionalized by law. The congressional intent was that African-Americans be accorded the same rights as whites.⁶⁹ However, the current interpretation of the Equal Protection Clause, which imposes a intent-based standard, has produced opposite results with respect to siting of hazardous waste facilities. The intent-based requirement has led the courts to avoid racial justice because, absent purposeful discrimination, the courts preclude social change and maintain the status quo.⁷⁰

Title VI of the Civil Rights Act of 1964 may prove more useful than the Equal Protection Clause for environmental discrimination claimants. Title VI prohibits recipients of federal funds from discriminating on the basis of race, color, or national origin.⁷¹ A Title VI claim, unlike an equal protection claim, does not require a showing of purposeful race discrimination. It requires merely a showing of "disparate impact."⁷² However, it is currently unsettled as to whether Title VI applies to EPA decision-making. The EPA has asserted that Title VI does not apply to its decision-making. While the EPA has maintained this position from 1971 to early 1993, the stance lacks support from any internal policy or legal precedent.⁷³

68. DERRICK BELL, *RACE, RACISM AND AMERICAN LAW* 38-39 (3d ed. 1992).

69. See Louis H. Pollak, "Original Intention" And *The Crucible of Litigation*, 57 U. CIN. L. REV. 867, 881 (1989) (discussing Professor Fairman's article about whether the Fourteenth Amendment established that all provisions of the Bill of Rights were protected against state action. See Charles Fairman, *Does the Fourteenth Amendment Incorporate the Bill of Rights? The Original Understanding* 2 STAN. L. REV. 5, 138-39 (1949)).

70. See Lively & Plass, *supra* note 62, at 1311.

71. Title VI of the Civil Rights Act of 1964 provides: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." 42 U.S.C. § 2000d (1988).

72. See *Lau v. Nichols*, 414 U.S. 563 (1974). In *Lau*, non-English speaking students of Chinese ancestry brought suit against school district alleging unequal educational opportunities due to official's failure to establish a program to rectify the students' language problem. The Court relied upon § 601 of the Civil Rights Act of 1964 (42 U.S.C. § 2000d) stating, "Discrimination is barred which has that effect even though no purposeful design is present" *Id.* at 568.

73. Stephen C. Jones, *Inequities of Industrial Siting Addressed*, NAT. L.J., Aug. 16, 1993, at 20.

Regardless of the EPA's position, Congress has taken the lead in addressing the problem of environmental discrimination and ameliorating the harm that the Court's intent-based inquiry for equal protection claims has failed to redress.

For example, the U.S. Senate approved the Department of Environmental Protection Act.⁷⁴ The Act would establish an office of Environmental Justice, which would undertake further study on the correlation between race and environmental hazards; it also would require the identification of high-impact toxic areas. Furthermore, members of the House of Representatives are drafting a bill to raise the EPA to the cabinet level, create a department to enforce Title VI, ensure that government agency decisions do not disproportionately impact low-income racial minority communities, and increase inspections and enforcement.⁷⁵ Finally, Congressional activity also includes an attempt to pass an Environmental Justice Act. A bill introduced in Congress by Senator Albert Gore, Jr., and Representative John Lewis sought "to establish a program to ensure equal protection of the public health." The bill would require the EPA to inspect, identify, list, and place a moratorium on siting new hazardous waste facilities in areas designated as having the highest total weight of toxic chemicals.⁷⁶ Although the legislation was not passed in 1992, it has the full support of members of the environmental justice movement. Organizers of the 1993 March on Washington urged the passage of the Act as part of their legislative package.⁷⁷

Possible avenues of recovery for the claimant seeking to challenge discriminatory, environmentally-related practices include: Title VIII of the Civil Right Act, 42 U.S.C. § 1982, the Fifth Amendment Takings Clause, Clean Air Act, and Clean Water Act, Lead Contamination Control Act, CERCLA, state constitutional theories, civil liberties theories, and common law nuisance claims.⁷⁸

74. *Id.*

75. *Id.*

76. See S. 2806, 102d Cong., 2d Sess. (1992); H.R. 5326, 102d Cong., 2d Sess. (1992). The Act has been reintroduced as H.R. 2105 on May 12, 1993 and S. 1161 on June 24, 1993. President Clinton has issued an executive order requiring federal agencies to develop programs to address environmental problems of low-income racial minorities. *Environmental Justice Proponents Have Washington's Ear*, ENV'T TODAY, Mar. 1994, at 6.

77. See Tony Pugh, *Diverse Visions Find a New Unity at March*, MIAMI HERALD, Aug. 29, 1993, at 1A.

78. Helen Hershkoff, *Environmental Equity: The New Frontier of Civil Liberties*, 2 LAND USE FORUM 23 (1993); Alice L. Brown, *Environmental Justice: New Civil Rights Frontier*, TRIAL (July 1993) at 48-49; Jones, *supra* note 73, at 20.

Tort claims, such as nuisance or emotional distress, are also possible theories of recovery for environmental discrimination claimants. In alleging tortious conduct, however, mere exposure to a pollutant is insufficient.⁷⁹ Exposure coupled with health impacts is more persuasive, but securing proof or establishing causation would prove a major obstacle for environmental discrimination claimants.⁸⁰

In effect, traditional legal theories of recovery such as tort law claims or claims of statutory violations requiring proof of discriminatory intent have proved inadequate to stop the presence and remedy the effects of a disproportionate number of hazardous

79. See Thomas J. Bois, II, *Defending Against Environmental Claims*, THE BRIEF (Fall 1992) (contending that in practically all toxic tort claims, the existence, cause and source of the injury is at issue); see also *Allen v. United States*, 588 F. Supp. 247 (D. Utah 1984); *Ferebee v. Chevron Chemical Co.*, 736 F.2d 1529 (D.C. Cir. 1984); *Velsicol Chemical Corp. v. Rowe*, 543 S.W.2d 337 (Tenn. 1976) (discussing duty to warn issue in context of multiple sources of pollution).

80. For example, in Louisiana, along the Mississippi River, a low-income black community is called Cancer Alley. Companies in the area include Borden, Shell, Uniroyal, Vulcan, BASF, Rubincon, and Ciba-Geigy. The Borden plant emits "rain" droplets that reportedly cause itching. Residents call the droplets "toxic gumbo." Various carcinogens and neurotoxins are burned in the area. Residents within 1 mile of the plant have a 4.5% greater chance of contracting lung cancer than those living one to three miles away. The statistics on lung cancer in the area are disputed by companies and local government, who allege health problems in African-American communities arise from smoking, drinking and high cholesterol food with no connection between the petrochemical plants and the residents' health problems. See Beasley, *Of Pollution and Poverty: Part 2: Keeping watch in Cancer Alley*, *supra* note 27, at 41. Another example of how low-income minority groups experience health problems and face difficulties proving cause and effect is in New York City. Harlem, a predominantly low-income African-American community of 40,000 is north of Central Park in Manhattan, New York. At North General Hospital in Harlem, asthma is the fifth most common disease reported (of the 20 million people nationwide who suffer from asthma, over 50% are African-American). An environmental factor that may explain asthma rates in Harlem is the emissions of diesel fuel from buses. Of the six bus depots in Manhattan, four are in Harlem. Reports indicate diesel emissions contribute to or aggravate asthma, bronchitis, emphysema, influenza, and certain cardiovascular problems. However, numerous other factors may precipitate asthma, such as: cosmetic sprays, perfumes, household deodorizers, oil, gas, kerosene, coal, asbestos, wet or damp carpeting, pressed wood products, heating and cooling systems, radon, pesticides, and humidification devices. See Hugh Hamilton, *Uptown Eco Blues, Environmental Woes in Harlem*, CITY SUN (New York), June 11, 1991, at A1; Eric A. Goldstein & Mark A. Izeman, *N.Y. Air*, THE AMICUS JOURNAL (Summer 1990); Jonathan M. Samet, et al. "Health Effects and Sources of Indoor Air Pollution" AM. R. OF RESPIRATORY DISORDERS (1987); U.S. EPA, Indoor Air Facts No. 4 Sick Building Syndrome, (Apr. 1991) (brochure); *Congressional Testimony before the Subcomm. On Superfund, Ocean and Water Protection of Senate Comm. on Environment and Public Works*, 100th Cong., 2d Sess. (1989) (testimony of J. Donald Millar, M.D., Director National Institute for Occupational Safety and Health Centers for Disease Control).

waste facilities in low-income racial minority communities.⁸¹ The disparate impact model used in the employment context can be an effective tool in remedying environmental discrimination.⁸² This model, which was developed by the Court, would allow environmental discrimination victims to circumvent the proof of intent requirements associated with an equal protection action.⁸³ Application of the disparate impact model to environmental discrimination cases is appropriate because, like employment discrimination victims, environmental discrimination claimants generally cannot obtain proof of wrongful intent. Yet environmental discrimination victims must live with the consequences of a disproportionate number of toxic facilities in their communities and with the associated health risks. As such, the Court should shift its focus from "motivation" to "effects," thereby allowing environmental discrimination victims to rely on statistical or numerical proof of discriminatory consequences in establishing violations. Congress has shown its general support for the disparate impact model.⁸⁴

III. FEDERAL AND STATE NOTICE REQUIREMENTS

Communication between government agencies and local communities is often in the form of a public notice. The shortcomings of traditional public notice are amply illustrated in the events sur-

81. Historically African-Americans have had to rely on non-traditional methods to remedy discriminatory practices, such as marches and boycotts. See generally BRANCH, *supra* note 37; MARK TUSHNET, *THE NAACP: LEGAL STRATEGY AGAINST SEGREGATED EDUCATION, 1925-1950* (1987). See also GIRARDEAU A. SPANN, *RACE AGAINST THE COURT* (1993) (contending the majoritarian nature of the Supreme Court functions to perpetuate the subordination of racial minorities for majority gain). In this view the Supreme Court has proved unworkable and counterproductive. Since the Supreme Court has evidenced this attitude, minorities must show concern for themselves and terminate dependency on the Court. Ironically, one author suggests the effect of environmental contaminants, such as lead paint, may serve as a defense rather than a cause of action. Deborah W. Denno, *Considering Lead Poisoning as a Criminal Defense*, 20 *FORDHAM URB. L.J.* 377 (1993).

82. See *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971) (Title VII contemplates consideration of motivation as well as consequences).

83. Instead of showing intent, plaintiffs would be able to rely on the presence of a disparate number of facilities in their communities to establish a violation.

84. The Court attempted to write the disparate impact model out of the employment field in *Wards Cove Packing Co. v. Atonio*, 490 U.S. 642 (1989) by requiring proof of causation. However, Congress overturned *Wards Cove* in the Civil Rights Act of 1991, Pub. L. No. 102-166, § 105, 105 Stat. 1071, 1074 (Nov. 21, 1991), by codifying the *Griggs* disparate impact test. Congress also affirmed a statutory basis for impact suits in the 1991 Act. § 3, 105 Stat. at 1071. For a good discussion of the causation concerns associated with the "intent" and "impact" models of proof, see Stephen A. Plass, *Bedrock Principles, Elusive Construction, and The Future of Equal Employment Laws*, 2 *HOFSTRA L. REV.* 313 (1992).

rounding a proposed siting of a medical waste facility in the South Bronx. Residents of the South Bronx, a low-income racial minority community in New York City, wanted to stop the construction of a forty-eight-ton-a-day medical waste incinerator in their community. State government officials said the facility posed minimal health hazards, citing a cancer risk of less than one in a million.⁸⁵ South Bronx residents asserted they had been unaware that the facility would be built and did not want it in their community. The Regional Director of the New York State Environmental Conservation Department argued that the legal requirements for public notice were met because there had been a public hearing. He contended that notice of the public hearing had been released to the community and that the hearing had lasted 35 minutes. Furthermore, numerous members of the Community Board had been at the public

85. Evaluation of the possibility or probability that something harmful to human health or safety will occur is termed "risk assessment." The concept of risk assessment is an integral part of environmental concerns. However, a dependency on risk assessment places concerns about a clean environment into lifeless technical debates about balancing risk and cost rather than health and the environment. The assertion that "one in a million" persons may become ill or die from a particular environmental hazard is often misleading. Are such statistics limited to the healthy middle-aged adult white male, excluding other racial groups, children, pregnant women and the unborn fetus? Recent studies indicate dioxin may pose a greater risk to a fetus exposed to the chemical. See Mike Mager, *Shifts in Sexuality: Contaminants Tied to Subtle Human Changes*, STAR TRIBUNE (Minneapolis) Sept. 17, 1992, at 9E. Furthermore, risk assessment is also prone to error as seen in the continuous debate concerning dioxin and the Times Beach incident, and the EPA's raising and lowering of acceptable levels of lead in drinking water. See Rosenthal, et al., *Legislating Acceptable Cancer Risk from Exposure to Toxic Chemicals*, 19 ECOLOGY L.Q. 269 (1992); E. Ann Cardinal, *Risky Business: Communicating Risk for the Government*, 25 ENVTL. SCI. TECH. 1983 (1991); P. Sandman, *Risk Communication: Facing Public Outrage*, EPA J. 21-22, (Nov. 1987); P. Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277 (1985); Elaine Vaughan & Brenda Nordenstam, *The Perception of Environmental Risk Among Ethnically Diverse Groups*, 22 J. OF CROSS-CULTURAL PSYCHOL. 29 (1991); U.S. GAO, ENVIRONMENTAL PROTECTION MEETING PUBLIC EXPECTATIONS WITH LIMITED RESOURCES (June 1991); William Reilly, *Taking Aim Toward 2000: Rethinking the Nation's Environmental Agenda*, 21 ENVTL. L. 1375 (1991); Acheson, *The Department of Risk Reduction or Risky Business*, 21 ENVTL. L. 1375 (1991). Furthermore, discussions about risk associated with hazardous waste facilities in minority communities may focus on reduction rather than elimination of certain conditions. For example, in an effort to dispel community concerns about risk associated with hazardous waste facilities, it has been suggested to substitute old facilities with new ones. KENT E. PORTNEY, *SITING HAZARDOUS WASTE TREATMENT FACILITIES: THE NIMBY SYNDROME* (1991). Risk allocation should be based upon community utility, ability to bear risks, compensation and consent. See Dale R. Hattis, et al., *Airborne Lead: A Clear Cut Case of Differential Protection*, ENV'T (Jan.-Feb. 1982). There is the suggestion that estimates of risk give rise to fear and courts have inappropriately allowed recovery for perceived rather than actual risks. This has resulted in increased litigation and higher health care costs. Martha A. Churchill, *Medical Monitoring and Cancerphobia - The Rise of Fear Lawsuits*, 35 FOR THE DEFENSE (Aug. 1993) at 2.

hearing, and the Board had the responsibility to inform the community in the general locale of the proposed facility. In the Director's view, the community had no standing to raise the issue of whether or not the facility should be built in their community because the opportunity to express their views and objections had passed.⁸⁶

Although the above scenario did not involve a hazardous waste facility, it highlights the issue of whether a causal connection exists between the type of notice government entities provide and the disproportionate number of hazardous waste facilities in low-income racial minority communities. It appears the South Bronx community received inadequate information in either form or substance. Information was either not disseminated or was disseminated in an inappropriate manner. Obvious questions come to mind: where and when was the notice posted? Was it in a form lay persons could understand? Who selected the Community Board? When and where were the hearings held? Did the notice provide sufficient information about the risks of such a facility? Was the community aware of the finality of the process? Were there Spanish translations for the large population of Latinos in the South Bronx?⁸⁷ Similar questions arise when considering whether the current notice requirements for siting a hazardous waste treatment, storage, or disposal facility are unfair to certain communities. In other words, does insufficient notice and communication contribute to the problem of environmental inequities?

Hazardous waste consists of a combination of solid wastes that either exhibits one of certain characteristics such as toxicity, corrosivity, or flammability or has been specifically listed by the EPA as hazardous waste because of its potential for harm.⁸⁸ The federal

86. Dennis Hevesi, *Bronx Foes Try To Stop Medical Incinerator*, N. Y. TIMES, Nov. 2, 1991, at 3. Similarly, in Ouachita Parish, Louisiana, citizens protested the importation of lead-contaminated soil from Texas. They alleged they were not informed of the project before EPA approval, and thus not allowed to voice their concerns at a public hearing. *Using the Big Guns Now*, LA. INDUS. ENVTL. ALERT (Envtl. Compliance Rep.) (Feb. 1992).

87. In our multicultural society, should various translations be provided based upon the composition of the affected community?

88. 42 U.S.C. §§ 6903(5), 6921 (1988); RCRA § 1004(5). See 4 JACKSON B. BATTLE & MAXINE I. LIPELES, ENVIRONMENTAL LAW: HAZARDOUS WASTE (1993). Information released by the EPA indicates, "Twenty-five percent of our two million underground hazardous waste storage tanks are leaking, and thousands more will soon leak. Many of these sources contain hundreds of chemicals that can reach groundwater and drinking water wells—toxic chemicals such as those in plastic, solvents, pesticides, paints, dyes and ink. Some 40,000 public water systems and 13 million wells that supply 50 percent of Americans with drinking water are

legislation pertaining to hazardous substances encompasses air and water pollution, pesticides, food, consumer products, workplace conditions, and hazardous substance releases.⁸⁹ Two principal federal statutes regulate hazardous waste. The Resource Conservation and Recovery Act (RCRA) was enacted in 1980 and regulates day to day generation and handling of hazardous waste. It is described as a "cradle-to-grave" statute because it regulates a hazardous substance from its creation through disposal.⁹⁰ The other federal statute, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or the Superfund Law),⁹¹ provides for the cleanup of contaminated hazardous waste sites.⁹²

Although there is substantial federal legislation impacting upon hazardous waste siting, treatment, storage, and disposal, states are authorized to enact their own legislation. State legislation may be more stringent than federal requirements.⁹³ Consequently, both

known to be contaminated." Richard D. Morrissey, *A Perspective On Environmental Pollution, Risk and Liability*, NAT. BAR ASSOC. MAG. (Mar. 1993), 27.

89. MICHAEL R. GREENBERG & RICHARD F. ANDERSON, *HAZARDOUS WASTE SITES: THE CREDIBILITY GAP* (1984); see also Gerrard, *supra* note 1; TRAVIS P. WAGNER, *THE HAZARDOUS WASTE Q & A* (1992).

90. 42 U.S.C. §§ 6901-6986 (1988). See BATTLE & LIPELES, *supra* note 88 (providing an excellent overview of hazardous waste laws); see also Gerrard, *supra* note 1. The intricacy of RCRA and CERCLA has further produced extensive common law. See *United States v. North-eastern Pharmaceutical & Chemical Co. Inc.*, 810 F.2d 726 (8th Cir. 1986).

91. 42 U.S.C. § 9601 (1988). CERCLA, along with numerous other environmental laws, has its roots in public awareness and environmental catastrophes. See *supra* notes 1-6 and accompanying text. See also James B. Reed, *Warning: Hazardous Materials on Board*, STATE LEGISLATURE (Oct. 1991) (discussing how the Hazardous Materials Transportation Uniform Safety Act of 1990 (HMTUSA) was enacted because of public concerns about the dangers of transporting hazardous waste materials). For a description of the evolution of environmental law, see GRAD, *supra* note 38, at § 1.01; Gerrard, *supra* note 1, at § 25.2.

92. Although RCRA and CERCLA are the two principal hazardous waste statutes, there is considerable federal legislation which regulates hazardous substances: Clean Air Act, 42 U.S.C. § 7401 (1988 and 1992 Supp. IV) ; Water Pollution Control Act, 33 U.S.C. § 1251 (1988); Ocean Dumping Act, 16 U.S.C. § 1401 (1988); Safe Drinking Water Act, 40 U.S.C. §§ 300f-300j (1988); Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136-136y (1988); Toxic Substances Control Act, 15 U.S.C. § 2601 (1988) ; and the National Environmental Policy Act, 42 U.S.C. § 4321 (1988).

93. Gerrard, *supra* note 1, at § 25.1; Robert B. Poyasek, *IMPACT OF LEGISLATION AND IMPLEMENTATION ON DISPOSAL MANAGEMENT PRACTICES*, in 3 *TOXIC AND HAZARDOUS WASTE DISPOSAL* 21 (1980). State laws that interfere with or are contrary to the laws of Congress are invalid. U.S. CONST., art. VI, cl. 2; see *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218 (1947); *Pacific Gas & Electric Co. v. State Energy Resources Conservation and Dev. Commis.*, 461 U.S. 190 (1983). Although the states are able to adopt regulations more stringent than federal laws, one notable exception involves attempts by states to prevent the interstate flow of hazardous waste. See *City of Philadelphia v. New Jersey*, 437 U.S. 617 (1978); *Fort Gratiot Landfill, Inc. v. Michigan Dep't of Natural Resources*, 112 S. Ct. 2019 (1992); *Chemical*

the federal and state governments have hazardous waste siting criteria, which include notice requirements that are prerequisites to authorizing a facility. RCRA requires that the EPA ensure that the public has an opportunity to participate in the hazardous waste permit process.⁹⁴ The federal public participation requirements under RCRA provide:

The EPA regional office must develop mailing lists of interested persons. The list includes names of persons who have participated in past permit proceedings and individuals who request that their names be included. EPA must also notify the public periodically—through public press and environmental news bulletins, State and regional funded newsletters, and state law journals—about the opportunity to be put on the lists.

EPA must provide a minimum of forty-five days for public comment after a draft permit is prepared. Notice of the draft permit must be sent to people on the mailing list, broadcasted over local radio stations, printed in local newspapers, and announced in any other medium designed to elicit public participation.

EPA must provide a hearing if requested in writing during the comment period. Notification of the hearing must be at least thirty days before the hearing, and the public comment period is extended until the close of the hearing.

After the public hearing the EPA regional office responds to public comments, indicates changes made in the permit, and either issues or denies the permit. Public notice of this decision and appeal procedures are sent to interested parties, persons who submitted comments, and hearing participants. Thirty days are allowed to file and appeal petition. The Administrator is permitted a “reasonable amount of time” (not defined in the regulations) either to grant or deny the appeal petition.⁹⁵

The public participation requirements under state law do not vary considerably from RCRA requirements. A review of state laws demonstrates that such notice is typically given by newspaper publication and local radio broadcast prior to a hearing.⁹⁶

All states and the federal government require or provide for a public hearing before the siting of a hazardous waste treatment, storage, or disposal facility. Public notice always precedes the pub-

Waste Management, Inc. v. Hunt, 112 S. Ct. 2009 (1992). For a list of the rules on how states have shaped their hazardous waste regulations to comply with RCRA, see *Where States Stand on Waste Rules*, CHEMICAL WEEK (Mar. 8, 1978).

94. RCRA does not regulate the hazardous waste site selection process, but requires that the site selected meets certain standards.

95. GAO REPORT, *supra* note 10; see 42 U.S.C. § 6974 (1988); *Protection of Environment*, 40 CFR § 124. 10.

96. See Appendix.

lic hearing. Information about the public hearing is primarily provided by a local newspaper of general circulation in the area of the proposed site and over local radio.⁹⁷

The goal of public notice prior to siting a hazardous waste facility is to convey information concerning the siting plan and to allow a reasonable opportunity for public response. The fundamental question becomes whether the above-described federal and state notice requirements fulfill these goals. A review of the current state and federal notice requirements that serve as a prerequisite for public hearings reveals that they are inadequate to inform certain targeted communities. This inadequacy can be demonstrated in many ways: first, through an examination of the role and effectiveness of notice by publication in legal proceedings; second, through an analysis of readership and general modes of communication; and third, through an assessment of the impact of the language barriers in non-English-speaking racial minority communities.

IV. ADEQUACY OF NOTICE

A. *Newspaper Publication*

The rules of civil procedure provide the means by which persons defend or initiate legal proceedings and implement substantive law. A primary purpose of the rules is to promote the just, efficient, and economical resolution of civil disputes. Procedural rules also give parties assurance they have been dealt with fairly and assure final adjudications of conflicts.⁹⁸ An integral part of the procedural rules are the constitutional requirements that a person have notice of a legal or equitable proceeding in which certain rights are affected and the opportunity to respond.⁹⁹ The requirement of notice applies both to legal and to equitable remedies such as attachments, sequestration, and preliminary restraining orders.¹⁰⁰ The Federal Rules of Civil Procedure are a useful benchmark for assessing the adequacy of notice requirements for siting hazardous

97. For an insightful discussion on what factors determine whether a newspaper fulfills the requirement that a newspaper be locally published, see Ana Kellia Ramares, Annotation, *Application of Requirement that Newspaper be Locally Published for Official Notice Publication*, 85 A.L.R. 4th 581 (1991). For a definition of "general circulation" within the meaning of state statutes requiring publication of notices in the newspaper, see Dale R. Aghte, Annotation, *What Constitutes Newspaper of "General Circulation" Within Meaning of State Statute Requiring Publication of Official Notices and the Like in Such Newspapers*, 24 A.L.R. 4th 822 (1983).

98. See FLEMING JAMES ET AL., *CIVIL PROCEDURE* (1992).

99. 58 AM. JUR. 2D *Notice* § 2 (1989).

100. FLEMING JAMES et al., *supra* note 98, at 73.

waste facilities. Both notice requirements for siting facilities and the civil procedure rules allow for notice in a newspaper of general circulation.

Under the federal procedural rules, a legal action is commenced when an action is filed with the court.¹⁰¹ The plaintiff must use due diligence in attempting to serve the defendant with the summons and complaint. The service of process must be authorized by statute or rule and comply with constitutional due process notice requirements. Personal service is preferable to service by newspaper (commonly termed "notice by publication"). The latter is appropriate, however, when a party's whereabouts are unknown. Absent due diligence to locate a party, service by publication is constitutionally insufficient.¹⁰² The preferred method to notify a party of a legal proceeding is personal service of process, whereby notice is "delivered" to the party.¹⁰³ The Supreme Court has held that notice by publication, without any other attempted method, does not satisfy the due process rights of interested parties where other means of notice, which are more likely to attract the parties' attention, are reasonably available.¹⁰⁴

Generally, both the state and federal statutes governing siting of hazardous waste facilities provide for notice by publication. The siting statutes tend to allow notice in a newspaper and over local radio broadcast. Neither the federal nor state hazardous waste siting statutes require due diligence with respect to effectuating individual or personal service to persons in the locale of a proposed hazardous waste facility. Pursuant to federal and state hazardous waste statutes, individuals who personally request placement on a mailing list will be personally notified of a proposal to construct a facility. The prerequisite of requesting placement on a mailing list for personal service before receiving personal notice of the proposed siting of a hazardous waste facility is ineffective for low-income racial minority communities or any other community. Few

101. Fed. R. Civ. P. 3.

102. *Greene v. Lindsey*, 456 U.S. 444 (1982). Actual notice is a due process right. Due process includes both the right of notice to persons with an interest in the matter and the right of such persons to be heard. *Boddie v. Connecticut*, 401 U.S. 371 (1971); *Armstrong v. Manzo*, 380 U.S. 545 (1965).

103. *Mullane v. Central Hanover Bank & Trust Co.*, 339 U.S. 306 (1950).

104. See also *Schroeder v. City of New York*, 371 U.S. 208 (1962); *Mennonite Bd. of Missions v. Adams*, 462 U.S. 791 (1983). Daniel A. Klein, Annotation, *Notice by Publication as Sufficient to Comply with Due Process Requirements Under Federal Constitution's Fourteenth Amendment - Supreme Court Cases*, 99 L. Ed. 2d 1029 (1990).

would ask for such a mailing or know such a right exists. The volume of laws promulgated each year makes such a request impractical and knowledge of a right to request unlikely. Statistics indicate well over 3,000,000 court decisions, with 50,000 cases reported annually, in addition to thousands of pages published annually in the Federal Register.¹⁰⁵ Even the EPA has stated that RCRA regulations governing hazardous waste are so complex that few within the EPA understand the regulations.¹⁰⁶ For example, one permit process generated nineteen volumes of technical materials, which the public was apparently expected to read.¹⁰⁷

Since notice by publication in legal proceedings may be inadequate because it often amounts to no notice at all, it is equally inadequate as a means to notify a community of a proposed hazardous waste facility. As one legal treatise notes, "it has been said notice by publication is a poor and sometimes hopeless substitute for actual service of notice, and that its justification is difficult at best."¹⁰⁸ Due to the associated risks and harmful effects of hazardous waste facilities, the notice requirements for siting hazardous waste facilities should comport with the Federal Rules of Civil Procedure. Service by publication should be appropriate only when a party cannot effectuate personal service. Personal service to individuals within a locale of a proposed hazardous waste facility should be required and is clearly attainable. Such a requirement exists in class action litigation. In *Eisen v. Carlisle*,¹⁰⁹ for example, a class action suit was filed against brokerage firms and the stock exchange for alleged violations of antitrust and securities laws. The Court required individual notice to all 2,250,000 class members whose names and addresses were easily ascertainable.¹¹⁰

Individual notice in siting hazardous waste facilities is further supported by the staggering costs of defending against community opposition to siting a facility. In a 1984 conference, the cost to de-

105. J. MYRON JACOBSTEIN & ROY MERSKY, FUNDAMENTALS OF LEGAL RESEARCH (1987).

106. *United States v. White*, 766 F. Supp. 873, 882 (E.D. Wash. 1991).

107. *See Meet Your Neighbor: The Chemical Industry Swings Open Its Gates*, 7 GREATER BATON ROUGE BUS. REP. 14 (1989).

108. AM. JUR 2D., *supra* note 99, at § 38.

109. 417 U.S. 156 (1974).

110. *See also* *Berland v. Mack*, 48 F.R.D. 121 (1969); *King v. South Central Bell Telephone*, 790 F.2d 524 (1986); *Gardebring v. Jenkins*, 485 U.S. 415 (1988); *Blum v. Bankatlantic Financial Corp.*, 925 F.2d 1357 (1991); Note, *Sending Notice to Potential Plaintiff in Class Actions Under the Age Discrimination in Employment Act: The Trial Court's Role*, 54 FORDHAM L. REV. 631 (1981).

fend the construction of a proposed hazardous waste facility was estimated at \$500,000.¹¹¹ Certainly some of this amount could go towards public notice and education about hazardous waste facilities. A planner of a proposed hazardous waste treatment, storage, or disposal facility could notify residents within the locale by placing notice in their utility bills or direct mailings.¹¹² In addition, notice could also be sent to libraries, churches, community centers, and specified public places in the locale and to local, state, and nationally established community boards.¹¹³ The standard articulated under the National Environmental Policy Act (NEPA) could apply to determine when notice in the mail should be provided in the interest of fostering environmental equity. NEPA requires an environmental impact statement for any major federal action "significantly affecting the quality of the human environment."¹¹⁴ Similarly, the "significant effects" test could be used to determine which types of government conduct affecting the environment require personal notice.

B. *Any Other Medium Designed to Elicit Public Participation*

The EPA provides notice for siting a hazardous waste facility via a mailing list, broadcasts over local radio, print in local newspapers, and any other medium designed to elicit public participation.

The critical point is whether other modes of communication, in addition to newspaper notice, are reasonably calculated to give actual notice designed to elicit public participation. Whether notice

111. John A. S. McGlennon, A Model Siting Process and the Role of Lawyers, Address at the 13th Annual A.B.A. Conference on the Environment (May 11-12, 1984) proceedings published in 15 *Env'tl. L. Rep.* 10,239 (BNA) (Aug. 1985) (discussing the IT Corporation project in Warren, Massachusetts); see Sonny Albarado, *IT Impropriety Implications Upset Ashby*, *BATON ROUGE MORNING ADVOCATE*, Nov. 6, 1980, at 3-B. Since the enactment of RCRA, only one new hazardous waste facility opened and has continued to operate on a site that was not previously used for hazardous waste treatment, storage, or disposal. The construction of a solid waste landfill is estimated to cost \$50,000 to \$300,000 per acre.

112. Notice must comport with the requirement that it is highly probable it will be read and understood. Thus, mailing a newspaper notice does not convert the notice by publication into individual notice. *Kaszuk v. Bakery and Confectionary Union*, 638 F. Supp. 365 (N.D. Ill. 1984).

113. Community boards could help dissipate concerns expressed by hazardous waste planners who feel that the public is so misinformed that science has given way to fear in siting decisions. Dialogue could develop greater public awareness concerning public safety, different technologies, risk-based versus technology-based standards, and centralized or decentralized agencies or boards. See *Hazardous Waste Public Education Key to Resolving Incinerator Siting Issue*, Panel Tells EPA, *supra* note 34.

114. 42 U.S.C. § 4332(2)(3) (1988).

is reasonable must be determined by the likelihood it will reach the audience at which it is directed. In this regard the educational level of the targeted audience is a critical factor. In 1960, 63.7% of whites (twenty-five and older) had an educational level of four years of high school or more. By comparison, during the same period 21.7% of African-Americans (twenty-five and older) had an educational level of four years of high school or more. In 1988, 86.6% of whites (twenty-five and older) had an educational level of four years of high school or more. In comparison, during the same period 66.7% of minorities in general (twenty-five and older) had an educational level of four years of high school or more.¹¹⁵ Statistics further indicate that white men ages twenty-five to thirty-four are twice as likely to become college graduates than African-American men of the same age.¹¹⁶ The nation's children also reflect a differential in reading proficiency. On a reading scale of 0 to 500, the proficiency level in 1988 for seventeen year-old African-Americans was 274.4 compared to 294.7 for whites.¹¹⁷

The above data reflect the fact that African-Americans are likely to have less formal education than whites.¹¹⁸ Education affects political participation. Less formal education makes individuals feel less a part of the political process. More education begets power and increases participation. When a community's education and income levels increase, the probability of a hazardous waste facility being sited in the community decreases. Additionally, expansion of a facility is less likely as voter turnout increases.¹¹⁹

Historically, cases involving voter registration have recognized the correlation between literacy levels, information dissemination, and public participation.¹²⁰ Hence, notice in a local newspaper of

115. U.S. NEWS & WORLD REP., July 20, 1991, at 20.

116. June O'Neill, *The Changing Economic Status of Black Americans*, THE AM. ENTERPRISE, Sep./Oct. 1992. See also THE JOURNAL OF BLACKS IN HIGHER EDUCATION (Autumn 1993). While more African-Americans are enrolling in college, they drop out more often and are less likely to graduate. For education patterns among Native Americans, see HOWARD MEREDITH, MODERN AMERICAN INDIAN TRIBAL GOVERNMENT AND POLITICS (1993).

117. Deborah Selsky, *The Nation's Reading Report Card*, LIB. J. (Nov. 15, 1990).

118. Courts have discussed this fact in school desegregation, voting rights, and employment cases. See *Little Rock Sch. Dist. v. Pulaski City*, 778 F.2d 404 (8th Cir. 1985); *Rodgers v. Lodge*, 458 U.S. 613 (1982); *McGruder v. Phillips County Election Comm'n*, 850 F.2d 406 (8th Cir. 1988); *United States v. Sheriff of Lancaster County*, 561 F. Supp. 1005 (E.D. Va. 1983); *Gantlin v. Westvaco Corp.*, 526 F. Supp. 1356 (D. S.C. 1981).

119. James T. Hamilton, *Missing The Mark(et) in Siting Hazardous Waste Facilities*, 2 DUKE ENVTL. L. & POL'Y F. 11 (1992).

120. See *Kirksey v. Bd. of Supervisors*, 554 F.2d 139 (5th Cir. 1977); *Perkins v. City of West Helena*, 675 F.2d 201 (8th Cir. 1982); *Jeffers v. Clinton*, 730 F. Supp. 196 (E.D. Ark. 1989);

general circulation would be ineffective in low-income racial minority communities with high illiteracy.

Reading habits also affect the effectiveness of newspaper notice in certain communities. Notably, those who read poorly tend to read less.¹²¹ In 1989, newspaper readership surveys indicated that 52% of whites read newspapers daily, while only 35% of African-Americans read newspapers daily.¹²² Generally, Americans are reading less. Recent estimates show ninety million illiterate Americans.¹²³ With such poor readership habits and abilities in America, newspaper notice may not be reasonably calculated to give actual notice to certain segments of our society.

The ineffectiveness of newspaper communication as a means of notification in low-income racial minority communities was recognized early in the civil rights movement. On December 1, 1955, Rosa Parks refused to give up her seat on a Montgomery bus. She decided to challenge the charge that she violated Alabama's bus segregation laws. Community leaders initially asked African-American residents to engage in a one-day boycott. Because leaders were cognizant of the need to notify African-American Montgomery residents of the boycott, the chosen modes of notice were leaflets given to churches, phone calls, announcements in recreation centers, and verbal communication with local or centralized community organizations and individuals. They utilized these modes because they recognized the lack of access to newspapers in the African-American community.¹²⁴

A mode of communication more reasonably calculated to assure public notice is television. We live in an audio-visual age where television has become the dominant media attraction. In the average American household, television is watched more than seven hours a day, and adults watch television more than thirty-two hours per

Hall v. Holder, 757 F. Supp 1560 (M.D. Ga. 1991). For a discussion on the history of African-American voting rights discrimination and how such discrimination has fostered learned helplessness, see Steven I. Friedland, *African-Americans and Sustained Voting Rights Inequality*, 31 DUQ. L. REV. 685 (1993).

121. Selsky, *supra* note 117.

122. FLORIS W. WOOD, AN AMERICAN PROFILE - OPINIONS AND BEHAVIOR 1972-1989 (Gale Research Inc.). Between 1967 and 1988 the overall number of people who read a newspaper daily decreased dramatically. See RICHARD G. NIEMI ET AL., TRENDS IN PUBLIC OPINION A COMPENDIUM OF SURVEY DATA 315 (1989).

123. Yvette Ousley, *Fighting Spanish Illiteracy Program Teaches Hispanics to Read, Write Their Language*, MIAMI HERALD, Sept. 16, 1993, at B1.

124. See BRANCH, *supra* note 37, at 131, 156.

week.¹²⁵ The majority of homes receive more than eight channels.¹²⁶ In 1950, approximately 15% of American households had television. In 1990, the number of households with television increased to 93%.¹²⁷ On average, African-Americans watch more television than whites.¹²⁸ Recent surveys in which African-Americans were sampled according to their proportion in the population revealed: 72% of respondents would rather get their news from television while 20% preferred radio; 52% had not listened to radio news the day before; 85% watched a television news program regularly; and, of those who read newspapers, most read for only fifteen to thirty minutes daily; 54% listened to the news on the radio.¹²⁹ In effect, television is the most popular mode of communication, followed by radio. Thus television coverage of a proposed hazardous waste facility would be a powerful tool in providing public notice to groups, especially where newspaper notice is likely to be ineffective.

C. *The Language Barrier*

Racial minorities comprise a majority of the population throughout two thousand of America's counties, towns, and cities, including New York, Los Angeles, Chicago, Houston, Detroit, and Dallas.¹³⁰ This number includes Latinos. In 1980, the U.S. Census Bureau reported the Latino population as 14.6 million.¹³¹ Approximately forty-three percent of Latinos spoke only Spanish.¹³² Between 1980 and 1985 the Latino population grew by 20 percent in contrast with the general United States population growth of 3.3 percent.¹³³ In 1990, Latinos constituted half of all people in the United States for

125. DENNIS A. GILBERT, COMPENDIUM OF AMERICAN PUBLIC OPINION (1988).

126. CARL LOWE, TELEVISION AND AMERICAN CULTURE.

127. Rich Bard, *Random Thoughts: Violence and T.V.*, MIAMI HERALD, Apr. 25, 1993, sec. M, at 1.

128. WOOD, *supra* note 122, at 933.

129. ROPER CENTER FOR PUBLIC OPINION RESEARCH, PEOPLE, THE PRESS AND POLITICS CAMPAIGN, (Univ. of Conn. 1993).

130. Tim Bouee, *2,000 Localities Minorities the Majority Say Census*, PRECINCT REPORTER, Jun. 17, 1993.

131. *Hispanic Population Swells to 6.4% of U.S.*, WALL ST. J., Feb. 24, 1981, at 36. The U.S. Census category for Latinos is "Hispanic."

132. Paul Anderson, *Panel Weighs English-Only Amendment*, MIAMI HERALD, June 13, 1984, at 21A.

133. Martha M. Hamilton, *New Dispute Erupts Over Sale of Spanish-Language T.V. Stations; Critics Say Deal Should Have Included Hispanic Americans*, WASH. POST, Sept. 21 1986, at D3. The author also states the figures concerning Hispanic Americans are considerably larger if illegal aliens and other immigrants are included.

whom English was a foreign language.¹³⁴ By 1993, the Census Bureau reported 17 million Americans spoke Spanish at home.¹³⁵ Recent statistics indicated Spanish is the second most common language after English in thirty-nine states.¹³⁶ Latino Americans encounter a language barrier that adversely impacts their community.¹³⁷ Notice of hearings, meetings, and general information about proposed hazardous facilities is frequently not provided in Spanish. For numerous persons who speak Spanish, or any other foreign language, information disseminated solely in English is insufficient.¹³⁸ Notice must be clear, definite, and explicit—a requirement that would require translations in some instances. This was recognized in a recent California siting case.

In *El Pueblo Para el Aire Y Agua Limpio v. County of Kings*,¹³⁹ the local residents challenged a decision of the Kings County Board of Supervisors (Board) that granted a conditional permit to Chemical Waste Management, Inc., to construct and operate a hazardous waste incinerator. The proposed facility, located in Kettleman Hills, Kings County, California, was designed to burn hundreds of millions of pounds of toxic waste annually. Approximately four miles away was a community in which forty percent of the residents spoke only Spanish.

Kings County held public hearings, posted public meeting notices, and issued other written information concerning the proposed site. However, all information was given exclusively in English. The *El Pueblo* court held that the final environmental report was inadequate, and the community was not provided sufficient notice because it lacked Spanish translations of the final environmental report and public hearing documents.¹⁴⁰

134. *English Foreign to 1 of 7 Americans; Spanish-Speaking Citizens on the Increase*, SUN SENTINEL (Fort Lauderdale), Apr. 28, 1993, at 3A.

135. *1 in 7 Don't Speak English at Home*, L.A. TIMES, Apr. 28, 1993 at A15.

136. *More In U.S. Using Foreign Language Daily*, ATLANTA CONST., Apr. 28, 1993, at A5.

137. The Supreme Court has discussed such language barriers in the context of state reapportionment statutes. See *White v. Register*, 412 U.S. 755 (1973).

138. Notice should be tailored to the targeted community. Many Americans speak English as a second language. For example, 1 to 2 million people in the United States speak the following languages: French, German, Italian or Chinese. *1 IN 7 DON'T SPEAK ENGLISH AT HOME*, *supra* note 135.

139. 22 Env'tl. L. Rep. 20357 (Env'tl. L. Inst.) (Cal. Super. Ct. Sacramento County, Dec. 30, 1991) (No. 366045).

140. *Id.*; see also *Judge Overturns Approval of Commercial Waste Incinerator*, L.A. TIMES, Jan. 1, 1992, at A24.

The *El Pueblo* decision parallels decisions in the area of labor relations. For example, in *Zamora v. Local 11, Hotel and Restaurant Union*,¹⁴¹ Spanish-speaking union members brought an action that challenged the union's rule of not providing translators at monthly membership meetings. Local 11 had a membership of approximately 16,500, of whom 48% understood only Spanish. Although bargaining agreements and monthly newsletters were printed in Spanish, Spanish translations were not provided at the monthly membership meetings. These meetings usually had a poor attendance of only fifty to seventy-five members. Topics discussed at the monthly meetings included expenditures, officer's salaries, elections, complaints, and other general matters. The court found that the non-translation rule interfered with the protected right of equal participation for all union members.¹⁴²

A final example of how a statute that fails to require translations of published materials into languages other than English adversely impacts upon certain communities is illustrated by the problems around the Mexico-U.S. border. In June 1992, the EPA established an Advisory Committee to examine issues concerning the border area.¹⁴³ The Committee's task was to recommend revisions to the Integrated Environmental Plan for the border area.¹⁴⁴

The Rio Grande River flows from Southwest Colorado into the Gulf of Mexico. It has been listed (by American Rivers, an environmental group in Washington, D.C.) as one of the ten most endangered rivers in the nation. On the U.S. side of the border, seventeen miles from the Rio Grande, is the community of Sierra Blanca, Texas. Its population of 2,500 is predominately Latino. Private industry has, pursuant to contract, deposited sewage and industrial sludge in the area. The area is also the proposed site for an additional sludge facility and a nuclear waste storage facility. The EPA Advisory Committee indicated that certain diseases among the border inhabitants occurred at a higher rate than the state and na-

141. 817 F.2d 566 (9th Cir. 1987).

142. *Id.* at 570.

143. This plan was developed in 1990 in response to Mexico and U.S. concerns to protect the environment in the border area, particularly wastewater and drinking water treatment.

144. *U.S.-Mexico Border: Group Says Plan Should Discourage Environmental Racism*, Int'l Env't L. (BNA) (June 18, 1993). In addition to the Committee's report, problems in the border area are also addressed by the North American Free Trade Agreement (NAFTA). See GARY CLYDE HUFBAUER & JEFFREY J. SCHOTT, *NAFTA: AN ASSESSMENT* (1993); *The Forum: Will NAFTA Protect the Environment?*, 10 ENVTL. F. (Mar./Apr. 1993); Marianne Lavelle, *Free Trade vs. Law*, NAT'L L.J., Mar. 29, 1993, at 1.

tional averages. Furthermore, the Committee indicated that existing methods of public notice were insufficient because the community was not allowed to participate in the siting process. Before permits for the various facilities were granted, public notice had been inadequate because no Spanish translations had been provided. The Committee concluded that environmental equity should be addressed in the border cleanup plan with a focus on public health and public participation with adequate public notice.¹⁴⁵

V. CONCLUSION

Environmental issues impact upon people, corporations, and governments. They involve scientific issues, economics, politics, law, sociology, ecology, gender, and race. Environmental discrimination claimants must draw from doctrines intended for other situations and move beyond race-based claims. A heightened level of public participation is necessary. Public participation must encompass public education.¹⁴⁶ In effect, participation-facilitating legislation, not litigation, should be the preferred tactical choice. Much of the discontent fueling the environmental justice movement arises from feelings of alienation from the decision-making process. Low-income minority communities have voiced concerns that their communities are dumping grounds and their lives are being viewed as expendable.¹⁴⁷ Many people would agree on the need for treatment, storage, and disposal of hazardous waste, but most would object to such facilities in their community.¹⁴⁸ Objections are typically

145. *U.S.-Mexico Border*, *supra* note 144.

146. "Both are important, but insufficient, to foster the two-way dialogue necessary to solve problems in a way that meets the needs of the community. Public education usually begins too late, after a site has been proposed and citizen fears heightened. Public hearings allow citizens to express their concerns, but are poorly set up to solve their problems." Gail Bingham, *Prospects for Negotiation of Hazardous Waste Siting Disputes*, Address Before the 13th Annual A.B.A. Conference on the Environment (May 11, 1984), in *Siting of Hazardous Waste Facilities and Transport of Hazardous Substances* 15 *Envl. L. Rep.* 10,249 (*Envl. L. Inst.*) (Aug. 1985).

147. Of course risks from modern industrial civilization are not limited to low income, minority communities, but to some extent are inevitable throughout society. For example, a study of Dow Chemical workers revealed a certain number of employees were expected to die from leukemia. Howard Kunreuther & Ruth Patrick, *Managing the Risk of Hazardous Waste*, 33 *Env't* 3, at 15 (Apr. 1991). Approximately 2.4 billion tons of air pollutants are released into the air each year by corporations with many identified as carcinogens. Richard Morrissey, *A Perspective on Environmental Pollution - Risk and Liability*, 4 *NAT'L B. Ass'n* 26 (1990).

148. This depicts the NIMBY ("Not in my backyard!") phenomenon where residents want certain projects, but not close to where they live. Although we may all acknowledge the need

grounded in concerns that such facilities are harmful to health and the environment, or wrongly placed.¹⁴⁹ The environmental justice movement demonstrates that low-income racial minority groups have concerns similar to most Americans about their health and environment, such as: whether there is a need for a particular facility; where the hazardous waste will come from; the availability of accurate information on potential impact; and compensation.¹⁵⁰ Government policy-makers can respond to these concerns through open dialogue and equitable practices. Communities need to know that hazardous waste and other facilities successfully operate in numerous communities with proper standards and controls, accurate data, and clarity about who bears ultimate responsibility.¹⁵¹ The data can be disseminated and discussed in public forums, precipitated by effective public notice of such forums.

The courts must begin to fashion remedies and interpret constitutional rights within the context of public health and safety. Environmental equity requires proper notice. Currently, most hazardous waste statutes provide for notice of a proposed facility via local radio stations, local newspapers, and any other medium designed to elicit public participation. For communities that have disproportionate numbers of hazardous waste facilities, this broad

to recycle, we are often reluctant to accept the smell, trash, and trucks that accompany a facility in our neighborhood. The NIMBY phenomenon encompasses hazardous waste facilities, half-way houses, homes for the mentally-handicapped, power plants, airports, homes for the homeless, garbage disposal sites, AIDS-care facilities and low-income housing projects. For a discussion on the roots of the NIMBY phenomenon, see Peter Margulies, *Building Communities of Virtue: Political Theory, Land Use Policy and The Not In My Backyard Syndrome*, 43 SYRACUSE L. REV. 945 (1992). One author has suggested that opposition to certain land uses has had direct adverse consequences on the American economy and that there must be a middle ground between environmentalists and business. Frank J. Popper, *The Environmentalist and the LULU*, 27 ENV'T 7 (Mar. 1985).

149. In one case involving the NIMBY phenomenon, plaintiffs sought to enjoin defendants from operating a hazardous waste landfill. In the granting the injunction the court upheld the lower court's finding that the landfill constituted a nuisance with a high probability of future harm. *Village of Wilsonville v. SCA Services, Inc.*, 426 N.E.2d 824 (Ill. 1981).

150. McGlennon, *supra* note 111.

151. Provision of sound information, over time, is a vital step in a successful siting process. "What is this facility being proposed? How would it operate? Why is it necessary? Where would all the waste come from? How do I know that it would operate safely?" . . . A full Environmental Impact Statement or Environmental Impact Review document provided at the end of the siting process, is far from an adequate substitute for continuing information. Public meetings are also vital; not formal hearings, but a continuing pattern of public involvement from the inception of the siting proposal.

David Morrell, *Siting and the Politics of Equity*, 1 HAZARDOUS WASTE 555 (1984).

concept of notice has proven unfair. Readership patterns indicate that more direct notice is appropriate. Furthermore, translations in languages other than English are necessary. Notice statutes must reflect the audience to whom they are directed because the underlying purposes of notice are to inform and give an opportunity to respond. Dialogue facilitates solutions that enable society to develop beyond discriminatory practices and focus on the problem of reducing the millions of tons of hazardous waste in the interest of all Americans.

APPENDIX

A. *Notice by Newspaper Publication and Radio*

The following states require notice *to be published in a local newspaper or a newspaper of general circulation and broadcast over local radio stations* (where indicated) regarding an application for—or a public hearing or a comment period with respect to an application for—siting of a hazardous waste facility (notice periods are indicated in parentheses, where applicable): Alabama (also radio), Alaska (120 days—also radio), Arizona (2 weeks), Arkansas (30 days), California (30 days), Connecticut, Delaware, Florida (notice must be given on date of filing application), Georgia (notice must be given 30 days after receipt of application), Hawaii (22 days), Illinois (notice must be given not more than 90 days after application), Indiana, Iowa, Kansas (30 days), Kentucky, Maine (also radio), Maryland (15 days), Massachusetts, Michigan (also radio), Minnesota (30 days), Mississippi (notice must be given twice within the two weeks preceding hearing), Missouri (also radio), Montana (3 weeks), Nebraska (30 days—also radio), Nevada (30 days), New Hampshire (30 days), New Jersey (30 days—also radio), New Mexico (also radio), New York (also radio), North Carolina (30 days), Ohio (also radio), Oklahoma, Pennsylvania (notice given once in each two successive weeks), Rhode Island (also radio), South Carolina (also radio), South Dakota (30 days), Tennessee (also radio), Utah (notice must be published twice prior to a hearing), Vermont (two weeks successively at least 12 days prior to hearing), Virginia (notice must be given once in each of two successive weeks; also radio), Washington (notice must be given for fourteen consecutive days), West Virginia (also radio), Wisconsin, and Wyoming. See ALA. CODE § 335-14-08 (1989); ALASKA ADMIN. CODE tit. 18, § 62.020 (Jan. 1993); ARIZ. REV. STAT. ANN. § 49-942(1) (1988); ARK. CODE ANN. § 8-7-217; CAL. HEALTH & SAFETY CODE § 25223 (West 1992); CONN. GEN. STAT. ANN. § 22(a)-118(e) (West 1985); DEL. CODE ANN. tit. 7, § 6004(b) (1991); FLA. STAT. ANN. § 403.707(1) (West 1993); GA. CODE ANN. § 12-8-66(h) (Michie 1992 & Supp. 1993); HAW. REV. STAT. § 91-9.5 (1988); ILL. ANN. STAT. ch. 111 1/2. para. 1039.3(c) (i)-(ii) (Smith-Hurd 1988); IND. CODE ANN. § 13-7-8.6-6(b) (Burns 1990); IOWA CODE ANN. § 455B.443(1) (West 1990); KAN. STAT. ANN. § 65-343 (1992); KY. REV. STAT. ANN. § 224.40-310(4) (Michie/Bobbs-Merrill 1991); Code Me. R. § 400.4(D) (1989); MD. REGS. CODE tit. 14, § 14.03.05 (1992); MASS. REGS. CODE tit. 990, § 4.05 (1989); MICH.

ADMIN. CODE r. 299.9513(i) (d) (1985); MINN. R. 7001.0520 (1991); 1990 Miss. LAWS 506; MO. CODE REGS. tit. 10, § 25-8.010 (1994); MONT. CODE ANN. § 75-10-441(2), (3) (1993); NEB. ADMIN. R. & REGS. 091.01 (1989); NEV. ADMIN. CODE ch. 444, § 8478 (1990); N.H. CODE ADMIN. R. REV. ENV-WM 353.23 (1991); N.J. ADMIN. CODE tit. 7, § 26-12.2 (1988); N.M. STAT. ANN. § 94-4-5 (Michie 1993); N.Y. COMP. CODES R. & REGS. § 621.6 (1986); N.C. GEN. STAT. § 130A-294(f) (1992); OHIO ADMIN. CODE § 3745-50-40(c)(2) (1992); OKLA. STAT. ANN. tit. 63, § 1-2006 (West 1993 & Supp. 1994); 25 PA. CODE § 269.124(b) (1990); 1988 R.I. PUB. LAWS 1.01; S.C. CODE REGS. tit. 61 § 124.10 (1990); S.D. ADMIN. R. 74:28:26:01 (1990); TENN. COMP. R. & REGS. ch. 1200-1-11-07 (1991); UTAH CODE ANN. § 19-6-205 (1993 Supp.); VT. STAT. ANN. tit. 10, § 6606a(c)(2) (1993); VA. CODE ANN. § 10.1-1447 (Michie 1993); WASH. ADMIN CODE § 173-303-281(3)(b) (1991); W. VA. CODE § 20-5E-9 (1989); WYO. STAT. § 35-12-107 (1988 & Supp. 1993).

B. *Form of Notice Not Specified*

The following states do not specify notice by newspaper publication or radio broadcast but require some form of reasonable public notice of an application for—or a public hearing or a comment period with respect to an application for—siting of a hazardous waste facility (notice periods are indicated in parentheses, where applicable): Alabama, Colorado, Louisiana (45 days), Nevada (30 days), North Dakota (30 days), Oregon. *See* ALA. CODE § 22-30-12 (g) (1993); COL. REV. STAT. ANN. § 25-25-303(8) (West 1990); LA. ADMIN. CODE tit. 33, §§ V.701-721 (1988); NEV. ADMIN. CODE ch. 444, § 8474 (1990); N.D. ADMIN. CODE § 24-07-06 (1988); OR. ADMIN. R. 340-106—12 (1991); OR. ADMIN R. 340-120-020 (2) (1987); WIS. ADMIN. CODE § 680.06(10)(a)(3) (Aug. 1993).

C. *No Public Notice Requirement*

Texas does not require any notice to the general public concerning an application for the siting of a hazardous waste facility. However, notice must be given to the locality's mayor, county judge, regional council, and local review committees. *See* TEX. ADMIN. CODE tit. 31, § 335.391 (1991).

