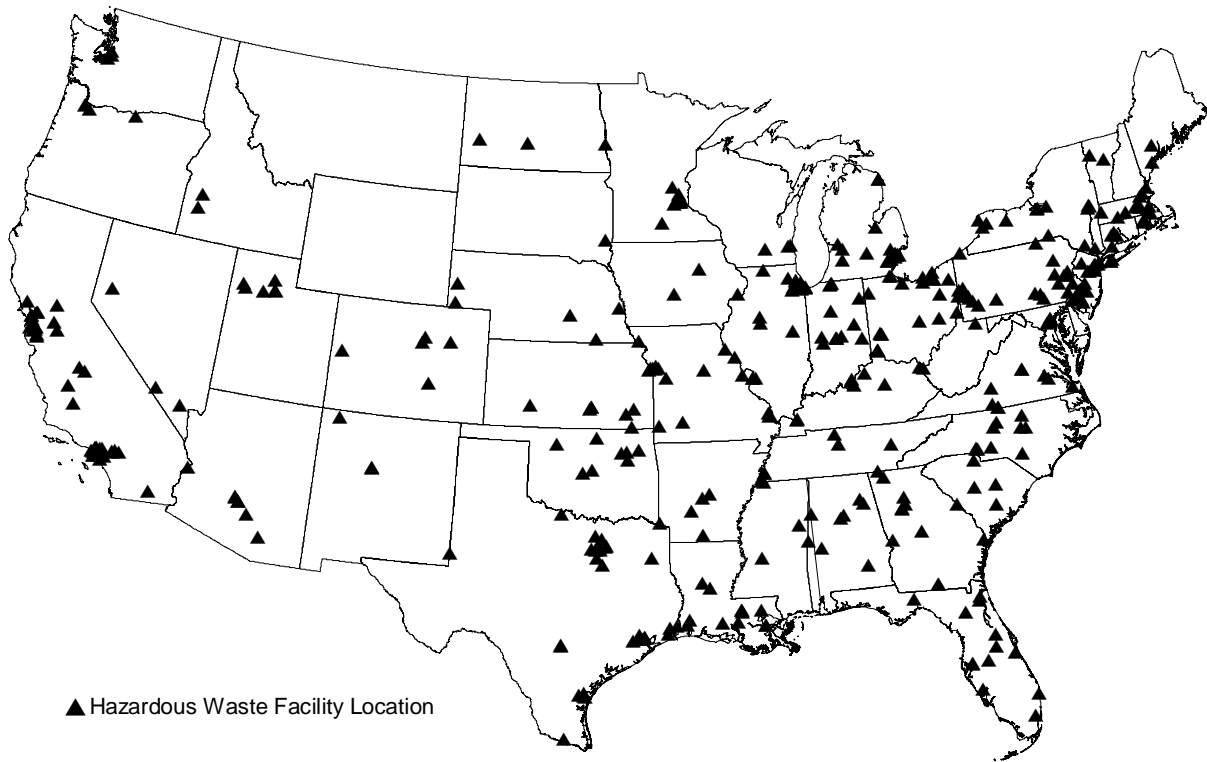


# Executive Summary

## TOXIC WASTES AND RACE AT TWENTY 1987-2007

### Grassroots Struggles to Dismantle Environmental Racism in the United States

A Report Prepared for the  
United Church of Christ  
Justice and Witness Ministries



*Special Preview Release for American Association for the Advancement of  
Science (AAAS) Annual Meeting, San Francisco, CA.*

#### Principal Authors:

Robert D. Bullard, Ph.D.

Paul Mohai, Ph.D.

Robin Saha, Ph.D.

Beverly Wright, Ph.D.

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## ABOUT THE UNITED CHURCH OF CHRIST JUSTICE & WITNESS MINISTRIES

Justice and Witness Ministries, one of four Covenanted Ministries in the United Church of Christ, helps local congregations and all other settings of the church respond to God's commandments to do justice, seek peace, and effect change for a better world. The work of JWM is guided by the pronouncements and resolutions approved by the General Synod of the United Church of Christ.

Working out of three offices in Cleveland, Washington, D.C., and the historic ✦ [Franklinton Center](#) at Bricks in eastern North Carolina, JWM empowers individuals and local congregations across the nation to do advocacy for justice in their communities and in the world. We also work closely with the United Nations office of Wider Church Ministries and with our colleagues in all of the Covenanted Ministries and other settings of the church who work for justice.

The **Economic Justice Ministry Team** is responsible for the longstanding commitments of the United Church of Christ and its predecessor churches in the areas of the global economy, public education, consumerism, health care for all, labor relations, economic development, and the elimination of hunger and poverty. The team's leader is the Rev. Dr. Wallace Ryan Kuroiwa.

The **Human Rights, Justice for Women, and Transformation Ministry Team** addresses a range of concerns: criminal justice, capital punishment, juvenile justice, women's concerns, sovereignty, political prisoners, advocacy for children and families, human sexuality, and multi-racial, multi-cultural advocacy for a more inclusive church and society. The team's leader is the Rev. Lois M. (Loey) Powell.

The **Racial Justice Ministry Team** is a catalyst for change working to confront and dismantle racism, create a new generation of racial justice advocates, and collaborate with others in pursuit of the UCC's commitment to be a church that is multi-racial, multi-cultural, open and affirming, and accessible to all. The team's leader is the Rev. Dr. Wallace Ryan Kuroiwa.

The **Public Life and Social Policy Ministry Team**, based in Washington, D.C., coordinates the public policy advocacy work of the church in collaboration with all settings of the UCC. Responding to legislative issues, this team works to give life and voice to the resolutions and pronouncements of General Synod on social policy. This office also houses the work of the ✦ [Justice and Peace Action Network](#), the UCC's grassroots network of justice advocates. The team's leader is the Rev. Ron Stief.

Justice and Witness Ministries  
United Church of Christ  
700 Prospect Ave.  
Cleveland, OH 44115  
216-736-3704  
[jwm@ucc.org](mailto:jwm@ucc.org)

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## ABOUT THE AUTHORS

**Robert D. Bullard** is the Ware Distinguished Professor of Sociology and Director of the Environmental Justice Resource Center at Clark Atlanta University. He is the author of thirteen books that address sustainable development, environmental racism, urban land use, industrial facility siting, community reinvestment, housing, transportation, and smart growth. His book, *Dumping in Dixie: Race, Class and Environmental Quality* (Westview Press, 2000), is a standard text in the environmental justice field. His most recent books include *Just Sustainabilities: Development in an Unequal World* (Earthscan/MIT Press, 2003), *Highway Robbery: Transportation Racism and New Routes to Equity* (South End Press, 2004), *The Quest for Environmental Justice: Human Rights and the Politics of Pollution* (Sierra Club Books, 2005), *Growing Smarter: Achieving Livable Communities, Environmental Justice, and Regional Equity* (MIT Press, 2007), and *The Black Metropolis in the Twenty-First Century: Race, Power, and the Politics of Place* (Rowman & Littlefield, forthcoming May 2007).

**Paul Mohai** is Professor in the School of Natural Resources and Environment, University of Michigan, Ann Arbor. He was an early and major contributor to the growing body of quantitative research examining the disproportionate environmental burdens in low-income and people of color communities. A significant outcome of this early research was the organization of the historic 1990 "Michigan Conference on Race and the Incidence of Environmental Hazards" with colleague, Dr. Bunyan Bryant. Dr. Mohai has also been a major contributor to research examining the environmental attitudes of African Americans and their influence on the environmental movement. His current research involves national-level studies examining cause and effect relationships in the distribution of environmental hazards by race and class, including examining the role environmental factors play in accounting for racial and socioeconomic disparities in health. He is the author of numerous articles on the subject of race and the environment.

**Robin Saha** is Assistant Professor of Environmental Studies at the University of Montana and affiliated faculty with its School of Public and Community Health Sciences. He is among the leading scholars conducting quantitative studies of environmental inequality using Geographic Information Systems (GIS). His articles appear in leading social science journals including *Demography* and *Social Problems*. His teaching and research focuses on the intersection of environmental justice, health, and policy with an emphasis on community engagement and empowerment. He is committed to providing assistance to contaminated communities and works actively on tribal environmental issues. One of his current community-based research projects focuses on substandard housing and environmental health on Montana Indian reservations. He also consults on environmental justice legal cases and conducts environmental justice analyses for a wide variety of nonprofit advocacy organizations.

**Beverly Wright** is a sociologist and the founding director of the Deep South Center for Environmental Justice (DSCEJ) at Dillard University (formerly at Xavier University of Louisiana) in New Orleans. She is a leading scholar, advocate, and activist in the environmental justice arena. She served on the U.S. Commission of Civil Rights for the state of Louisiana and to the city of New Orleans' Select Committee for the Sewerage and Water Board. She is co-chair of the National Black Environmental Justice Network and the Environmental Justice Climate Change (EJCC) Initiative. She is the co-author of *In the Wake of the Storm: Environment, Disaster, and Race After Katrina* (Russell Sage Foundation, May 2006). She is a native of New Orleans and a survivor of Hurricane Katrina.

# EXECUTIVE SUMMARY

## Introduction

In 1987, the United Church of Christ Commission for Racial Justice released its groundbreaking study *Toxic Wastes and Race in the United States*. The report was significant because it found race to be the most potent variable in predicting where commercial hazardous waste facilities were located in the U.S., more powerful than household income, the value of homes, and the estimated amount of hazardous waste generated by industry. The *Toxic Wastes and Race* study was revisited in 1994 using 1990 census data. The 1994 study found that people of color are 47 percent more likely to live near a hazardous waste facility than whites.

This year, the United Church of Christ Justice and Witness Ministries commissioned a new report as part of the twentieth anniversary of the release of the 1987 report. The 2007 *Toxic Wastes and Race at Twenty* report uses 2000 census data. The report also chronicles important environmental justice milestones since 1987 and a collection of “impact” essays from environmental justice leaders on a range of topics. This new report also examines the environmental justice implications in post-Katrina New Orleans and uses the Dickson County (Tennessee) Landfill case, the “poster child” for environmental racism, to illustrate the deadly mix of waste and race.

*Toxic Wastes and Race at Twenty* is designed to facilitate renewed grassroots organizing and provide a catalyst for local, regional, and national environmental justice public forums, discussion groups, and policy changes in 2007 and beyond.

## Approach

This new report includes the first national-level study to employ 2000 Census data and distance-based methods to a current database of commercial hazardous waste facilities to assess the extent of racial and socioeconomic disparities in facility locations in the U.S. Disparities are examined by region and state, and separate analyses are conducted for metropolitan areas, where most hazardous waste facilities are located.

## Key Findings

The application of these new methods, which better match where people and hazardous sites are located, reveals that racial disparities in the distribution of hazardous wastes are greater than previously reported. In fact, these methods show that people of color make up the majority of those living in host neighborhoods within 3 kilometers (1.8 miles) of the nation’s hazardous waste facilities. The evidence is clear that these racial and ethnic disparities are prevalent throughout the country.

### National Disparities

Over nine million people (9,222,000) are estimated to live in circular host neighborhoods within 3 kilometers of the nation’s 413 commercial hazardous waste facilities. Over 5.1 million people of color, including 2.5 million Hispanics or Latinos, 1.8 million African Americans, 616,000 Asians/Pacific Islanders, and 62,000 Native Americans live in neighborhoods with one or more commercial hazardous waste facilities. Indeed these host neighborhoods are densely populated, with over 870 persons per square kilometer (2,300 per mi<sup>2</sup>), compared to 30 persons per square kilometer (77 per mi<sup>2</sup>) in non-host areas. Not surprisingly, 343 facilities (83%) are located in metropolitan areas.

For 2000, neighborhoods within 3 kilometers of commercial hazardous waste facilities are 56% people of color whereas non-host areas are 30% people of color. Thus, percentages of people of color as a whole are 1.9 times greater in host neighborhoods than in non-host areas. Percentages of African Americans, Hispanics/Latinos, and Asians/Pacific Islanders in host neighborhoods are 1.7, 2.3, and 1.8 times greater (20% vs. 12%, 27% vs. 12%, and 6.7% vs. 3.6%), respectively. These racial disparities in the location of

the nation's commercial hazardous waste facilities are statistically significant at a 0.001 level, i.e., there is less than 1 chance in 1000 that they are due to random chance.

Poverty rates in the host neighborhoods are 1.5 times greater than non-host areas (18% vs. 12%) and mean annual household incomes and mean owner-occupied housing values in host neighborhoods are 15% lower (\$48,234 vs. \$56,912, and \$135,510 vs. \$159,536, respectively). Depressed economic conditions characterize host neighborhoods of the nation's hazardous waste facilities.

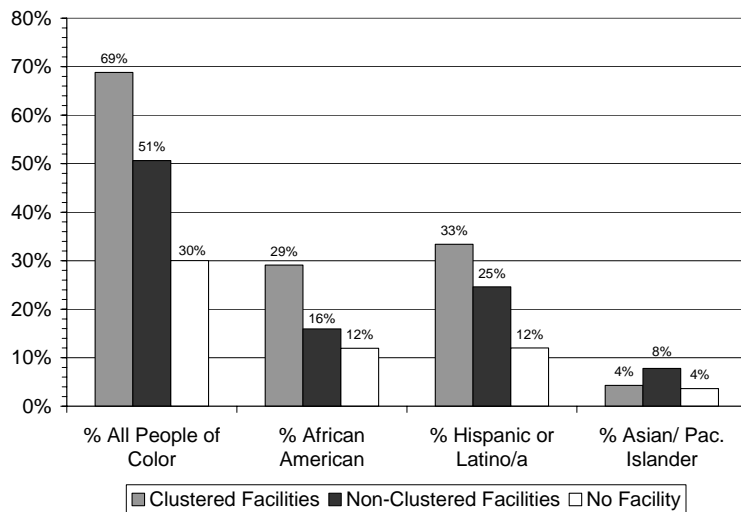
### Racial and Socioeconomic Disparities between Host Neighborhoods and Non-Host Areas for the Nation's 413 Commercial Hazardous Waste Facilities

Demographic Variable	Host	
	Neighborhoods	Non-Host Areas
<i>Race/Ethnicity</i>		
% People of Color	55.9%	30.0%
% African American	20.0%	11.9%
% Hispanic or Latino	27.0%	12.0%
% Asian/Pacific Islander	6.7%	3.6%
% Native American	0.7%	0.9%
<i>Socioeconomics</i>		
Poverty Rate	18.3%	12.2%
Mean Household Income	\$48,234	\$56,912
Mean Housing Value	\$135,510	\$159,536

*Based on 2000 Census Data*

### Neighborhoods with Clustered Facilities

Neighborhoods with facilities clustered close together have higher percentages of people of color than those with non-clustered facilities (69% vs. 51%). Likewise, neighborhoods with clustered facilities have disproportionately high poverty rates. These differences are statistically significant at a 0.001 level.



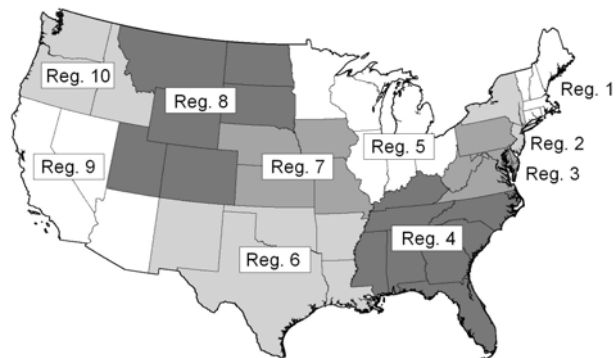
Percentages of African Americans and Hispanics in the neighborhoods with clustered facilities are significantly higher than neighborhoods with non-clustered facilities (29% vs. 16% and 33% vs. 25%, respectively).

Clustered facility neighborhoods have higher poverty rates than non-clustered facility neighborhoods (22% vs. 17%). Mean household incomes are 10% lower in neighborhoods with clustered facilities (\$44,600 vs. \$49,600), and mean housing values are 14% lower (\$121,200 vs. \$141,000).

Because people of color and the poor are highly concentrated in neighborhoods with multiple facilities, they continue to be particularly vulnerable to the various negative impacts of hazardous waste facilities.

### EPA Regional Disparities

Racial disparities for people of color as a whole exist in 9 out of 10 EPA regions (all except Region 3). These disparities are statistically significant at the 0.001 level. Disparities in people of color percentages between host neighborhoods and non-host areas are greatest in: Region 1, the Northeast (36% vs. 15%); Region 4, the southeast (54% vs. 30%); Region 5, the Midwest (53% vs. 19%);



Region 6, the South, (63% vs. 42%); and Region 9, the southwest (80% vs. 49%). See Appendix 1.

Seven EPA regions have statistically significant disparities in Hispanic or Latino percentages, seven EPA regions have statistically significant disparities in African American percentages, and six EPA regions have statistically significant disparities in percentages of Asians/Pacific Islanders (see Appendices 2-4).

Differences in poverty rates between hazardous waste host neighborhoods and non-host areas are greatest for Region 1 (16% vs. 8.7%), Region 2 (19% vs. 12%), Region 5 (19% vs. 9.6%), Region 7 (15% and 10%), Region 8 (15% and 10%), and Region 9 (21% vs. 13%) – see Appendix 5. Socioeconomic disparities are statistically significant in all 9 EPA regions, all except Region 9.

Disproportionately high percentages of people of color are found in 7 of the 9 regions with clustered facility neighborhoods. Differences between clustered and non-clustered facility neighborhoods are greatest in Region 5 (62% and 46%), Region 7 (59% vs.25%), Region 8 (55% vs. 26%), and Region 9 (89% vs. 75%). Regions 1, 3, and 4 also have large disparities between clustered and non-clustered facility neighborhoods.

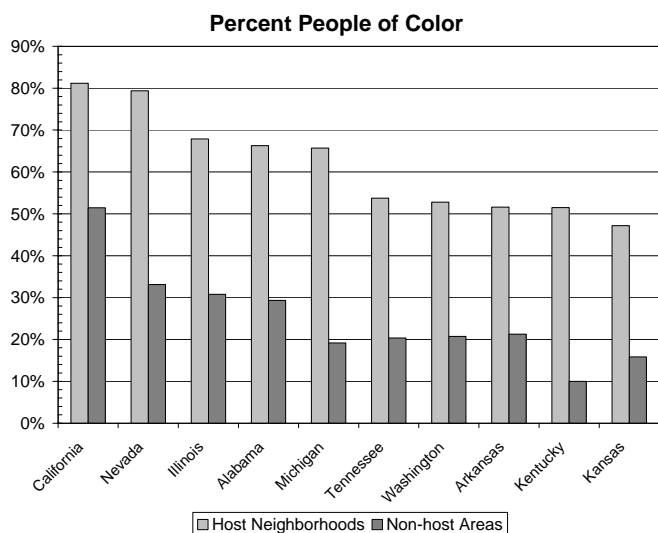
**Percent People of Color in Clustered and Non-Clustered Facility Neighborhoods by EPA Region**

EPA Region	Clustered	Non-Clustered	No Facility
Region 1	39.6%	35.5%	15.0%
Region 2	52.6%	51.3%	36.0%
Region 3	32.0%	23.1%	24.5%
Region 4	63.3%	52.7%	30.4%
Region 5	62.3%	45.7%	18.8%
Region 6	61.8%	63.0%	41.8%
Region 7	58.6%	25.4%	13.4%
Region 8	54.7%	26.0%	18.2%
Region 9	88.9%	74.8%	49.4%
Region 10	n/a	38.9%	19.1%

In sum, racial disparities in the location of the nation’s commercial hazardous waste facilities exist in 9 of 10 EPA regions. For Hispanics, African Americans, and Asians/Pacific Islanders, statistically significant disparities exist in the majority or vast majority of EPA regions. Moreover, the pattern of people of color being especially concentrated in areas where facilities are clustered is also geographically widespread throughout the country.

**State Disparities**

Alaska, Delaware, Hawaii, New Hampshire, Montana, Wyoming, and the District of Columbia did not have licensed and operating commercial hazardous waste facilities in 1999. Forty of the remaining 44 states (90%) with facilities have disproportionately high percentages of people of color in circular host neighborhoods within 3 km. of the facilities – on average about two times greater than the average percentage in non-host areas for each state (44% vs. 23%). Host neighborhoods in 19 states are majority people of color (see Appendix 1).



States with the 10 largest differences in people of color percentages between host neighborhoods and non-host areas are indicated in the figure and shown in order of the largest percentages of people of color living in the host neighborhoods. For both California and Nevada, these percentages are about 80%. For three additional states, people of color make up a two-thirds or more majority in these neighborhoods. In descending order of by the size of the differences between host and non-host areas, these states are: Michigan (66% vs. 19%); Nevada (79% vs. 33%); Kentucky (51% vs. 10%); Illinois (68% vs. 31%); Alabama (66% vs. 31%); Tennessee (54% vs. 20%); Washington (53% vs. 20%); Kansas (47% vs. 16%); Arkansas (52% vs.

21%); and California (81% vs. 51%). Differences in these percentages range from a high of 47% for Michigan to 30% for California.

Host neighborhoods in Arizona, California, and Nevada are majority Hispanic or Latino. Other states with very large disparities in Hispanic or Latino percentages include: Colorado, Connecticut, Florida, Illinois, Kansas, and Utah (see Appendix 2). Differences in these percentages between host neighborhoods and non-host areas range from a high of 32% for Nevada to 13% for Kansas. Twenty-five other states have disparities in Hispanic percentages.

Host neighborhoods in Alabama and Michigan are majority African American. Other states with very large disparities in African American percentages: Arkansas, Illinois, Kentucky, Nevada, North Carolina, Ohio, Tennessee, and Wisconsin. Among these 10 states, differences in African American percentages between host neighborhoods and non-host areas range from a high of 46% for Michigan to 19% for Nevada. Twenty-eight other states have African American disparities (see Appendix 3).

The State of Washington has the largest disparity in the percentage of Asians/Pacific Islanders (26% vs. 5.6%). Some of the other 20 states with Asian/Pacific Islander disparities include California, Massachusetts, Minnesota, New York, Oregon, Rhode Island, and Utah (see Appendix 4).

Thirty-five states have socioeconomic disparities, i.e., in poverty rates. In these states, the average poverty rate in host neighborhoods is 18% compared to 12% in non-host areas (see Appendix 5).

Metropolitan Disparities

In metropolitan areas, people of color percentages in hazardous waste host neighborhoods are significantly greater than those in non-host areas (57% vs. 33%). Likewise, the nation's metropolitan areas show disparities in percentages of African Americans, Hispanics/Latinos, and Asians/Pacific Islanders, 20% vs. 13%, 27% vs. 14%, and 6.8% vs. 4.4%, respectively. Socioeconomic disparities exist between host neighborhoods and non-host areas, with poverty rates of 18% vs. 12%, respectively.

One hundred and five of the 149 metropolitan areas with facilities (70%) have host neighborhoods with disproportionately high percentages of people of color and 46 of these metro areas (31%) have majority people of color host neighborhoods (see Appendix 6).

Host neighborhoods in the 10 metropolitan areas with the largest number of people of color living in the host areas have a total of 3.12 million people of color, which is 60% of the total population of people of color in all hazardous waste host neighborhoods in the country (5.16 million). Six metropolitan areas account for half of all people of color living in close proximity to all of the nation's commercial hazardous waste facilities— Los Angeles, New York, Detroit, Chicago, Oakland, and Orange County, CA. Los Angeles alone accounts for 21% of the people of color in host neighborhoods nationally.

In sum, significant racial disparities exist within the nation's metropolitan areas, where 4 of every 5 hazardous waste facilities are located.

Continuing Significance of Race

**Racial and Socioeconomic Disparities between Host Neighborhoods and Non-Host Areas for 343 Commercial Hazardous Waste Facilities in Metropolitan Areas**

Demographic Variable	Host Neighborhoods	Non-Host Areas
<i>Race/Ethnicity</i>		
% People of Color	56.6%	33.1%
% African American	20.1%	12.8%
% Hispanic or Latino	27.4%	13.7%
% Asian/Pacific Islander	6.8%	4.4%
<i>Socioeconomics</i>		
Poverty Rate	18.3%	11.6%
Mean Household Income	\$48,391	\$60,438
Mean Housing Value	\$136,880	\$173,738

*Based on 2000 Census Data*

In 1987, *Toxic Wastes and Race in the United States* found race to be more important than socioeconomic status in predicting the location of the nation's commercial hazardous waste facilities. In 2007, our current study results show that race continues to be a significant and robust predictor of commercial hazardous waste facility locations when socioeconomic and other non-racial factors are taken into account. A separate analysis of metropolitan areas alone produces similar results.

## Conclusions

Twenty years after the release of *Toxic Wastes and Race*, significant racial and socioeconomic disparities persist in the distribution of the nation's commercial hazardous waste facilities. Although the current assessment uses newer methods that better match where people and hazardous waste facilities are located, the conclusions are very much the same as they were in 1987. In fact, people of color are found to be more concentrated around hazardous waste facilities than previously shown.

**Race matters.** People of color and persons of low socioeconomic status are still disproportionately impacted and are particularly concentrated in neighborhoods and communities with the greatest number of facilities. Race continues to be an independent predictor of where hazardous wastes are located, and it is a stronger predictor than income, education and other socioeconomic indicators. Indeed, a watershed moment has occurred in the last decade. People of color now comprise a majority in neighborhoods with commercial hazardous waste facilities, and much larger (more than two-thirds) majorities can be found in neighborhoods with clustered facilities. People of color in 2007 are more concentrated in areas with commercial hazardous sites than in 1987. African Americans, Hispanics/Latinos and Asian Americans/Pacific Islanders alike are disproportionately burdened by hazardous wastes in the U.S.

Race maps closely with the geography of pollution. The findings in our new report are consistent with a September 2005 Associated Press (AP) study showing African Americans were more than twice as likely as whites to live in neighborhoods where air pollution seems to pose the greatest health danger. Hispanics and Asians also were more likely to breathe dirty air in some regions of the United States. However, toxic chemical assaults are not new for many people of color who are forced to live next to and often on the fence line with chemical industries that spew their poisons into the air, water and ground.

**Place matters.** People of color are particularly concentrated in neighborhoods and communities with the greatest number of hazardous waste facilities, a finding that directly parallels that of the original UCC report. This current appraisal also reveals that racial disparities are widespread throughout the country – whether one examines EPA regions, states or metropolitan areas, where the lion's share of facilities is located. Significant racial and socioeconomic disparities exist today despite the considerable societal attention to the problem noted in this report. These findings raise serious questions about the ability of current policies and institutions to adequately protect people of color and the poor from toxic threats.

**Unequal protection places communities of color at special risk.** Not only are people of color differentially impacted by toxic wastes and contamination, they can expect different responses from the government when it comes to remediation—as clearly seen in the two case studies in Post-Katrina New Orleans and in Dickson County, Tennessee. Thus, it does not appear that existing environmental, health and civil rights laws and local land use controls have been adequately applied or adapted to reducing health risks or mitigating various adverse impacts to families living in or near toxic “hot spots.”

**Polluting industries still follow the path of least resistance.** For many industries it is a “race to the bottom,” where land, labor and lives are cheap. It's about profits and the “bottom line.” Environmental “sacrifice zones” are seen as the price of doing business. Vulnerable communities, populations and individuals often fall between the regulatory cracks. They are in many ways “invisible” communities. The environmental justice movement served to make these disenfranchised communities visible and vocal.

**The current environmental protection apparatus is “broken” and needs to be “fixed.”** The current environmental protection system fails to provide equal protection to people of color and low-income communities. Various levels of government have been slow to respond to environmental health threats

from toxic waste in communities of color. The mission of the U.S. EPA was never designed to address environmental policies and practices that result in unfair, unjust and inequitable outcomes. The impetus for changing the dominant environmental protection paradigm did not come from within regulatory agencies, the polluting industry, academia or the "industry" that has been built around risk management. The impetus for change came from grassroots mobilization that views environmental protection as a basic right, not a privilege reserved for a few who can "vote with their feet" and escape from or fend off locally undesirable land uses or LULUs—such as landfills, incinerators, chemical plants, refineries and other polluting facilities.

**Slow government response to environmental contamination and toxic threats unnecessarily endangers the health of the most vulnerable populations in our society.** Government officials have knowingly allowed people of color families near Superfund sites and other contaminated waste sites to be poisoned with lead, arsenic, dioxin, TCE, DDT, PCBs and a host of other deadly chemicals. Having the facts and failing to respond is tantamount to an immoral "human experiment."

Clearly, the environmental justice movement over the last two decades has made a difference in the lives of people of color and low-income communities that are overburdened with environmental pollution. After years of intense study, targeted research, public hearings, grassroots organizing, networking and movement building, environmental justice struggles have taken center stage. Yet, all communities are still *not* created equal. People of color neighborhoods are still the dumping grounds for all kinds of toxins. Federal agencies such as the EPA have dropped the ball in implementing environmental justice and civil rights policies and programs that could truly make a difference to affected communities.

Community leaders who have been on the front line for justice for decades know that the lethargic, and too often antagonistic, government response to environmental emergencies in their communities is not the exception but the general rule. They have come to understand that waiting for the government to respond can be hazardous to their health and the health of their communities. Many of these leaders are not waiting, but are mobilizing to force all levels of government to do the right thing—and do it in a timely manner before disaster strikes.

While communities all across the nation celebrate the twentieth anniversary of *Toxic Wastes and Race* and the new report, they know all too well that there is still much work to be done before we achieve the goal of environmental justice for all. While much progress has been made in mainstreaming environmental protection as a civil rights, human rights and social justice issue, the key is getting government to enforce the laws and regulations equally across the board—without regard to race, color or national origin.

Getting government to respond to the needs of low-income and people of color communities has not been easy, especially in recent years when the United States Environmental Protection Agency, the governmental agency millions of Americans look to for protection, has mounted an all-out attack on environmental justice and environmental justice principles established in the early 1990s. It has not been easy fending off attacks and proposals from the EPA that would dismantle or weaken the hard-fought gains made by individuals and groups that put their lives on the front line. Moreover, the agency has failed to implement the Environmental Justice Executive Order 12898 signed by President Bill Clinton in 1994 or apply Title VI of the Civil Rights Act.

## **Recommendations**

Many of the environmental injustice problems that disproportionately and adversely affect low-income and people of color communities could be eliminated if current environmental, health, housing, land use and civil rights laws were vigorously enforced in a nondiscriminatory way. Many of the environmental problems facing low-income persons and people of color are systemic and will require institutional change, including new legislation. We also recognize that government alone cannot solve these problems, but need the support and assistance of concerned individuals, groups and organizations from various walks of life. The following recommendations are offered:

## Congressional Actions

**Codify Environmental Justice Executive Order 12898.** In order to strengthen compliance and enforcement of environmental justice objectives at the federal level, ensure that discriminatory agency decisions and actions are addressed, and to provide clear leadership to the states, Congress should codify into law Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” By codifying the Executive Order, Congress will establish an unequivocal legal mandate and impose federal responsibility in ways that advance equal protection under law in communities of color and low-income communities. Executive Order 12898 provides significant impetus at the federal level and in the states. However, arguably the power of the Executive Branch alone is limited. Enacting a law which codifies the government's role in achieving environmental justice, expands the original list of seventeen agencies required to comply and establishes annual reports to Congress that would pave the way to government-wide action and provide a means of accountability.

**Provide Legislative “Fix” for Title VI of the Civil Rights Act of 1964.** Work toward a legislative “fix” of Title VI of the Civil Rights Act of 1964 that was gutted by the 2001 *Alexander v. Sandoval* U.S. Supreme Court decision that requires intent, rather than disparate impact, to prove discrimination. Congress should act to restore the status quo that existed prior to *Sandoval* by passing legislation to reestablish that there is a private right of action for disparate impact discrimination under the Title VI regulation. The failure to restore the private right of action will mean that private advocacy organizations will have to fight many discrimination battles with one hand tied behind their backs.

**Re-instate the Superfund Tax.** The new Congress needs to act immediately to re-instate the Superfund Tax, re-examine the National Priorities List (NPL) hazardous site ranking system and reinvigorate Federal Relocation Policy implementation in communities of color to move those communities that are directly in harm's way.

**Hold Congressional Hearings on EPA Response to Contamination in EJ Communities.** We urge the U.S. Congress to hold hearings on the U.S. Environmental Protection Agency's (EPA's) response to toxic contamination in EJ communities, including post-Katrina New Orleans, the Dickson County (Tennessee) Landfill water contamination problem, and similar toxic contamination problems found in low-income and people of color communities throughout the United States.

**Convene Congressional Black Caucus and Congressional Hispanic Caucus Policy Briefings.** We urge the Congressional Black Caucus and the Congressional Hispanic Caucus to convene policy briefings on the findings of *Toxic Wastes and Race at Twenty* to explore possible legislative and policy remedies.

**Enact Legislation Promoting Clean Production and Waste Reduction.** Require industry to use clean production technologies and support necessary R&D for toxic use reduction and closed loop production systems. Create incentives and buy back programs to achieve full recovery, reuse and recycling of waste and product design that enhances waste material recovery and reduction. Policies must include material restrictions for highly toxic and carcinogenic materials.

**Require Comprehensive Safety Data for All Chemicals.** Chemical manufacturing companies must provide publicly available safety information about a chemical for it to remain on or be added to the market. The information must allow for reasonable evaluation of the safety of the chemical for human health and the environment and must include hazard, use and exposure information. This is referred to as the “No Data, No Market” principle.

## Executive Branch Actions

**Implement EPA Office of Inspector General's Recommendations.** Even the EPA's own Inspector General (IG) agrees that the agency has not developed a clear vision or a comprehensive strategic plan, and has not established values, goals, expectations and performance measurements for integrating

environmental justice into its day-to-day operations. The EPA should implement the EJ recommendations of the IG's 2004 and 2006 reports for addressing Executive Order 12898.

**Fully Implement Environmental Justice Executive Order 12898.** The U.S. EPA, FEMA, Army Corps of Engineers, Department of Labor, HUD and other federal agencies need to fully implement the Environmental Justice Executive Order 12898 in the cleanup and rebuilding in the hurricane-ravaged Gulf Coast region.

**Protect Community Right-to-Know.** Reinstate reporting emissions to the Toxic Release Inventory (TRI) database on an annual basis to protect communities' right to know. Reinstate reporting lower emission thresholds to the TRI.

**End EPA Rollback of Environmental Justice Initiatives.** Environmental justice leaders are demanding that the U.S. EPA end its attempts to roll back environmental justice and take aggressive steps to implement EJ Executive Order 12898 and provide targeted enforcement where the needs are the greatest, and where unequal protection places low-income and people of color populations at special risk.

**Require Cumulative Risk Assessments in Facility Permitting.** EPA should require assessments of multiple, cumulative and synergistic exposures, unique exposure pathways, and impacts to sensitive populations in issuing environmental permits and regulations under the Resource Conservation and Recovery Act (RCRA), Clean Air Act (CAA), Clean Water Act (CWA) and other federal laws. Similar considerations should be made in establishing site-specific clean-up standards under Superfund and Brownfields programs.

**Require Safety Buffers in Facility Permitting and Fenceline Community Performance Bonds for Variances.** The EPA and states should adopt site location standards requiring a safe distance between a residential population and an industrial facility so that the population is not located within the area where deaths or serious injury to health or property would result in the event that a toxic or flammable substance stored, processed or generated by the facility would be released to the environment through explosion, fire or spill. If safety buffer exemptions are granted, require a locally administered Fenceline Community Performance Bond to provide recovery resources for residents impacted by chemical accidents.

#### State and Local Actions

**Require State-by-State Assessments (Report Cards) on Environmental Justice.** Require states to evaluate and report their progress made on environmental justice. From 1993 to present, nearly three dozen states have expressly addressed environmental justice, demonstrating increased attention to the issue at a political level by passing legislation. However, little is known about the efficacy of these laws and if in fact they are being enforced.

**Require Brownfields Community Revitalization Analysis.** Parties seeking to benefit from governmental subsidies should be required to conduct a Community Revitalization Analysis (CRA) and take steps to address the most serious impacts identified in the analysis.

**Develop Brownfields Partnerships with Academic Institutions.** Residents in neighborhoods with brownfields sites must be an integral part of the redevelopment process. Many brownfields are located in or near low-income and people of color communities, historically black colleges and universities, Hispanic Serving Institutions and American Indian Tribally Controlled Colleges and Universities.

**Establish Tax Increment Finance Funds to Promote Environmental Justice-Driven Community Development.** Environmental justice organizations should become involved in redevelopment processes in their neighborhoods in order to integrate brownfields priorities into long-range neighborhood redevelopment plans. This will allow for the use of Tax Increment Finance funds accrued by the redevelopment process to fund the cleanup and redevelopment of brownfields sites for community-determined uses. It is imperative that EJ groups and other community-based organizations are provided

resources to drive the development process, as investment in an area increases and as real-estate values rise—to minimize gentrification and displacement of incumbent residents.

**Establish Community Land Trusts.** The establishment of Community Land Trusts (CLTs) could allow communities to purchase or obtain brownfields from local governments at below-market rates, and then redevelop them for a variety of community needs including limited-equity housing. CLTs are community-governed nonprofits, with development priorities that are determined by local residents.

**Adopt Green Procurement Policies and Clean Production Tax Policies.** State and local governments can show leadership in reducing the demand for products produced using unsustainable technologies that harm human health and the environment. Government must use its buying power and tax dollars ethically by supporting clean production systems. Ecological tax reform can assure that public money goes to safer materials and promotes pollution prevention.

#### Nongovernmental Organization (NGO) Actions

**Develop Community Benefits Plans.** Encourage environmental justice movement leaders to develop environmental justice criteria for Community Benefits Plans (modeled after those employed successfully in union organizing) in order to assess the desirability of any given brownfields redevelopment project proposed for a community.

**Increase Private Foundations' General Support Funding for Environmental, Economic and Climate Justice, and Healthy Communities.** Increase private foundation support for efforts of environmental justice groups and their allies to craft and implement legislative, public policy and legal advocacy campaigns to address long-ignored environmental and public health inequities. Currently there is a tremendous amount of attention and focus by environmental grantmakers in particular to issues of climate change. But very little attention is being paid (in terms of grants and philanthropic support) to campaigns that focus specifically on climate justice issues.

**Fund Support for Training New Generations of Leaders.** Environmental justice organizations, campaigns and collaborative partnerships, including environmental justice centers and academic programs at universities, remain the stepchild of philanthropic giving, thereby exacerbating environmental and public health disparities. Increasing the pool of young people of color in the environmental fields makes good economic sense. It is also good common sense, given the changing demographics of the country. Funders should challenge their environmental grantees to confront the issues of diversity on their staffs and boards.

**Target the “Dirty Dozen” Environmental Justice Test Cases.** Since much of the environmental protection apparatus was placed on hold or shut down altogether over the past decade, we urge the national environmental, civil rights, human rights, faith-based and political organizations to “adopt” environmental justice test cases to draw national attention back to the deadly mix of waste, race, class and government inaction. We recommend the national coalition compile a list and target the twelve worst cases, the “Dirty Dozen,” of private industry and government installations that have polluted African American, Native American, Latino American, Asian American/Pacific Islander and poor White American communities and their residents.

**Step up Efforts to Diversify Mainstream Environmental Organizations.** There must be a serious and sustained effort to redress this utter lack of diversity within the mainstream environmental movement, an effort that moves beyond tokenism toward real organizational transformation. In the twenty years that have passed since the original publication of *Toxic Wastes and Race in the United States*, there continues to be a huge divide between “mainstream” environmental organizations and environmental justice groups. The environmental movement in the U.S. continues to be one of the most segregated spheres in American society. While a few environmental organizations took seriously the challenges put forward at the First National People of Color Environmental Leadership Summit in 1991, the overall lack of diversity at the staff, board, and program level remains staggering.

**Continue to Strengthen Racial, Ethnic, Cross-Class Collaborations Among Environmental Justice Organizations.** Important strides have been made by the environmental justice movement in building multi-racial, multi-ethnic coalitions and in developing strategic alliances with mainstream environmental groups, organized labor, faith-based groups and the scientific community. An October 2005 conference, called *Summit 2005 – Diverse Partners for Environmental Progress*, took some initial steps at strengthening alliances within the environmental justice movement. Since then several regional meetings have occurred and in September 2007 “Summit 2007” will take place to “strengthen the network of environmental advocates that is reflective of race, ethnicity, culture, class, and geography.” We encourage these and similar efforts to work together in a multi-racial, multi-ethnic fashion to achieve our collective mission to end the suffering of communities most affected by environmental degradation.

#### Industry Actions

**Adopt Clean Production Principles and Methods.** Clean production is rooted in the Precautionary Principle and requires clean manufacturing processes that produce clean and safe products. As a healthy business strategy to transform the toxic chemical economy, industry is urged to adopt toxic use reduction, waste reduction, zero waste and closed loop production systems that promote use of renewable energy, nontoxic materials, safer chemical practices and sustainable product design. Industry must invest in research and development of sustainable chemicals, products, materials and processes. It can begin by adopting the Louisville Charter for safe chemicals developed in 2004 by a broad set of environmental justice and health organizations and professionals.

**Phase Out Persistent, Bioaccumulative, or Highly Toxic Chemicals.** Prioritize for elimination chemicals that are slow to degrade, accumulate in our bodies or living organisms, or are highly hazardous to humans or the environment, including those that disrupt hormones and the immune system and are particularly dangerous to children and other vulnerable populations. Ensure that chemicals eliminated in the United States are not exported to other countries.

**Adopt Extended Producer Responsibility.** Extended Producer Responsibility (EPR) requires producers take responsibility for the entire product life cycle including the post consumer phase of their product, thereby promoting closed loop systems. EPR makes producers responsible for the environmental and public health impacts of their products, for example, by prohibiting export of end-of-life product waste to other countries as a commodity. Industry must establish minimum recovery, reuse, and material recycling targets. Incineration or combustion should not be considered “recycling.” Industry also must widely adopt end-of-life product buy-backs and phase out plans for all product wastes going to landfills, incinerators, cement kilns, or combustion facilities.

**Support Community and Worker Right-to-Know.** An informed public, workers, and communities must have access to information about industries’ use and release of toxic chemical and industries’ product chains. Disclose chemicals and materials, list quantities of chemicals produced, used, released, and exported, and provide access to information. The public and workers must be made sufficiently aware of chemical hazards, uses and exposures to make informed decisions. Access to information must include citizen/community inspections. Corporations also must provide adequate information such as life cycle assessments and product labeling so that consumers and governments can use their spending power to support clean production. Industry must also provide meaningful involvement for the public and workers in decisions on chemicals.

**Adopt and Uphold Legally-Binding Good Neighborhood Agreements.** Uphold performance standards negotiated with fence line communities that may include community access to information, environmental and health monitoring, right to inspect the facility, accident preparedness, pollution prevention and support of good local jobs, union jobs, local economic needs and means for dispute resolution.

**Appendix 1 – People of Color Percentages in Hazardous Waste Host Neighborhoods  
and Non-Host Areas by EPA Region and State<sup>1</sup>**

<b>EPA Region/State</b>	<b>Sites<sup>2</sup></b>	<b>Majority People of Color Sites<sup>3</sup></b>	<b>Host Neighborhoods</b>	<b>Non-Host Areas</b>	<b>Difference<sup>4</sup></b>	<b>Ratio</b>
<b>Region 1</b>	<b>23</b>	<b>3</b>	<b>36.3%</b>	<b>15.0%</b>	<b>21.3%</b>	<b>2.43</b>
Connecticut	4	1	49.0%	21.3%	27.7%	2.30
Maine	2	0	7.8%	3.4%	4.4%	2.31
Massachusetts	12	1	33.5%	17.2%	16.3%	1.95
Rhode island	3	1	39.6%	14.6%	25.0%	2.71
Vermont	2	0	4.4%	3.9%	0.5%	1.13
<b>Region 2</b>	<b>32</b>	<b>5</b>	<b>51.5%</b>	<b>36.0%</b>	<b>15.6%</b>	<b>1.43</b>
New Jersey	14	3	54.8%	33.0%	21.9%	1.66
New York	18	2	50.3%	37.3%	13.0%	1.35
<b>Region 3</b>	<b>35</b>	<b>1</b>	<b>23.2%</b>	<b>24.5%</b>	<b>-1.3%</b>	<b>0.95</b>
Maryland	3	1	44.8%	37.8%	7.0%	1.19
Pennsylvania	23	0	16.5%	15.9%	0.6%	1.04
Virginia	9	0	36.1%	29.8%	6.3%	1.21
West Virginia	2	0	10.2%	5.4%	4.8%	1.89
<b>Region 4</b>	<b>67</b>	<b>28</b>	<b>54.3%</b>	<b>30.4%</b>	<b>23.8%</b>	<b>1.78</b>
Alabama	8	3	66.3%	29.3%	36.9%	2.26
Florida	13	5	52.7%	34.3%	18.4%	1.54
Georgia	12	7	55.6%	37.0%	18.6%	1.50
Kentucky	9	1	51.5%	10.0%	41.5%	5.14
Mississippi	3	2	50.6%	39.1%	11.5%	1.29
North Carolina	10	4	55.9%	29.4%	26.5%	1.90
South Carolina	4	3	43.9%	33.8%	10.2%	1.30
Tennessee	6	3	53.8%	20.4%	33.4%	2.64
<b>Region 5</b>	<b>85</b>	<b>28</b>	<b>52.6%</b>	<b>18.8%</b>	<b>33.8%</b>	<b>2.80</b>
Illinois	16	10	67.9%	30.8%	37.1%	2.21
Indiana	16	4	41.2%	13.1%	28.1%	3.14
Michigan	19	8	65.7%	19.2%	46.5%	3.43
Minnesota	10	2	34.4%	10.3%	24.1%	3.33
Ohio	21	4	39.0%	15.3%	23.7%	2.55
Wisconsin	3	0	35.6%	12.4%	23.2%	2.87
<b>Region 6</b>	<b>61</b>	<b>28</b>	<b>62.7%</b>	<b>41.8%</b>	<b>20.9%</b>	<b>1.50</b>
Arkansas	5	2	51.6%	21.3%	30.4%	2.43
Louisiana	12	5	52.7%	37.3%	15.4%	1.41
New Mexico	3	1	52.5%	55.4%	-2.9%	0.95
Oklahoma	8	0	28.1%	25.9%	2.2%	1.09
Texas	33	20	66.4%	47.1%	19.4%	1.41
<b>Region 7</b>	<b>32</b>	<b>5</b>	<b>29.1%</b>	<b>13.4%</b>	<b>15.7%</b>	<b>2.17</b>
Iowa	3	0	21.0%	7.0%	13.9%	2.98
Kansas	9	3	47.2%	15.9%	31.3%	2.97
Missouri	15	2	28.3%	15.9%	12.4%	1.78
Nebraska	5	0	11.2%	12.7%	-1.4%	0.89
<b>Region 8</b>	<b>15</b>	<b>5</b>	<b>31.2%</b>	<b>18.2%</b>	<b>13.0%</b>	<b>1.72</b>
Colorado	5	1	41.0%	25.2%	15.8%	1.63
North Dakota	3	0	7.5%	8.2%	-0.7%	0.91
South Dakota	1	0	13.7%	11.9%	1.8%	1.15
Utah	6	4	36.5%	14.1%	22.4%	2.58
<b>Region 9</b>	<b>55</b>	<b>43</b>	<b>80.5%</b>	<b>49.4%</b>	<b>31.1%</b>	<b>1.63</b>
Arizona	7	4	64.3%	35.7%	28.6%	1.80
California	45	38	81.2%	51.5%	29.7%	1.58
Nevada	3	1	79.4%	33.1%	46.3%	2.40
<b>Region 10</b>	<b>8</b>	<b>1</b>	<b>38.9%</b>	<b>19.1%</b>	<b>19.9%</b>	<b>2.04</b>
Idaho	2	0	7.9%	12.0%	-4.1%	0.66
Oregon	3	0	25.7%	16.3%	9.4%	1.57
Washington	3	1	52.8%	20.7%	32.0%	2.54
<b>U.S. Total</b>	<b>413</b>	<b>147</b>	<b>55.9%</b>	<b>30.0%</b>	<b>25.9%</b>	<b>1.86</b>

<sup>1</sup> Alaska (Reg. 10), Hawaii (Reg. 9), Delaware & New Hampshire (Reg. 1), Montana & Wyoming (Reg. 8) have no commercial hazardous waste facilities.

<sup>2</sup> Number of commercial hazardous waste facilities. <sup>3</sup> Number of host neighborhoods with majority people of color, i.e., greater than 50%. <sup>4</sup> Differences may not precisely correspond to other values due to rounding off. Tabulation based on 2000 Census data.

## Appendix 2 – Hispanic/Latino Percentages by EPA Region and State

EPA Region/State	Host Neighborhoods	Non-Host Areas	Difference <sup>1</sup>	Ratio
<b>Region 1</b>	<b>19.5%</b>	<b>5.5%</b>	<b>13.9%</b>	<b>3.52</b>
Connecticut	25.8%	8.6%	17.2%	3.00
Maine	1.7%	0.7%	1.0%	2.42
Massachusetts	19.0%	5.9%	13.1%	3.21
Rhode island	19.6%	6.9%	12.8%	2.86
Vermont	1.2%	0.9%	0.3%	1.37
<b>Region 2</b>	<b>23.3%</b>	<b>14.0%</b>	<b>9.3%</b>	<b>1.66</b>
New Jersey	23.8%	12.8%	11.0%	1.87
New York	23.1%	14.6%	8.5%	1.58
<b>Region 3</b>	<b>4.7%</b>	<b>3.7%</b>	<b>1.0%</b>	<b>1.26</b>
Maryland	2.5%	4.3%	-1.9%	0.57
Pennsylvania	5.8%	3.1%	2.7%	1.88
Virginia	2.3%	4.6%	-2.3%	0.50
West Virginia	1.1%	0.6%	0.5%	1.74
<b>Region 4</b>	<b>13.7%</b>	<b>7.2%</b>	<b>6.5%</b>	<b>1.91</b>
Alabama	1.2%	1.6%	-0.4%	0.74
Florida	33.6%	16.5%	17.0%	2.03
Georgia	8.5%	5.2%	3.3%	1.64
Kentucky	0.9%	1.4%	-0.5%	0.61
Mississippi	1.7%	1.3%	0.4%	1.27
North Carolina	6.6%	4.6%	2.0%	1.43
South Carolina	1.4%	2.3%	-0.9%	0.60
Tennessee	6.2%	2.0%	4.1%	3.02
<b>Region 5</b>	<b>11.3%</b>	<b>5.0%</b>	<b>6.3%</b>	<b>2.27</b>
Illinois	25.8%	11.8%	14.0%	2.19
Indiana	15.4%	3.0%	12.4%	5.12
Michigan	3.5%	3.2%	0.3%	1.09
Minnesota	6.9%	2.6%	4.3%	2.64
Ohio	5.2%	1.8%	3.4%	2.90
Wisconsin	2.4%	3.6%	-1.2%	0.68
<b>Region 6</b>	<b>37.9%</b>	<b>23.1%</b>	<b>14.7%</b>	<b>1.64</b>
Arkansas	2.0%	3.2%	-1.2%	0.62
Louisiana	6.4%	2.4%	4.0%	2.71
New Mexico	42.3%	42.1%	0.2%	1.00
Oklahoma	5.0%	5.2%	-0.1%	0.98
Texas	43.1%	31.7%	11.4%	1.36
<b>Region 7</b>	<b>8.9%</b>	<b>3.6%</b>	<b>5.3%</b>	<b>2.50</b>
Iowa	4.1%	2.8%	1.4%	1.49
Kansas	19.8%	6.5%	13.4%	3.06
Missouri	4.4%	2.0%	2.4%	2.18
Nebraska	7.9%	5.4%	2.5%	1.47
<b>Region 8</b>	<b>22.9%</b>	<b>10.5%</b>	<b>12.4%</b>	<b>2.19</b>
Colorado	35.0%	16.7%	18.3%	2.10
North Dakota	1.2%	1.2%	0.1%	1.06
South Dakota	3.8%	1.3%	2.5%	2.85
Utah	23.2%	8.6%	14.6%	2.69
<b>Region 9</b>	<b>54.1%</b>	<b>28.7%</b>	<b>25.3%</b>	<b>1.88</b>
Arizona	50.9%	24.8%	26.1%	2.06
California	54.3%	30.8%	23.5%	1.76
Nevada	50.3%	18.5%	31.8%	2.72
<b>Region 10</b>	<b>10.1%</b>	<b>7.5%</b>	<b>2.6%</b>	<b>1.35</b>
Idaho	3.9%	7.9%	-3.9%	0.50
Oregon	12.7%	7.9%	4.7%	1.60
Washington	8.1%	7.5%	0.7%	1.09

<sup>1</sup> Differences may not precisely correspond to other values due to rounding off. Tabulation based on 2000 Census data.

### Appendix 3 – African American Percentages by EPA Region and State

EPA Region/State	Host Neighborhoods	Non-Host Areas	Difference <sup>1</sup>	Ratio
<b>Region 1</b>	<b>9.6%</b>	<b>4.8%</b>	<b>4.8%</b>	<b>2.00</b>
Connecticut	20.5%	8.4%	12.1%	2.44
Maine	1.9%	0.4%	1.4%	4.21
Massachusetts	5.7%	5.3%	0.4%	1.08
Rhode Island	11.0%	3.2%	7.8%	3.41
Vermont	0.4%	0.5%	-0.1%	0.87
<b>Region 2</b>	<b>16.0%</b>	<b>15.0%</b>	<b>1.0%</b>	<b>1.07</b>
New Jersey	23.8%	12.9%	10.9%	1.85
New York	13.1%	15.9%	-2.8%	0.83
<b>Region 3</b>	<b>15.1%</b>	<b>16.6%</b>	<b>-1.5%</b>	<b>0.91</b>
Maryland	37.3%	27.5%	9.8%	1.35
Pennsylvania	7.8%	9.9%	-2.2%	0.78
Virginia	30.8%	19.5%	11.3%	1.58
West Virginia	6.3%	3.0%	3.2%	2.06
<b>Region 4</b>	<b>37.0%</b>	<b>20.4%</b>	<b>16.6%</b>	<b>1.82</b>
Alabama	64.0%	25.6%	38.4%	2.50
Florida	16.5%	14.4%	2.1%	1.14
Georgia	41.8%	28.3%	13.4%	1.47
Kentucky	48.7%	6.6%	42.1%	7.39
Mississippi	47.5%	36.2%	11.3%	1.31
North Carolina	44.2%	21.2%	23.0%	2.09
South Carolina	41.3%	29.4%	11.9%	1.40
Tennessee	43.6%	16.0%	27.6%	2.72
<b>Region 5</b>	<b>35.8%</b>	<b>10.1%</b>	<b>25.7%</b>	<b>3.55</b>
Illinois	38.0%	14.1%	23.9%	2.69
Indiana	23.2%	7.7%	15.5%	3.00
Michigan	57.5%	11.9%	45.6%	4.84
Minnesota	12.8%	2.8%	10.0%	4.57
Ohio	30.7%	10.7%	19.9%	2.86
Wisconsin	29.0%	5.4%	23.6%	5.39
<b>Region 6</b>	<b>20.4%</b>	<b>13.5%</b>	<b>6.9%</b>	<b>1.51</b>
Arkansas	47.7%	15.4%	32.2%	3.09
Louisiana	44.2%	32.2%	12.0%	1.37
New Mexico	2.3%	1.8%	0.5%	1.28
Oklahoma	10.6%	7.5%	3.1%	1.42
Texas	19.2%	11.2%	8.0%	1.71
<b>Region 7</b>	<b>16.1%</b>	<b>6.7%</b>	<b>9.4%</b>	<b>2.40</b>
Iowa	13.6%	1.8%	11.7%	7.39
Kansas	21.2%	5.1%	16.1%	4.17
Missouri	20.0%	10.9%	9.2%	1.84
Nebraska	0.8%	4.1%	-3.2%	0.21
<b>Region 8</b>	<b>1.9%</b>	<b>2.0%</b>	<b>-0.1%</b>	<b>0.95</b>
Colorado	1.5%	3.8%	-2.3%	0.40
North Dakota	1.2%	0.5%	0.7%	2.34
South Dakota	3.8%	0.5%	3.2%	6.98
Utah	2.8%	0.7%	2.1%	4.10
<b>Region 9</b>	<b>11.8%</b>	<b>5.6%</b>	<b>6.2%</b>	<b>2.10</b>
Arizona	7.9%	2.9%	5.0%	2.72
California	11.6%	6.2%	5.4%	1.87
Nevada	24.8%	5.9%	18.8%	4.18
<b>Region 10</b>	<b>6.6%</b>	<b>2.3%</b>	<b>4.2%</b>	<b>2.84</b>
Idaho	0.8%	0.4%	0.4%	2.04
Oregon	1.3%	1.6%	-0.2%	0.86
Washington	11.6%	3.0%	8.6%	3.82

<sup>1</sup> Differences may not precisely correspond to other values due to rounding off. Tabulation based on 2000 Census data.

#### Appendix 4 – Asian/Pacific Islander Percentages by EPA Region and State

EPA Region/State	Host Neighborhoods	Non-Host Areas	Difference <sup>1</sup>	Ratio
<b>Region 1</b>	<b>4.9%</b>	<b>2.6%</b>	<b>2.4%</b>	<b>1.91</b>
Connecticut	1.3%	2.5%	-1.2%	0.51
Maine	1.9%	0.6%	1.2%	2.92
Massachusetts	6.6%	3.6%	3.0%	1.83
Rhode island	5.6%	1.8%	3.8%	3.14
Vermont	1.0%	0.8%	0.2%	1.28
<b>Region 2</b>	<b>9.7%</b>	<b>5.4%</b>	<b>4.3%</b>	<b>1.81</b>
New Jersey	2.2%	5.0%	-2.8%	0.44
New York	1.3%	1.1%	0.2%	1.19
<b>Region 3</b>	<b>2.0%</b>	<b>2.7%</b>	<b>-0.7%</b>	<b>0.75</b>
Maryland	3.1%	4.0%	-0.9%	0.76
Pennsylvania	1.8%	1.8%	0.0%	0.99
Virginia	1.4%	3.7%	-2.3%	0.38
West Virginia	1.1%	0.5%	0.6%	2.06
<b>Region 4</b>	<b>2.2%</b>	<b>1.4%</b>	<b>0.8%</b>	<b>1.59</b>
Alabama	0.2%	0.7%	-0.5%	0.31
Florida	1.8%	1.7%	0.1%	1.03
Georgia	4.0%	2.1%	1.9%	1.89
Kentucky	0.4%	0.8%	-0.4%	0.49
Mississippi	0.7%	0.6%	0.0%	1.03
North Carolina	11.4%	5.2%	6.2%	2.19
South Carolina	0.2%	0.9%	-0.7%	0.25
Tennessee	1.9%	1.0%	1.0%	1.99
<b>Region 5</b>	<b>3.2%</b>	<b>2.0%</b>	<b>1.2%</b>	<b>1.59</b>
Illinois	3.1%	3.5%	-0.4%	0.89
Indiana	0.8%	1.0%	-0.2%	0.79
Michigan	1.6%	1.8%	-0.2%	0.90
Minnesota	10.2%	2.4%	7.8%	4.27
Ohio	1.2%	1.2%	0.0%	1.00
Wisconsin	2.1%	1.6%	0.5%	1.32
<b>Region 6</b>	<b>2.5%</b>	<b>2.1%</b>	<b>0.4%</b>	<b>1.17</b>
Arkansas	0.2%	0.8%	-0.6%	0.21
Louisiana	1.1%	1.3%	-0.2%	0.88
New Mexico	5.1%	5.8%	-0.6%	0.89
Oklahoma	0.6%	1.4%	-0.8%	0.45
Texas	2.9%	2.7%	0.2%	1.06
<b>Region 7</b>	<b>1.7%</b>	<b>1.3%</b>	<b>0.4%</b>	<b>1.30</b>
Iowa	1.4%	1.2%	0.1%	1.11
Kansas	2.5%	1.7%	0.8%	1.46
Missouri	1.5%	1.1%	0.4%	1.33
Nebraska	3.0%	1.4%	1.6%	2.14
<b>Region 8</b>	<b>3.1%</b>	<b>1.7%</b>	<b>1.4%</b>	<b>1.80</b>
Colorado	2.1%	2.3%	-0.2%	0.92
North Dakota	1.3%	0.5%	0.8%	2.57
South Dakota	1.3%	0.6%	0.6%	2.00
Utah	6.8%	2.2%	4.6%	3.11
<b>Region 9</b>	<b>12.3%</b>	<b>10.8%</b>	<b>1.5%</b>	<b>1.14</b>
Arizona	2.6%	1.9%	0.7%	1.36
California	13.1%	11.1%	2.0%	1.18
Nevada	1.2%	1.3%	-0.1%	0.93
<b>Region 10</b>	<b>17.1%</b>	<b>4.2%</b>	<b>12.9%</b>	<b>4.07</b>
Idaho	1.3%	1.0%	0.3%	1.30
Oregon	8.1%	3.0%	5.0%	2.66
Washington	26.3%	5.6%	20.7%	4.72

<sup>1</sup> Differences may not precisely correspond to other values due to rounding off. Tabulation based on 2000 Census data.

### Appendix 5 – Poverty Rates by EPA Region and State

EPA Region/State	Host Neighborhoods	Non-Host Areas	Difference <sup>1</sup>	Ratio
<b>Region 1</b>	<b>15.7%</b>	<b>8.7%</b>	<b>7.0%</b>	<b>1.80</b>
Connecticut	16.0%	7.5%	8.6%	2.15
Maine	14.4%	10.8%	3.6%	1.33
Massachusetts	14.6%	9.0%	5.6%	1.63
Rhode Island	19.7%	10.8%	8.9%	1.83
Vermont	8.5%	9.5%	-1.0%	0.90
<b>Region 2</b>	<b>19.4%</b>	<b>12.3%</b>	<b>7.1%</b>	<b>1.57</b>
New Jersey	15.6%	8.2%	7.5%	1.92
New York	20.8%	14.2%	6.5%	1.46
<b>Region 3</b>	<b>12.6%</b>	<b>10.7%</b>	<b>1.9%</b>	<b>1.18</b>
Maryland	15.6%	8.3%	7.2%	1.87
Pennsylvania	11.2%	11.0%	0.2%	1.02
Virginia	11.4%	9.6%	1.8%	1.19
West Virginia	23.3%	17.8%	5.5%	1.31
<b>Region 4</b>	<b>15.7%</b>	<b>13.7%</b>	<b>2.0%</b>	<b>1.15</b>
Alabama	22.9%	16.0%	6.8%	1.43
Florida	13.9%	12.5%	1.4%	1.11
Georgia	12.5%	13.0%	-0.5%	0.96
Kentucky	23.3%	15.7%	7.6%	1.48
Mississippi	17.5%	20.0%	-2.5%	0.88
North Carolina	17.2%	12.2%	5.1%	1.41
South Carolina	14.0%	14.1%	-0.2%	0.99
Tennessee	14.8%	13.5%	1.3%	1.10
<b>Region 5</b>	<b>19.4%</b>	<b>9.6%</b>	<b>9.7%</b>	<b>2.01</b>
Illinois	18.6%	10.4%	8.2%	1.79
Indiana	16.3%	9.2%	7.0%	1.76
Michigan	22.8%	9.9%	12.9%	2.30
Minnesota	16.1%	7.4%	8.7%	2.17
Ohio	21.6%	10.2%	11.4%	2.11
Wisconsin	10.0%	8.7%	1.3%	1.15
<b>Region 6</b>	<b>18.8%</b>	<b>16.0%</b>	<b>2.8%</b>	<b>1.18</b>
Arkansas	25.2%	15.8%	9.4%	1.60
Louisiana	21.3%	19.6%	1.7%	1.09
New Mexico	14.8%	18.5%	-3.7%	0.80
Oklahoma	19.8%	14.7%	5.1%	1.35
Texas	18.7%	15.3%	3.5%	1.23
<b>Region 7</b>	<b>15.0%</b>	<b>10.4%</b>	<b>4.7%</b>	<b>1.45</b>
Iowa	14.1%	9.0%	5.0%	1.56
Kansas	18.5%	9.6%	8.9%	1.93
Missouri	16.3%	11.6%	4.7%	1.40
Nebraska	7.6%	9.8%	-2.2%	0.77
<b>Region 8</b>	<b>14.8%</b>	<b>10.3%</b>	<b>4.4%</b>	<b>1.43</b>
Colorado	15.1%	9.1%	6.0%	1.66
North Dakota	13.2%	11.8%	1.4%	1.12
South Dakota	13.0%	13.2%	-0.1%	0.99
Utah	15.7%	9.2%	6.5%	1.70
<b>Region 9</b>	<b>20.7%</b>	<b>13.5%</b>	<b>7.2%</b>	<b>1.54</b>
Arizona	28.3%	13.7%	14.7%	2.07
California	20.2%	13.8%	6.4%	1.46
Nevada	28.1%	9.8%	18.3%	2.87
<b>Region 10</b>	<b>10.9%</b>	<b>11.0%</b>	<b>-0.1%</b>	<b>0.99</b>
Idaho	5.7%	11.8%	-6.0%	0.49
Oregon	9.6%	11.6%	-2.1%	0.82
Washington	12.4%	10.6%	1.8%	1.17

<sup>1</sup> Differences may not precisely correspond to other values due to rounding off. Tabulation based on 2000 Census data.

**Appendix 6 – People of Color Percentages for 50 Selected Metropolitan Areas**

<b>Metropolitan Area</b>	<b>Sites<sup>1</sup></b>	<b>Host</b>	<b>Non-Host</b>	<b>Difference<sup>2</sup></b>	<b>Ratio</b>
Albuquerque, NM	2	53.0%	52.2%	0.8%	1.01
Atlanta, GA	4	64.6%	39.6%	24.9%	1.63
Augusta--Aiken, GA--SC	1	58.2%	38.5%	19.6%	1.51
Baton Rouge, LA	3	89.6%	34.7%	54.9%	2.58
Beaumont--Port Arthur, TX	3	57.5%	34.9%	22.5%	1.65
Birmingham, AL	2	74.4%	31.9%	42.4%	2.33
Bridgeport, CT	1	64.4%	22.1%	42.3%	2.91
Canton--Massillon, OH	1	38.1%	8.5%	29.6%	4.49
Charlotte--Gastonia--Rock Hill, NC--SC	4	74.9%	26.5%	48.4%	2.83
Chicago, IL	9	71.6%	40.5%	31.1%	1.77
Cincinnati, OH--KY--IN	3	54.9%	14.2%	40.7%	3.87
Corpus Christi, TX	4	64.3%	60.4%	3.9%	1.06
Dallas, TX	8	55.1%	43.2%	11.9%	1.27
Detroit, MI	12	69.3%	25.8%	43.5%	2.68
Fresno, CA	2	78.4%	58.9%	19.6%	1.33
Gary, IN	3	68.0%	28.1%	39.9%	2.42
Houston, TX	10	78.6%	52.7%	25.9%	1.49
Jackson, MS	1	93.1%	46.3%	46.8%	2.01
Jersey City, NJ	1	66.4%	64.7%	1.7%	1.03
Las Vegas, NV--AZ	2	80.2%	34.8%	45.4%	2.31
Lawrence, MA--NH	1	57.9%	7.4%	50.5%	7.85
Longview--Marshall, TX	1	70.9%	26.6%	44.3%	2.66
Los Angeles--Long Beach, CA	17	90.9%	65.8%	25.0%	1.38
Louisville, KY--IN	3	51.6%	15.7%	35.9%	3.29
Lowell, MA--NH	1	40.8%	7.8%	33.0%	5.25
Memphis, TN--AR--MS	4	57.2%	47.8%	9.4%	1.20
Miami, FL	1	91.9%	79.0%	12.9%	1.16
New Orleans, LA	2	53.5%	45.1%	8.4%	1.19
New York, NY	3	61.0%	60.4%	0.6%	1.01
Newark, NJ	4	66.8%	38.1%	28.7%	1.75
Oakland, CA	6	76.0%	49.2%	26.7%	1.54
Orange County, CA	3	69.8%	46.8%	23.0%	1.49
Phoenix--Mesa, AZ	5	63.7%	33.5%	30.2%	1.90
Pueblo, CO	1	63.1%	39.7%	23.4%	1.59
Riverside--San Bernardino, CA	4	70.5%	52.4%	18.2%	1.35
Saginaw--Bay City--Midland, MI	1	68.7%	17.0%	51.7%	4.04
San Antonio, TX	2	72.7%	60.4%	12.2%	1.20
San Francisco, CA	2	55.6%	48.6%	7.0%	1.14
San Jose, CA	2	77.1%	53.6%	23.5%	1.44
Savannah, GA	1	50.1%	39.6%	10.5%	1.27
Seattle--Bellevue--Everett, WA	2	58.1%	23.0%	35.2%	2.53
South Bend, IN	3	48.5%	12.5%	35.9%	3.87
Stockton--Lodi, CA	1	58.3%	52.4%	6.0%	1.11
Sumter, SC	1	80.3%	47.4%	32.9%	1.69
Tallahassee, FL	1	76.9%	39.2%	37.7%	1.96
Tampa--St. Petersburg--Clearwater, FL	2	52.6%	23.7%	28.9%	2.22
Tucson, AZ	1	70.0%	38.1%	31.8%	1.83
Vallejo--Fairfield--Napa, CA	2	59.1%	45.4%	13.7%	1.30
Waterbury, CT	1	47.8%	17.3%	30.4%	2.75
Wichita, KS	3	50.7%	17.5%	33.1%	2.89
<b>AVERAGE</b>	<b>3.1</b>	<b>65.3%</b>	<b>38.2%</b>	<b>27.1%</b>	<b>2.16</b>

<sup>1</sup> Number of commercial hazardous waste facilities. <sup>2</sup> Differences may not precisely correspond to other values due to rounding off. Tabulation based on 2000 Census data.