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FROM CIVIL RIGHTS TO BLACK LIVES MATTER

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This introductory chapter lays the foundation for understanding environmental justice from its early roots in the modern civil rights movement to the current-day Black Lives Matter (BLM) movement. It also explores how the environmental justice framework redefined environmentalism and challenged institutional racism and the dominant environmental protection paradigm. The chapter uses an environmental justice framework to examine the location of polluting facilities; government response to natural and human-made disasters; and the application and enforcement of laws, policies, and regulations governing equal protection and civil rights. The environmental justice framework rests on developing tools and strategies to eliminate unfair, unjust, and inequitable conditions and decisions. It also attempts to uncover the underlying assumptions that contribute to and produce inequality, including differential exposure, unfair treatment, and unequal protection. The framework brings to the surface the ethical, moral, and political questions of “who gets what, when, why, and how much?”

Various movements over the decades have challenged structural racism that devalued blacks and other people of color and their communities. These movements challenged the underlying assumptions that contribute to and reproduce inequality. The modern civil rights movement of the 1950s and 1960s was largely an anti-racism and anti-white supremacy movement. The 1970s and 1980s ushered in a more focused era of targeting unequal and unfair pollution burdens borne by poor people, people of color, and other vulnerable populations—including children. The 1990s and 2000s expanded the equity and justice lens to include issues ranging from health equity, parks and green space, food security and healthy food access, sustainability, climate change, community resilience, racial profiling, policing, and criminal justice.

LEGACY OF THE MODERN CIVIL RIGHTS MOVEMENT: 1950s AND 1960s

The U.S. civil rights movement waged an assault on various forms of structural racism that penetrated the daily lives of African Americans and other people of color—in voting, housing, education, employment, transportation, and equal access to other public accommodations. Protesters—young and old—were beaten, hosed with water cannons, attacked with vicious police dogs, harassed, and jailed, and some were killed in their quest for equal treatment. Yet, they persisted in their intergenerational quest for justice.

It is worth noting that Dr. Martin Luther King Jr. went to Memphis, Tennessee, in April 1968 to support the environmental and economic justice struggle of 1,300 striking sanitation workers from Local 1733. The strike shut down garbage collection and sewer, water, and street maintenance. Clearly,

Photo 1.1: Houston protests against the Whispering Pines Sanitary Landfill that was the subject of the *Bean et al. v Southwestern Waste Management Corps.* lawsuit—the nation’s first lawsuit to challenge environmental racism using civil rights laws.

Photo by Robert D. Bullard, 1978.

the Memphis struggle was much more than a garbage strike. The “I AM A MAN” signs that black workers carried reflected the larger struggle for human dignity and rights. Black sanitation workers were on strike because of unequal pay, discriminatory labor practices, and unsafe work conditions that resulted in disproportionately high rates of injuries and deaths among them. They were also striking to be treated as men—with the same dignity and respect accorded white city workers. For Memphis strikers, Black Workers Mattered. Memphis was Dr. King’s “last campaign.” He was assassinated on April 4, 1968, but his legacy lives on and is an integral part of anti-racism movements around jobs, environment, health, transportation, land use, smart growth, energy, climate, and criminal justice.

HOUSTON WASTE STUDY HISTORICAL BACKDROP: 1970s

The historical backdrop of the environmental justice movement has its roots in small, isolated struggles found across the United States. A decade after Dr. King’s death, black homeowners in 1978 took on a fight against a municipal landfill proposal in a mostly black suburban community in Houston, Texas. The city has seen a dramatic demographic shift over the past three decades (Bullard, 1987). In 1980, it was 52.3 percent white, 27.4 percent black, 17.6 percent Hispanic, and 2.7 percent Asian and other. By 2010, Houston became a majority people-of-color city—25.6 percent Anglo, 43.8 percent Hispanic, 23.7 percent African American, and 6.0 percent Asian.

The Houston case study examined solid waste disposal in Houston from the 1970s through 2013. Houston is the nation’s fourth largest city with a population of some 2.3 million persons spread over more than 600 square miles and more than 500 neighborhoods. It is the only major American city without zoning. This no-zoning policy allowed for an erratic land-use pattern. As a result, the NIMBY (Not in My Back Yard) practice was replaced with the “PIBBY” (Place in Blacks’ Back Yard) policy (Bullard, 1983). The all-white, all-male Houston city government and private industry targeted landfills, incinerators, garbage dumps, and garbage transfer stations for Houston’s black neighborhoods (Bullard, 1987). Five decades of this type of thinking and discriminatory land-use practices lowered black residents’ property values, accelerated physical deterioration, and increased disinvestment in Houston’s black neighborhoods. Houston’s black neighborhoods were in fact “unofficially zoned for garbage” (Bullard, 2005). Discriminatory siting of waste facilities stigmatized black neighborhoods as “dumping grounds” for a host of other unwanted services, including salvage yards and recycling (Rosen, 1994, pp. 223–229).

Ineffective land-use regulations created a nightmare for many of Houston’s neighborhoods—especially the ones that were ill equipped to fend off industrial encroachment. From the 1920s through the 1970s, the siting of nonresidential facilities heightened animosities between the black community and the local government. This is especially true in the case of solid waste disposal. It was not until 1978, with *Bean v. Southwestern Waste Management Corp.*, that Black

Houston mounted a legal assault on environmental racism in solid waste facility siting (Bullard, 1983).

The *Bean* case exposed racism and the discriminatory practices of Houston's waste facilities as well as its flawed no-zoning legacy. For example, the Whispering Pines Landfill that triggered the lawsuit was sited less than 1,500 feet from a public school and within a two-mile radius of a half-dozen other schools in the predominately black and poor North Forest Independent School District. Although the landfill was built and plaintiffs lost their legal case in 1984, the lawsuit changed the city's solid waste facility siting practices after 1979 (Bullard, 2005). From the time of the lawsuit until the present, not a single Type I municipal landfill has been sited in Houston, in contrast to the 1920s to the late 1970s, when Black Houston became the "unofficial dumping grounds" for the city's garbage (Bullard, 1983).

For decades, the city used two basic methods to dispose of its solid waste—incineration and landfill. Eleven of 13 city-owned landfills and incinerators (84.6 percent) were built in black neighborhoods. This city siting pattern set the stage for private waste disposal firms to follow. From 1970 to 1978, the Texas Department of Health (TDH) issued four sanitary Type I solid waste landfill permits, for the disposal of Houston's solid waste, and all four were located in city council districts that were majority people of color.

In 2018, the brunt of waste disposal was still borne disproportionately by low-income people of color. In 2018, two Type I landfills, McCarty Landfill and Whispering Pines Landfill, operated in Houston, and both were in council district B, which is 93 percent people of color (53 percent black and 40 percent Hispanic). As mentioned earlier, after 1979 and the *Bean* case, no other Type I landfills were built in the city. Houston instead began sending much household garbage to four landfills located outside the city limits. In 2018, three of these four landfills were located in census tracts where the majority of the population is people of color—Waste Management (76.6 percent), Atascocita (86.0 percent), and BFI Blue Ridge (85.7 percent).

BIRTH OF THE ENVIRONMENTAL JUSTICE MOVEMENT: WARREN COUNTY, NORTH CAROLINA: 1980s

The national environmental justice movement in the United States was born in mostly African American, rural, and poor Warren County, North Carolina, in the early 1980s after the state government decided to dispose of 30,000 cubic yards of soil contaminated with polychlorinated biphenyls (PCBs) in the tiny town of Afton—more than 84 percent of the community was black in 1982 (Bullard, 2000). Protests ensued, resulting in more than 500 arrests. The landfill later became the most recognized symbol in the county, and Warren County became a symbol of the environmental justice movement. By 1993, the facility was failing with 13 feet of water trapped inside it (Exchange Project 2006). For a decade, community leaders pressed the state to clean up the leaky landfill. Although the PCB landfill has been cleaned up, the county is still economically worse off than the state as a whole. More than 24.4 percent of Warren County residents in 2008–2012 were below the poverty line, compared with North

Carolina's 16.8 percent poverty rate—a 7.6 percentage point gap. The 2008–2012 median household income for Warren County residents was only \$34,803, compared with \$46,450 for the state, or roughly 75 percent of the state median (U.S. Census Bureau, 2018). These data reveal the cumulative burdens that impact toxic communities.

The Warren County protests provided the impetus for a 1983 U.S. General Accounting Office (GAO) study, *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities* (U.S. General Accounting Office, 1983). The GAO study found that three out of four of the off-site, commercial hazardous waste landfills in Environmental Protection Agency (EPA) Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) were located in predominantly African American communities, although African Americans made up only 20 percent of the region's population. The protesters put “environmental racism” on the map.

The disturbing findings from the GAO report led Benjamin Chavis of the United Church of Christ Commission for Racial Justice to produce the first national study on race and waste in 1987. The study report, *Toxic Wastes and Race in the United States*, found race to be the most significant variable in predicting where these waste facilities were located—more powerful than household income, the value of homes, and the estimated amount of hazardous waste generated by industry (Commission for Racial Justice, United Church of Christ, 1987). In other words, race was a more powerful predictor than class of where toxic waste facilities are located in the United States. The *Toxic Wastes and Race* study was revisited in 1994 using 1990 census data, in which it was found that people of color were 47 percent more likely than white Americans to live near a hazardous waste facility (Goldman & Fitton, 1994).

ENVIRONMENTAL JUSTICE MOVEMENT BUILDING: 1990s

In 1990, *Dumping in Dixie: Race, Class, and Environmental Quality* became the first book to chronicle environmental injustice, environmental racism, and the convergence of two major movements—the civil rights and environmental movements—into the environmental justice movement (Bullard, 2000). *Dumping in Dixie* documented racial dynamics involved in the location of municipal landfills, hazardous waste sites, incinerators, lead smelters, refineries, and chemical plants. The book provided clear examples of “environmental racism 101” and was adopted as a textbook by dozens of U.S. colleges and universities. The southern United States or “Dixie” is different from the rest of the country. The South has a unique legacy of slavery, “Jim Crow” racial segregation, and resistance to equal justice for all its citizens. The South is also the most environmentally degraded region of the country. It is no accident that the modern civil rights and environmental justice movements were born in the South.

A growing grassroots environmental justice movement began to take shape in the late 1980s and early 1990s. The impetus for this growth centered around grassroots activism; the redefinition of environmental rights and civil rights;

alliances and coalitions; community-driven research, forums, and conferences; and the First National People of Color Environmental Leadership Summit held in October 1991. The summit was attended by more than 1,000 individuals from every state in the U.S. and at least a half-dozen other countries. Summit delegates adopted the 17 Principles of Environmental Justice. By the time the June 1992 United Nations Conference on Environment and Development (the Rio Earth Summit) started, the Principles of Environmental Justice had been distributed and translated into a half-dozen languages.

Environmental justice leaders embraced *the principle that all people and communities are entitled to equal protection of our environmental, health, employment, education, housing, transportation, and civil rights laws* (Bullard, 1993a). For decades, hundreds of communities across the nation used a variety of tactics to confront environmental injustice (Agyeman, Bullard, & Evans, 2003; Bullard, 1987, 1993a, 1993b, 1993c, 1994, 2000, 2007; Bullard, Johnson, & Torres, 2011). The federal EPA took action on environmental justice concerns in 1990 only after extensive prodding from grassroots environmental justice activists, educators, and academics who called themselves the Michigan Group, named for environmental justice leaders who were successful in meeting with EPA administrator William Reilly and his senior staff. These meetings resulted in some key first steps in advancing environmental justice at the EPA, including the creation of the Office of Environmental Equity. In 1992, under the George H. W. Bush administration, the EPA produced *Environmental Equity: Reducing Risks for All Communities*, one of the first federal reports to acknowledge the fact that some populations shouldered greater environmental health risks in some areas than others (U.S. Environmental Protection Agency, 1992).

Thus, environmental justice was not something invented by the EPA. However, in 1992 the EPA arrived at its own definition of environmental justice as “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies.” For the EPA, “fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies” (U.S. Environmental Protection Agency, 1998, p. 2).

In 1994, President Bill Clinton issued Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (Clinton, 1994). This executive order attempted to address environmental injustice within existing federal laws and regulations. It also reinforced the Civil Rights Act of 1964, Title VI, which prohibits discriminatory practices in programs receiving federal funds (see Chapter 10) and put the spotlight back on the National Environmental Policy Act (NEPA), a law that set policy goals for the protection, maintenance, and enhancement of the environment. NEPA’s goal is to ensure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing environment. NEPA requires federal agencies to prepare a detailed statement on the environmental effects of proposed federal actions that significantly affect the quality of human health.

Executive Order 12898 called for improved methodologies for assessing and mitigating health effects from multiple and cumulative exposures as well as

impacts on subsistence fishers and consumers of wild game, in addition to the collection of data on low-income and minority populations who may be disproportionately at risk. It also encouraged participation of the impacted populations in the various phases of assessing impacts—including scoping, data gathering, considering alternatives, analysis, mitigation, and monitoring.

In 1999, environmental justice leaders were able to get the national Academy of Sciences Institute of Medicine (IOM) to examine environmental justice and health in the United States. The IOM study concluded that government, public health officials, and the medical and scientific communities need to place a higher value on the problems and concerns of environmental justice communities (Institute of Medicine, 1999). The study also confirmed what most environmental justice leaders and communities have known for decades. People of color and low-income communities are exposed to higher levels of pollution than the rest of the nation; and they experience certain diseases in greater numbers than more affluent, white communities. In the United States, all communities are not created equal. If a community happens to be poor or working class or is inhabited largely by people of color, it generally receives less protection.

The environmental justice framework challenges the dominant environmental protection paradigm that largely institutionalizes unequal enforcement; trades human health for profit; places the burden of proof on the “victims” and not the polluting industry; legitimates human exposure to harmful chemicals, pesticides, and hazardous substances; promotes “risky” technologies; exploits the vulnerability of economically and politically disenfranchised communities; subsidizes ecological destruction; creates an industry around risk assessment and risk management; delays cleanup actions; and fails to develop pollution prevention as the overarching and dominant strategy (Finkel & Golding, 1994).

The EPA is mandated to enforce the nation’s environmental laws and regulations equally across the board (Collins, 2005). It is also required to protect all persons who live in the United States, not just individuals or groups who can afford lawyers, lobbyists, and experts. Environmental protection is a right, not a privilege reserved for a few who can “vote with their feet” and escape or fend off environmental stressors (Bullard, 2005, p. 20). Companies operating industrial facilities are required to obtain permits from state and sometimes federal environmental agencies and conform to local land-use regulations. However, even when operated according to accepted specifications, industrial facilities can adversely impact nearby residents when leaks, explosions, and accidents occur. Indeed, industrial facilities in some cases have posed serious safety risks to health, property, and quality of life (Baibergenova et al., 2003; Bullard et al., 2008; Edelstein, 2004; Elliot et al., 1993; Fielder et al., 2000; Gerschwind et al., 1992; Nelson et al., 1992; Vrijheid et al., 2002). As a result of these threats, public opposition to industrial facility siting has been nearly universal, especially for high-profile facilities such as incinerators and landfills (Bullard et al., 2008).

The 1990s saw a record number of communities of color “racially profiled” or targeted for polluting operations. Communities all across the country resisted, but most were still vulnerable to industrial facility siting because of their limited financial, scientific, technical, and legal resources (Cole & Foster, 2000; Lerner, 2010; Taylor, 1998). People-of-color environmental justice organizations and networks were still small and underfunded, and only a

handful had paid staff. Generally, communities with the greatest needs have the least resources and organization capacity to effectively fend off environmental assaults.

In 1992, the *National Law Journal* uncovered glaring inequities in the way the EPA enforced its laws related to hazardous waste cleanup (Lavelle & Coyle, 1992). The authors wrote: “There is a racial divide in the way the U.S. government cleans up toxic waste sites and punishes polluters. White communities see faster action, better results and stiffer penalties than communities where blacks, Hispanics and other minorities live. This unequal protection often occurs whether the community is wealthy or poor” (pp. S1–S2). These findings supplement the findings of earlier studies and reinforce what many grassroots leaders have been saying all along: People of color differentially are impacted by industrial pollution, and they also can expect different treatment from the government.

NEW TECHNOLOGY, RESEARCH TO ACTION, POLICY, AND ORGANIZING TOOLS: 2000S

The 2000s ushered in new technological advances that offered tremendous benefits to the environmental justice movement and frontline communities. A record number of grassroots leaders from low-wealth and people-of-color communities were able to gain access to new computing and communication technology and the Internet, which enabled them to better connect with their constituencies and allies. New funding opportunities from private foundations allowed more grassroots community groups and their leaders to have access to cell phones, geographic information systems (GIS) and other spatial mapping tools, community-based participatory research (CBPR) (see Chapter 6), and multi-stakeholder networks, including community-university partnerships and collaborations.

A 2002 study, *Air of Injustice: African Americans and Power Plant Pollution*, found that more than 68 percent of African Americans live within 30 miles of a coal-fired power plant, the distance within which the maximum effects of the smokestack plume are expected to occur, compared with 56 percent of white Americans (Clean the Air et al., 2002). In September 2005, the Associated Press (AP) released results from its analysis of an EPA research project showing that African Americans were 79 percent more likely than whites to live in neighborhoods where industrial pollution is suspected of posing the greatest health danger (Pace, 2005). The study revealed that in 19 states, blacks were more than twice as likely as whites to live in neighborhoods where air pollution seems to pose the greatest health danger. Hispanics in 12 states and Asians in seven states were also more likely to breathe dirty air than whites in some regions of the United States. The AP found that residents of at-risk neighborhoods were generally poorer and less educated, and unemployment rates in those districts were nearly 20 percent higher than the national average. The 2007 study *Toxic Wastes and Race at Twenty 1987–2007* found that people of color make up the majority (56 percent) of those living in neighborhoods within two miles of the nation’s commercial hazardous waste facilities (Bullard et al., 2008).



This study reveals that where facilities are clustered together, people of color make up 69 percent of these neighborhoods.

This pattern underscores the cumulative impact from discriminatory zoning and land-use practices. People of color were also overrepresented in populations living within a one-mile radius (44 percent) and a three-mile radius (46 percent) of the nation's 1,388 Superfund sites.

A 2008 study by University of Colorado researchers on race, income, and environmental inequality in the United States concluded that African Americans experience such a high air-pollution burden that black households with incomes of \$50,000 to \$60,000 live in neighborhoods that are, on average, more polluted than neighborhoods of white households with incomes less than \$10,000 (Downey & Hawkins, 2008). In effect, research indicates that environmental inequality for African Americans could not be reduced to a “poverty thing.” That same year, Hoerner and Robinson (2008), in their study of differential impacts of climate change on vulnerable populations, found that 43 percent of African Americans live in urban “heat islands,” compared to only 20 percent of whites. Nationally, African Americans have a 5.3 percent higher prevalence of heat-related mortality than whites, and 64 percent of this disparity is traced to disparities in the prevalence of home air conditioning.

In 2011, a team of Duke University researchers also found significant air pollution burden borne by people of color compared to whites (Miranda et al., 2011). They found that

non-Hispanic blacks in the United States suffer worse air quality across multiple metrics, geographic scales, and multiple pollution metrics. Hispanics also suffer worse air quality with respect to particulate matter, but not necessarily so for ozone. It also appears that environmental justice concerns are more prominent along race/ethnicity lines, rather than measures of poverty. (Miranda et al., 2011, p. 1755)

In ranking the 75 worst polluting coal-fired power plants in the United States, a NAACP (2012) study, *Coal Blooded: Putting Profits before People*, found that four million people live within three miles of these plants. Two million people live within three miles of one of the top 12 “dirtiest” coal-fired power plants. Approximately 76 percent of these residents are people of color and the average per-capita income is \$14,626, compared with the national average of \$21,587. People of color are severely overrepresented in communities that host the “dirty dozen” coal power plants since they made up only 37 percent of the U.S. population in 2010 (U.S. Census Bureau, 2010).

A Coming Clean (2012) report, *Who's in Danger? A Demographic Analysis of Chemical Disaster Vulnerability Zones*, found that fence-line residents who live closest to the facilities have average home values 33 percent below the national average and average incomes 22 percent below the national average. The percentage of blacks in the fence-line zones is 75 percent greater than for the United States as a whole, and the percentage of Latinos is 60 percent greater. The percentage of adults in the fence-line zones with less than a high school diploma is 46 percent greater than for the United States as a whole, but the percentage with a college or other post-high school degree is 27 percent lower;

and the poverty rate in the fence-line zones is 50 percent higher than for the United States as a whole.

Oil trains also pose special risk to people of color, who often live on the “wrong side of the tracks.” The nation’s oil trains are more likely to run through communities of color and expose their residents to elevated risks from explosion and derailment “blast zones.” The blast zone is everything within a mile of tracks used for the oil trains (ACTION United, ForestEthics, and PennEnvironment Research and Policy Center, 2016). The *Fumes across the Fence-Line* report details the health toll the oil and gas industry has on black communities (NAACP and Clean Air Task Force, 2017). More than a million African Americans live within a half-mile of an oil and gas operation, and more than 6.7 million live in a county that is home to a refinery. Many of these communities (Manchester in Houston; Louisiana’s “Cancer Alley”; North Richmond, California; Southwest Detroit; Port Arthur, Texas) are described as “sacrifice zones” because of the concentration of oil and gas pollution. And because of heightened exposure to oil and gas pollution, African American children suffer from 138,000 asthma attacks and 101,000 lost school days each year (NAACP and Clean Air Task Force, 2017).

The 150 or so U.S. oil refineries operating in 32 states emit thousands of tons of hazardous air pollutants, including substances that cause cancer. Half of the people at an increased cancer risk from refineries’ pollution are people of color (Garcia, 2014). America is still segregated, and so is pollution (Bullard et al., 2011). More than 69.2 percent of Hispanic children, 61.3 percent of African American children, and 67.7 percent of Asian American children live in areas that exceed the EPA ozone standard, compared with 50.8 percent of white children. University of Minnesota researchers found that African Americans and other people of color breathe 38 percent more polluted air than whites and are exposed to 46 percent more nitrogen oxide (Clark et al., 2014). All indicators point to pollution taking a heavy health toll on Black America—especially black children.

The former vice president under Lyndon Johnson, Hubert H. Humphrey, once said, “The moral test of government is how that government treats those who are in the dawn of life, the children; those who are in the twilight of life, the elderly; those who are in the shadows of life, the sick, the needy and the handicapped.” Children, especially poor children of color, form one of our most vulnerable groups in the United States when it comes to pollution. In addition to schools, many urban parks and playgrounds are located next to refineries, coal plants, chemical facilities, and highways. The adverse health effects of living or playing so close to polluting sources is elevated asthma and respiratory disease. For example, the asthma rate among African Americans is 35 percent higher than among whites; the hospitalization rate for African Americans and Latinos is three to four times the rate for whites; African Americans and Puerto Ricans are three times more likely than whites to die from asthma-related causes; and African Americans account for 13 percent of the U.S. population but 26 percent of asthma deaths.

Lack of zoning and poor land-use planning created a pollution nightmare for children living along the petrochemical corridor. The vast majority of residents and school children living along the Houston Ship Channel are Hispanic and African American. Children living within two miles of the channel had

a 56 percent greater chance of developing lymphocytic leukemia (Houston Department of Health and Human Services, 2005). This pattern of over-polluting children of color also occurs in cities with zoning. A 2006 California study found that areas that suffer from increased respiratory hazards from air toxics tend to have schools with larger percentages of poor students and students of color (Pastor et al., 2006, p. 337).

The problem of schools near polluting facilities was thrust on the national stage in the *USA Today* special report *Toxic Air and America's Schools* (Morrison, Heath and Jervis 2008). In mapping the nation's 127,800 public, private, and parochial schools, the investigative reporters found that 20,000 schools—about one in every six—are within a half-mile of a major industrial plant. Nationally, one in three U.S. school children is at risk from a chemical catastrophe. In 2011, a team of University of Michigan researchers found that students of color are more likely than their white counterparts to attend schools in heavily polluted areas (Mohai et al., 2011, pp. 852–862). In Michigan, for example, whereas 44.4 percent of all white students in the state attend schools located in the top 10 percent of the most polluted locations in the state, 81.5 percent of all African American children and 62.1 percent of all Hispanic students attend schools in the most polluted zones.

The University of Michigan researchers also found that air pollution from industrial sources near Michigan public schools jeopardizes children's health and academic success. Schools located in areas with the highest air pollution levels had the lowest attendance rates and the highest proportions of students who failed to meet state educational testing standards. California researchers found a clear link between toxics near schools and student academic performance in Los Angeles (Pastor, Morello-Frosch, & Sadd, 2006). In El Paso, Texas, residential exposure to air toxics was linked to lower grade point averages among school children (Clark-Reyna, Grineski, & Collins, 2016).

Students of color are hit especially hard by transportation pollution. One in every 11 U.S. public schools, serving roughly 4.4 million students, lies within 500 feet of highways, truck routes, and other roads with significant traffic; 15 percent of schools where more than three-quarters of the students are racial or ethnic minorities are located near a busy road, compared with just 4 percent of schools where the demographics are reversed (Hopkins, 2014). White children make up almost 52 percent of U.S. public school students, yet only 28 percent attend high-risk schools. Black students, by contrast, make up just 16 percent of the total public school population, with 27 percent attending high-risk schools. Latinos constitute 24 percent of public school students, and 34 percent attend high-risk schools (Grineski & Collins, 2018).

This systematic overexposure of African Americans to air pollution was borne out by a 2018 U.S. EPA study that found race was more powerful than poverty in predicting exposure to air pollution (Mikati et al., 2018). In 46 states, people of color live with more air pollution than whites. African Americans are exposed to 1.54 times more fine particulate matter than whites, Hispanics are exposed to 1.2 times more than whites, and those below the poverty line are exposed to 1.35 times more than those above the line. The overall pattern reveals that a disproportionate share of places where people of color live, work, play, and learn are toxic “hotspots” with dangerous operations that pose elevated health threats—especially to vulnerable children of color.

A NEW GENERATION FIGHTING TO MAKE BLACK LIVES MATTER

Blacks lives matter less than white lives because of systemic racism that is baked into every institution in America—whether in voting, education, employment, health, the environment, or the criminal justice system. The environmental racism you will read about in this text, such as the Flint water crisis, is no fluke. In the United States, some people and communities have the “wrong complexion for protection” (Bullard & Wright, 2012). The Black Lives Matter (BLM) movement emerged in response to the 2012 death of unarmed black teenager Trayvon Martin and the 2013 acquittal of his vigilante killer, George Zimmerman. The unpopular verdict sparked outrage, protests, and the Black Lives Matter hashtag posting on social media by three black women—Alicia Garza, Patrisse Cullors, and Opal Tometi. BLM co-founder Alicia Garza gave a succinct overview of what the Black Lives Matter movement stands for: “Black Lives Matter is an ideological and political intervention in a world where Black lives are systematically and intentionally targeted for demise. It is an affirmation of Black folks’ contributions to this society, our humanity, and our resilience in the face of deadly oppression” (Garza, 2014).

The #BlackLivesMatter hashtag used social media to effectively shine the national spotlight on racialized state-sanctioned killings of unarmed black men. Black Lives Matter activists exploited social media through videos and testimony where African Americans were recorded being shot, beaten, choked, and/or killed by police or vigilantes (Pellow, 2016). The movement gained national attention for its street demonstrations and mass protests following the 2014 police killing of two African American males: Michael Brown in Ferguson, Missouri, and Eric Garner in New York City (Day, 2015; Luibrand, 2015). BLM protests expanded into dozens of chapters in the United States with a primary focus on addressing racial profiling, racial inequality, and racism in the U.S. criminal justice system (Cullors-Brignac, 2016). The BLM network developed 13 core principles to guide their work; among them are diversity, empathy, restorative justice, being unapologetically black, and intergenerationality (Barre, 2016, p. 2).

Systemic policies of police violence and killing, racial profiling, overpolicing, overticketing, arresting, and jailing in the criminal justice system all emanate from the same systemic forces that target, overpollute, and poison black people where they live, work, play, and attend school. Just as black people are special targets of state-sanctioned police violence, black communities and their inhabitants are also targets of state-sponsored permits to pollute and of pollution violence (poisoning men, women, children, and unborn babies is a form of violence) by industries that cause premature illnesses and deaths in the black community.

Social media and videos taken on smartphones have allowed Americans to see in living color how racialized policing kills blacks with impunity. Racism in the criminal justice system kills and denies black people equal justice and equal protection under the laws guaranteed by the U.S. Constitution. Environmental racism kills more slowly (without the vantage point of videos) and harms a disparate share of black people. Racism denies them the same rights of equal protection and equal justice by targeting black communities

for environmentally risky and polluting facilities—resulting in elevated rates of cancer and respiratory and cardiovascular illnesses such as heart disease and stroke. Racism is making Black America sick.

Dismantling systemic racism is a core guiding principle of both the environmental justice movement and the Black Lives Matter movement. In the final analysis, there is only one movement—the movement that fights for an American society that values black lives the same way it values white lives. Erasing American racism from our society will make us a much healthier, safer, and more just nation.

DEEPENING OUR UNDERSTANDING

1. This chapter has reviewed a voluminous quantity of evidence that people of color endure more than their fair share of environmental burden, at root due to structural racism.
 - a. Where are the environmental burdens in your own community (where you are from or where you go to school)? For example, where is garbage taken? Where are toxic substances transferred, stored, or dumped? Where are industries that produce air or water pollution located?
 - b. Who lives close to these facilities? Does it fit with the dominant national trend that this chapter describes?
2. Video taken on smartphones has aided awareness of Black Lives Matter in terms of police violence. In what ways do you think technologies do or could enable more significant exposure of and activism around environmental justice concerns today?

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