

# ENVIRONMENTAL INJUSTICE

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## ABSTRACT

*When I was a child my parents and I routinely traveled south on I-75 through Southwest Detroit en route to visit family. During these trips, I always noticed enormous oil refineries emitting massive clouds of smoke. As I grew up, I later discovered that this area is referred to as "48217," the most polluted zip-code in the state of Michigan. Well, this makes sense, right? The bridge to Windsor, Canada is a couple miles away, the Detroit River is nearby, and there are various interstates running through the area. Easy access to these channels is a logistical dream. I knew that someone was making a lot of money off this prime location, but what about all the residents who wake up to these dark clouds of smoke on a daily basis. The overwhelming majority of the residents in "48217" are those of color – Blacks and Hispanics. This curiosity led to a deeper study into similarly situated cities in the country. I found that people of color, from coast to coast, are exposed to harmful environmental conditions at an alarmingly higher rate than white Americans. The*

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*residual effects of this disproportionate exposure have resulted in complicated health issues and the loss of life. People are entitled to breathe in clean air and drink clean water. This is Environmental Injustice.*

#### INTRODUCTION

The issue of environmental racism is an issue of life and death. It is just not an issue of some form of prejudice where someone doesn't like you because the color of your skin. This is an issue that will take your life away, if you don't get involved.<sup>1</sup> – Benjamin Chavis Jr

Race has long been linked to hardships that members of minority and low socioeconomic groups face in the United States. Certain racial classes have battled inequities for many years. The most common set of inequities are evident in education, employment, the criminal justice system, housing, and health care. However, one of the most widely overlooked and arguably most important inequities is found in the very air we breathe.

Environmental injustice can be defined in various ways, but, at its core, it is the disproportionate exposure of communities of color and the poor to pollution, hazardous waste, and unequal environmental regulation.<sup>2</sup> Historically, certain race and socioeconomic classes have been exposed to unsafe and hazardous environmental conditions at a higher rate of frequency than other groups.<sup>3</sup> There is a direct correlation between the emission of hazardous conditions and where these certain race and socioeconomic populations live.<sup>4</sup> Systemic disparate environmental problems have been around for years but have started to gain nationwide attention in the late 1980s.<sup>5</sup>

Although environmental injustice has made headlines relatively recently, it is an issue that minorities and poor individuals have endured for decades. Individuals of color, particularly Blacks, have been oppressed for over 400 years.<sup>6</sup> Blacks have been considered to be inferior dating all

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1. *A Movement Is Born: Environmental Justice and the UCC*, UNITED CHURCH OF CHRIST, [https://www.ucc.org/a\\_movement\\_is\\_born\\_environmental\\_justice\\_and\\_the\\_ucc](https://www.ucc.org/a_movement_is_born_environmental_justice_and_the_ucc) (last visited Jan. 09, 2022) (quoting *Earthkeeping: Toxic Racism* (WGBH Collection television broadcast Nov. 11, 1993) [hereinafter *A Movement is Born*]).

2. Juliana Maantay, *Mapping Environmental Injustices: Pitfalls and Potential of Geographic Information Systems in Assessing Environmental Health and Equity*, 110 ENV'T HEALTH PERSPECTIVES 161, 161 (2002).

3. *Id.*

4. *Id.*

5. *Id.*

6. Supriya Yelimeli, *Rep. Barbara Lee Wants To Form a Racial Healing Commission to Reckon With 400 Years of Systemic Racism*, BERKELEYSIDE (June 9, 2020, 11:30 AM),

the way back to slavery. It should come as no surprise that Blacks, out of all the other various race groups, would have to endure hazardous living conditions.

### I. BACKGROUND

The segregation of the Black community from other races has a long history in the United States. As Blacks began to earn financial capital in the 1950s, they attempted to build homes. During these times, most attempts to build homes resulted in unsuccessful attempts to secure financing for homes.<sup>7</sup> Due to the inability to obtain financing, Blacks were confined to certain areas of cities throughout the country.<sup>8</sup> This segregation of Blacks from other races became what is known as ‘redlining.’<sup>9</sup>

When decision makers were tasked with deciding where waste should be discarded or where hazardous industrial plants should be built and operated, it was decided, unsurprisingly, to use Black neighborhoods as the dump sites.<sup>10</sup> These decisions were made, and continue to be made, without the input of the residents living in the areas. Once families settled into these segregated areas, they remained there for all these years. “Environmental racism is inseparable from racial segregation. Residential segregation – which is itself a result of individual and systemic racism, including public policy choices at every level of government and exclusionary choices by financial actors – means that people of color are often concentrated in neighborhoods that have frequently been disempowered, both politically and financially.”<sup>11</sup>

Minority and low-income communities have been forced to raise generation after generation in these hazardous conditions. Living in such conditions is not only one of the most overlooked inequities, but it also comes with detrimental consequences. The continual exposure to hazardous conditions has led to generational health issues. These disparate

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<https://www.berkeleyside.com/2020/06/09/rep-barbara-lee-wants-to-form-a-healing-commission-to-reckon-with-400-years-of-systemic-racism>.

7. Terry Gross, *A ‘Forgotten History’ of How the U.S. Government Segregated America*, NAT’L PUB. RADIO (May 3, 2017, 12:47 PM), <https://www.npr.org/2017/05/03/526655831/a-forgotten-history-of-how-the-u-s-government-segregated-america>.

8. *Id.*

9. *Id.*

10. *Environmental Justice History*, OFF. OF LEGACY MGMT. (May 9, 2020), <https://www.energy.gov/lm/services/environmental-justice/environmental-justice-history>.

11. Casey Berkovitz, *Environmental Racism Has Left Black Communities Especially Vulnerable to COVID-19*, THE CENTURY FOUND. (May 19, 2020), <https://tcf.org/content/commentary/environmental-racism-left-black-communities-especially-vulnerable-covid-19/?session=1>.

health issues were exposed when the world was impacted by an unprecedented pandemic in 2020.<sup>12</sup> “The interlocking harms of environmental racism and residential segregation, the health effects of those systems, and the particular way that COVID-19 spreads and affects individuals are likely combining to contribute to racial disparities in COVID-19 cases and deaths.”<sup>13</sup> The majority of neighborhoods located near industrial plants are populated with people of color.<sup>14</sup> It is this proximity that exposes these systematically oppressed groups to “... higher health, economic and social hazards beyond the pre-existing health disparities they already face.”<sup>15</sup> This exposure has led to chronic disease (such as asthma and other respiratory diseases) and other potential health complications.<sup>16</sup> These health complications caused by environmental injustices are linked to the disproportionately higher mortality rate that COVID-19 has on minorities, particularly Blacks.<sup>17</sup> Because of systemic hazardous living conditions, Black people are not as healthy as whites and are more prone to having a lower life expectancy.<sup>18</sup>

#### A. National Environmental Policy Act

President Richard Nixon signed into law the National Environmental Policy Act of 1969 (NEPA) on January 1, 1970.<sup>19</sup> “NEPA was the first major environmental law in the United States and is often called the ‘Magna Carta’ of Federal environmental laws. NEPA requires Federal agencies to assess the environmental effects of proposed major Federal actions prior to making decisions.”<sup>20</sup> NEPA’s intended mission was to ensure all citizens, notwithstanding race, were subject to healthy environmental.<sup>21</sup>

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12. *See generally id.*

13. *Id.*

14. American Public Health Association, *Creating the Healthiest Nation: Environmental Justice For All*, AM. PUB. HEALTH ASS’N, at 3 [https://www.apha.org/-/media/files/pdf/factsheets/environmental\\_justice.ashx?la=en&hash=BF2694E6A2FC6707C373F1E1DC60243BF333CACE](https://www.apha.org/-/media/files/pdf/factsheets/environmental_justice.ashx?la=en&hash=BF2694E6A2FC6707C373F1E1DC60243BF333CACE) (last visited Jan. 09, 2022).

15. *Id.* at 2.

16. *Id.*

17. Harriet A. Washington, *How Environmental Racism is Fuelling the Coronavirus Pandemic*, NATURE (May 19, 2020), <https://www.nature.com/articles/d41586-020-01453-y>.

18. Allan S. Noonan, et al., *Improving the Health of African Americans in the USA: An Overdue Opportunity for Social Justice*, 37 PUB. HEALTH REV. 12, (2016).

19. *Welcome*, NAT’L ENV’T POLICY ACT, <https://ceq.doe.gov> (last visited Jan. 09, 2022).

20. *Id.*

21. *Id.*

### *B. Environmental Protection Agency*

Due to increased concern of deteriorating city air, President Richard Nixon sought the assistance of Congress to help with what was quickly becoming a major concern: harm to the environment.<sup>22</sup> It was requested that Congress appropriate four billion dollars to help improve environmental infrastructure, such as water treatment facilities, and to enact various national quality standards.<sup>23</sup> There was also a goal to enact stricter vehicle emission regulations with efforts to reduce automobile pollution.<sup>24</sup>

President Nixon requested that Congress consolidate environmental responsibilities of the federal government under one agency.<sup>25</sup> This one agency was ultimately created and named the Environmental Protection Agency (EPA).<sup>26</sup> The EPA became operable in 1970 and pursued its mission of protecting human health and the environment through the promulgation of many broad sweeping rules and regulations of environmental hazards, most notably the Clean Air and Clean Water Acts.<sup>27</sup> To this day, the EPA remains one of the premier federal agency charged with enacting and enforcing environmental regulation.

## II. ANALYSIS

“The disparate effects of air pollution alone—hardly the only harm of racism and segregation—have been shown to have adverse health effects.”<sup>28</sup> Studies have shown that “exposure to fine particulate matter (PM2.5)” has been disproportionately affecting racial minorities.<sup>29</sup> PM2.5 is “emitted during combustion from sources like car engines and power plants,” and it known to be a carcinogen “which the [EPA] links to premature death” in people affected by a number of prior respiratory or cardiac conditions.<sup>30</sup>

The American Public Health Association conducted a study that revealed that race is a primary factor in the placement of toxic facilities.<sup>31</sup>

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22. *Id.*

23. *The Origins of the EPA*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/history/origins-epa> (last visited Jan. 09, 2022).

24. *Id.*

25. *Id.*

26. *Id.*

27. *40th Anniversary of the Clean Air Act*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/clean-air-act-overview/40th-anniversary-clean-air-act>.

28. Berkovitz, *supra* note 11.

29. *Id.*

30. *Id.*

31. American Public Health Association, *supra* note 14, at 3.

“In 2007, more than half of the people who live within 1.86 miles of toxic waste facilities in the U.S. were people of color.”<sup>32</sup> Further, “more than [eleven] percent of African-American children ... are poisoned by lead in their environment from paint, food cans, and other consumer products, compared with 2.3% of white children.”<sup>33</sup> Blacks face significantly higher “health burdens” from various sources of air pollution in comparison to the overall American population.<sup>34</sup> “From 2000 to 2010, disparities in nitrogen dioxide ... exposure were larger by race-ethnicity than by income.”<sup>35</sup> Blacks and Hispanic people experienced thirty-seven percent higher exposures to nitrogen oxides than white people in 2010.<sup>36</sup> Nitrogen oxides are known to increase an individual’s chance to develop heart and respiratory problems including asthma.<sup>37</sup> “During 2016, asthma affected 15.7 percent of [Black] children... while it affected 7.1 percent of white children.”<sup>38</sup> As this study reveals, there are health disparities within races as a result of living in hazardous living conditions.

#### A. *Holding the EPA Accountable*

The EPA defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”<sup>39</sup> The EPA’s vision of environmental justice is when everyone, no matter

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32. *Id.* (citing ROBERT D. BULLARD ET AL., *TOXIC WASTES AND RACE AT TWENTY 1987-2007: GRASSROOTS STRUGGLES TO DISMANTLE ENVIRONMENTAL RACISM IN THE UNITED STATES* (2007)).

33. *Id.* (citing Anne M. Wengrovitz & Mary Jean Brown, *Recommendations for Blood Lead Screening of Medicaid-Eligible Children Aged 1—5 Years: An Updated Approach to Targeting a Group at High Risk*, 58 MORBIDITY AND MORTALITY WEEKLY REPORT: RECOMMENDATIONS AND REPORTS 1 (2009)).

34. *Id.*

35. *Id.*

36. *Id.* (citing Lara P. Clark et al., *Changes in Transportation-Related Air Pollution Exposures by Race-Ethnicity and Socioeconomic Status: Outdoor Nitrogen Dioxide in the United States in 2000 and 2010*, 125 ENV’T HEALTH PERSPECTIVES (2017)).

37. *Id.* (citing *Nitrogen Dioxide (NO<sub>2</sub>) Pollution*, U.S. ENV’T PROT. AGENCY, <https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects> (last visited Jan. 09, 2022)).

38. *Id.* (citing Hatice S. Zahran, *Vital Signs: Asthma in Children – United States, 2001-2006*, 67 MORBIDITY AND MORTALITY WEEKLY REPORT: RECOMMENDATIONS AND REPORTS (2018)).

39. *Environmental Justice*, U.S. ENV’T PROT. AGENCY, <https://www.epa.gov/environmentaljustice> (last visited Jan. 09, 2022).

demographic or socioeconomic class, has an equal say in the decision-making process in the creation of a healthy environment.<sup>40</sup>

There have always been concerns within minority communities about the great injustices taking place in their neighborhoods, but these concerns intensified in the 1980s.<sup>41</sup> Determined to effectuate change, the Congressional Black Caucus met with the EPA in 1990 to discuss the rampant environmental injustices inflicted on underserved communities throughout the country.<sup>42</sup> The Congressional Black Caucus challenged the EPA's commitment to addressing the environmental disparities in communities of color, and their demand on change was the first big political movement to improve the environmental conditions on communities of color.<sup>43</sup> In response to the Congressional Black Caucus's concerns, the EPA created the Environmental Equity Workgroup (EEW) in 1992.<sup>44</sup> The EEW was tasked specifically with investigating environmental injustice.<sup>45</sup> Following the EEW's investigation, it issued a well-known report, *Reducing Risk for All Communities*, which linked the exposure of racial minorities to high levels of pollution.<sup>46</sup> This report revealed to the world the troubling information that the Black community has known about and had to struggle with for years. It appeared to be a light at the end of the tunnel.

The EEW report found that commercial or uncontrolled hazardous waste sites were frequently, if not always, placed near a minority community.<sup>47</sup> The study also revealed that the majority of offsite hazardous waste landfills were located in areas where Blacks were the majority of the population.<sup>48</sup>

Because of these findings, the EEW made several recommendations to the EPA. One of these recommendations was to create an office specifically tasked with addressing environmental inequities. In light of the recommendations, the EPA created what has become known as the Office of Environmental Justice (OEJ).<sup>49</sup> "The OEJ coordinates Agency efforts to address the needs of vulnerable populations by decreasing

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40. *Id.*

41. *Environmental Justice*, AVOICE, <http://www.avoiceline.org/environmental/history.html> (last visited Jan. 09, 2022).

42. *Id.*

43. *Id.*

44. *Id.*

45. *Id.*

46. *See generally* EPA, ENVIRONMENTAL EQUITY: REDUCING RISK FOR ALL COMMUNITIES (1992).

47. *Id.* at 7.

48. *Id.* at 7-8.

49. *Environmental Justice*, *supra* note 41.

environmental burdens, increasing environmental benefits, and working collaboratively to build healthy, sustainable communities. The OEJ provides financial and technical assistance to communities working constructively and collaboratively to address environmental justice issues.”<sup>50</sup> The Office also works with local, state, and federal governments; tribal governments; community organizations; business and industry; and academia, to establish partnerships seeking to achieve protection from environmental and health hazards for all people regardless of race, color, national origin, or income.<sup>51</sup>

### B. *United Church of Christ*

Another strong advocate for environmental justice was the United Church of Christ (UCC). The UCC has served as the primary civil rights organization tackling environmental issues.<sup>52</sup> The UCC’s landmark 1987 report, *Toxic Wastes and Race in the United States*, found that race was one of the top variables associated with the location of toxic waste facilities.<sup>53</sup> This report revealed findings similar to that of the later EEW investigation.

In regard to commercial waste facilities, the report revealed that race proved to be the most significant among variables tested in association with the location of commercial hazardous facilities.<sup>54</sup> Communities with the most commercial hazardous waste facilities had the highest number of racial and ethnic residents.<sup>55</sup> “Three out of the five largest commercial hazardous waste landfills in the United States were located in predominantly Black... or Hispanic communities.”<sup>56</sup>

Additionally, the report revealed that “[t]hree out of every five Black and Hispanic Americans lived in communities with uncontrolled toxic waste sites.”<sup>57</sup> At the time of the report, more than fifteen million Blacks lived in communities with one or more uncontrolled toxic waste site.<sup>58</sup> Furthermore, Blacks were heavily over-represented in the populations of

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50. *Office of Environmental Justice in Action*, U.S. ENV’T PROT. AGENCY, [https://www.epa.gov/sites/default/files/2017-09/documents/epa\\_office\\_of\\_environmental\\_justice\\_fact\\_sheet.pdf](https://www.epa.gov/sites/default/files/2017-09/documents/epa_office_of_environmental_justice_fact_sheet.pdf) (last visited Jan. 09, 2022).

51. *Id.*

52. *A Movement Is Born*, *supra* note 1.

53. UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE, *TOXIC WASTES AND RACE IN THE UNITED STATES* xiii (1987).

54. *Id.*

55. *Id.*

56. *Id at* xiv.

57. *Id.*

58. *Id.*

metropolitan areas with the largest number of uncontrolled toxic waste sites.<sup>59</sup>

The report states “the possibility that these patterns resulted by chance is virtually impossible, strongly suggesting that some underlying factor or factors, which are related to race, played a role in the location of commercial hazardous waste facilities.”<sup>60</sup> Rev. Chavis famously noted, “...the issue of environmental racism is an issue of life and death. It is just not an issue of some form of prejudice where someone doesn’t like you because the color of your skin. This is an issue that will take your life away, if you don’t get involved.”<sup>61</sup>

In 1991, the UCC held the First National People of Color Environmental Leadership Summit in Washington, D.C.<sup>62</sup> This Summit led to the creation of the “Principles of Environmental Justice.”<sup>63</sup> The principles serve as the backbone of the UCC’s commitment to effectuating change. It provides seventeen commitments that should be followed in order to create a better environment for all.<sup>64</sup>

### III. CASE STUDIES

#### A. ‘Toxic Doughnut’

The Altgeld Gardens is a public housing complex located on the Chicago’s Southeast side.<sup>65</sup> The Altgeld Gardens were built to be a federal housing project to house Black war workers during World War II.<sup>66</sup> The complex now has approximately 7,000 residents, ninety-nine percent of those residents are Black, and the housing complex is known as the ‘Toxic Doughnut.’<sup>67</sup> “[T]he nearly 1,600 units in the community ... sit right in the

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59. *Id.* at xv.

60. *Id.*

61. *Earthkeeping: Toxic Racism* (WGBH Collection television broadcast Nov. 11, 1993), <https://dptv.pbslearningmedia.org/resource/envh10.sci.life.eco.envracism/mental-justice-opposing-a-toxic-waste-landfill/>.

62. *30th Anniversary: The First National People of Color Environmental Leadership Summit*, UNITED CHURCH OF CHRIST, <https://www.ucc.org/30th-anniversary-the-first-national-people-of-color-environmental-leadership-summit/> (last visited Jan. 10, 2022).

63. *Id.*

64. *Id.*

65. Susan Cosier, *What a Guttled EPA Could Mean for Chicago’s “Toxic Doughnut,”* NRDC (Apr. 17, 2017), <https://www.nrdc.org/stories/what-guttled-epa-could-mean-chicago-toxic-doughnut>.

66. Harvey M. Choldin, *Chicago Housing Authority*, ENCYCLOPEDIA OF CHICAGO, <http://www.encyclopedia.chicagohistory.org/pages/253.html> (last visited Jan. 10, 2022).

67. Cosier, *supra* note 65.

middle of a ring of brownfields, Superfund sites, and landfills.”<sup>68</sup> The ‘Toxic Doughnut’ “is surrounded by the largest concentration of hazardous waste sites in the country.”<sup>69</sup> This toxic environment has led to poor health for many of the residents.<sup>70</sup>

In 2020, the City of Chicago released its Air Quality and Health report. The report revealed that, “...chronic disease is the leading driver of Chicago’s nine-year life expectancy gap between Black and white residents...” Further, “[a]ir pollution can both increase risk of chronic illnesses like heart and lung diseases and contribute to worse outcomes for people living with certain health conditions.”<sup>71</sup> The report found that

...air pollution is harmful to Chicago residents’ health and quality of life. Exposure to pollutants such as ozone and PM2.5 is associated with increased risk of lung irritation, respiratory problems, cardiovascular disease, asthma, cancer, and early death. PM2.5 pollution, which can penetrate deep into the lungs, is particularly damaging. Our estimates suggest that 5% of premature deaths in Chicago each year can be attributed to exposure to PM2.5.<sup>72</sup>

Below is an Air Quality + Health Index Deciles map of Chicago from January 1, 2020. The index combines community level data on air pollution, health, and social factors to identify the areas in the city that are most vulnerable to the effects of air pollution. As the map reveals, the Southeast side of Chicago, where the ‘Toxic Doughnut’ is located, contains one of most vulnerable blocks in the city.<sup>73</sup>

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68. *Id.*

69. *Id.*

70. *See generally id.*

71. CHICAGO DEPARTMENT OF PUBLIC HEALTH, CITY OF CHICAGO AIR QUALITY AND HEALTH REPORT 2020 3 (2020).

72. *Id.* at 4.

73. *Id.* at 7.

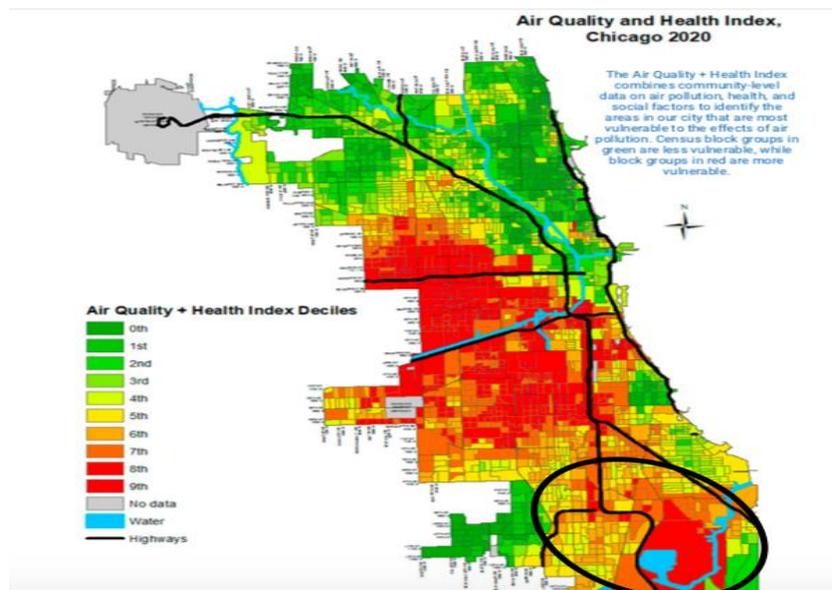


Figure 1.1: ‘Toxic Doughnut’ is one of the most vulnerable communities to the effects of air pollution.<sup>74</sup>

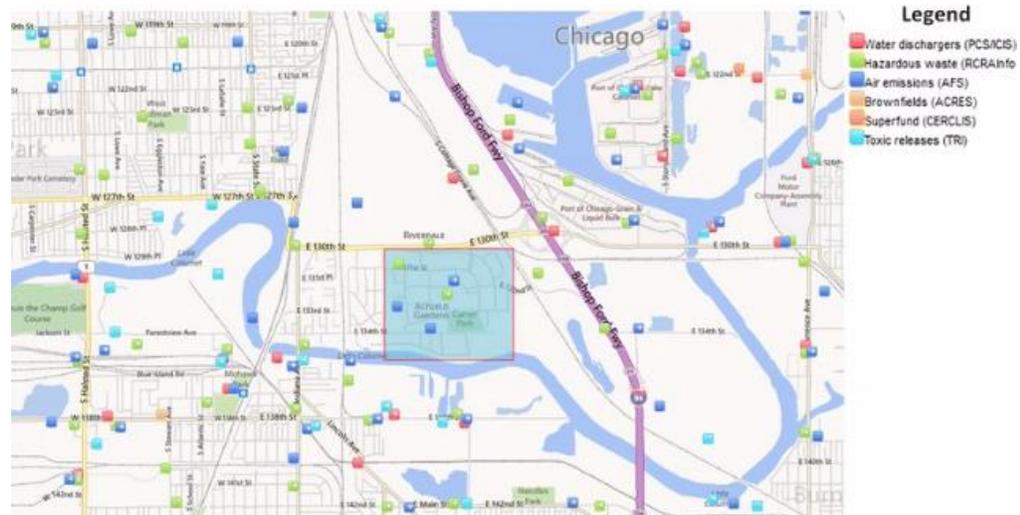


Figure 1. 2: Reveals all the hazardous sites that surround the ‘Toxic Doughnut.’<sup>75</sup>

<sup>74</sup> *Id.*

<sup>75</sup> Brandi M. White & Eric S. Hall, *Perceptions of Environmental Health Risks Among Residents in the “Toxic Doughnut”: Opportunities for Risk Screening and Community Mobilization*, 15 BMC PUB. HEALTH (2015).

Chicago Mayor, Lori Lightfoot, has been committed to advancing environmental justice.<sup>76</sup> Chicago, in an effort to doing so, will likely begin by examining gaps in policies and regulations.<sup>77</sup>

*B. Uniontown, Alabama*

In 2008, Harriman, Tennessee was the site of the largest coal ash spill in United States history.<sup>78</sup> Harriman is a predominantly white city with a small Black minority.<sup>79</sup> More than a billion gallons of highly toxic coal spilled into the Emory River Channel.<sup>80</sup> After a 1.2 billion dollar clean-up project, the owner of the dump, Tennessee Valley Authority, worked with the Alabama Department of Environmental Management to move the toxic coal 350 miles south and dump it at the Arrowhead landfill.<sup>81</sup> The Arrowhead landfill is located in a small town in Alabama called Uniontown.<sup>82</sup> Uniontown's population is eighty-eight percent Black.<sup>83</sup> The residents were subsequently exposed to life-threatening toxins and chemicals resulting from the dumping in the landfill. The toxic coal was obviously harmful because the Tennessee Valley Authority worked promptly to transport the coal out of Harriman, Tennessee.

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76. CHICAGO DEPARTMENT OF PUBLIC HEALTH, *supra* note 71, at 3.

77. *Id.*

78. Austin Gaffney, *A Legacy of Contamination*, GRIST (Dec. 15, 2020), <https://grist.org/justice/tva-kingston-coal-ash-spill-nuclear/>.

79. *Harriman, Tennessee Population 2021*, WORLD POPULATION REV., <https://worldpopulationreview.com/us-cities/harriman-tn-population> (last visited Jan. 10, 2022).

80. Marianne Engleman-Lado et al., *Environmental Injustice in Uniontown, Alabama, Decades after the Civil Rights Act of 1964: It's Time For Action*, 44 AM. BAR ASS'N (Apr. 13, 2020), [https://www.americanbar.org/groups/crsj/publications/human\\_rights\\_magazine\\_home/vol--44--no-2--housing/environmental-injustice-in-uniontown--alabama--decades-after-the/](https://www.americanbar.org/groups/crsj/publications/human_rights_magazine_home/vol--44--no-2--housing/environmental-injustice-in-uniontown--alabama--decades-after-the/).

81. Jared Saylor & Debra Mayfield, *A Toxic Inheritance*, EARTH JUSTICE (Apr. 2014), <https://earthjustice.org/features/a-toxic-inheritance>.

82. *Id.*

83. *Id.*



Figure 1.3: Reveals how far the coal ash was transported from Tennessee to Uniontown.<sup>84</sup>

It is important to note that Tennessee has the second largest amount of landfills, per state, in the United States with 129.<sup>85</sup> Despite the abundance of landfills in Tennessee, the toxic coal ash was transported 350 miles south.<sup>86</sup>

The Uniontown residents have pushed back against the hazardous environment treatment since the opening of Arrowtown in 2007.<sup>87</sup> In 2013, thirty-five residents submitted a complaint to the EPA's Office of Civil Rights alleging that the Alabama Department of Environmental Management's (ADEM) "decision to reissue and modify the operating permit for Arrowhead landfill violated Title VI of the Civil Rights Act of 1964 ... and agency regulations[.]"<sup>88</sup> In this complaint, the residents alleged several negative impacts from the operation of the landfill, "including interference with sleep, frequent emission of odors, irritation of nose, throat, and eyes, dizziness, nausea, an increase in the vector population in and around homes close to the landfills, and increased noise from the operation of heavy machinery."<sup>89</sup>

84. *Id.*

85. *Project and Landfill Data by State*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/lmop/project-and-landfill-data-state> (last visited Jan. 10, 2022).

86. Saylor & Mayfield, *supra* note 81.

87. Engleman-Lado et al., *supra* note 80.

88. *Id.*

89. *Id.*

There were various other complaints against the ADEM. In 2016, Uniontown residents filed a second complaint with the EPA asking it to address ADEM's failure to protect them from Arrowhead Landfill's retaliation and intimidation they experienced after filing their first complaint.<sup>90</sup> Arrowhead Landfill subsequently filed a \$30 million lawsuit against the innocent Uniontown residents.<sup>91</sup> Despite the clear signs of intimidation and evidence of discrimination, the EPA's Office of Civil Rights dismissed the complaint in March 2018.<sup>92</sup>

### C. 'Cancer Alley'

An eighty-five mile stretch of land that runs alongside the Mississippi River between New Orleans and Baton Rouge has become known as 'Cancer Alley.'<sup>93</sup> This chemical corridor has the highest rate of air pollution-caused cancer in the United States, nearly fifty times the national average.<sup>94</sup> Reserve, Louisiana, a small city in the corridor, has the highest risk of cancer in the country.<sup>95</sup> "In the first half of the 20th century, Reserve was a mostly white small town on the east bank of the Mississippi River adjusting to life in post-slavery Louisiana. But in the 1960s, chemical plants arrived in force, drastically reshaping the region and transforming the racial makeup of the town."<sup>96</sup> Whites left the area and Blacks were forced to move in because there was nowhere else to go. This corridor is home to over 150 plants and refineries.<sup>97</sup> "The industrial plants collectively release more than 30,000 tons of annual emissions of PM2.5... This leads to respiratory illnesses including chronic cough,

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90. *Id.*

91. *Id.*

92. *Id.*

93. Tristan Baurick et al., *Welcome to "Cancer Alley," Where Toxic Air is About to Get Worse*, PROPUBLICA (Oct. 30, 2019, 12:00 PM), <https://www.propublica.org/article/welcome-to-cancer-alley-where-toxic-air-is-about-to-get-worse>.

94. James Pasley, *Inside Louisiana's Horrifying 'Cancer Alley,' an 85-mile Stretch of Pollution and Environmental Racism That's Now Dealing with Some of the Highest Coronavirus Death Rates in the Country*, BUS. INSIDER, <https://www.businessinsider.com/louisiana-cancer-alley-photos-oil-refineries-chemicals-pollution-2019-11> (last updated Apr. 9, 2020, 8:42 PM).

95. Rick Jervis & Alan Gomez, *Racism Turned Their Neighborhood Into 'Cancer Alley.' Now They're Dying from COVID-19*, USA TODAY, <https://www.usatoday.com/in-depth/news/nation/2020/10/12/covid-racism-kills-black-americans-living-near-toxic-plants/3498180001/> (last updated Dec. 8, 2020, 9:05 PM).

96. *Id.*

97. *Id.*

bronchitis, chest illnesses, and pneumonia—all preexisting conditions that make COVID-19 more deadly.”<sup>98</sup>

There is a business reason many petrochemical facilities have flocked to this corridor. The facilities reap the advantages of having access to natural gas and a global transportation network on the Mississippi river. While many of the companies are prospering, there are many individuals that have lost their lives or are now at a higher risk of chronic disease because of these facilities.

The issues surrounding ‘Cancer Alley’ have been magnified since the pandemic in 2020. COVID-19 has had a disproportionate impact on the residents of this corridor. At one point, St. John the Baptist Parish, a small county in the corridor with a population of about 43,000, had the highest per capita COVID-19 death rate of any county in the United States.<sup>99</sup> A study released by Harvard found that an increase in exposure to PM2.5 leads to significant increases in COVID-19 related deaths.<sup>100</sup> The harm that these residents have had to endure over all these years and during the COVID-19 pandemic is unfortunate and heart-wrenching.

#### IV. EFFECTUATING CHANGE

During President Barack Obama’s time in office, there were significant strides in the right direction toward environmental justice. In 2011, The EPA and several other federal agencies signed a Memorandum of Understanding titled the *Memorandum of Understanding On Environmental Justice and Executive Order 12898*.<sup>101</sup> This Memorandum reinstated Executive Order 12898, which was signed into law by President William Clinton in 1994.<sup>102</sup> Executive Order 12898 served to focus attention and federal resources to environmental protection for all

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98. Krista Karlson, *Cancer Alley Now Coronavirus Alley*, SIERRA (June 9, 2020), <https://www.sierraclub.org/sierra/cancer-alley-now-coronavirus-alley>.

99. Ashley Killough & Ed Lavandera, *This Small Louisiana Parish Has the Highest Death Rate Per Capita for Coronavirus in the Country*, CNN <https://www.cnn.com/2020/04/15/us/louisiana-st-john-the-baptist-coronavirus/index.html> (last updated Apr. 16, 2020, 1:39 AM).

100. Xiao Wu et al., *Exposure to Air Pollution and COVID-19 Mortality in the United States: A Nationwide Cross-Sectional Study*, 6 SCI. ADVANCES, 1 (2020).

101. Memorandum of Understanding on Environmental Justice and Executive Order 12898 (Aug. 2011) (<https://www.epa.gov/sites/default/files/2015-02/documents/ej-mou-2011-08.pdf>).

102. *Summary of Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, U.S. ENV’T PROT. AGENCY, <https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice> (last visited Jan. 10, 2022).

communities.<sup>103</sup> Executive Order 12898 was one of the first steps towards addressing environmental injustice.

Plan Environmental Justice 2014 was issued by the EPA in 2011 and served as a roadmap to help the EPA integrate environmental justice into its programs, policies, and activities.<sup>104</sup>

The EPA released their EJ 2020 Action Agenda (EJ 2020) which was the EPA's strategic plan for advancing environmental justice for the years 2016-2020. EJ 2020 had "three goals: 1) Deepen environmental justice practice within EPA programs to improve the health and environment of overburdened communities; 2) Work with partners to expand the positive impact within overburdened communities; and 3) Demonstrate progress on significant national environmental justice challenges."<sup>105</sup>

All of this progress towards environmental justice was stalled during President Donald Trump's term. President Trump sought to reduce the EPA's budget, the sole agency tasked with regulating and protecting the environment, a number of times.<sup>106</sup> The EPA is paramount in the fight to combat environmental injustices.

President Joe Biden has expressed his concern and commitment to improving the environment.<sup>107</sup> Additionally, President Biden has stated his intentions during his campaign to address the environmental issues that have plagued minority and low socioeconomic communities.<sup>108</sup> President Biden plans to "revise and reinvigorate" EO 12898.<sup>109</sup>

President Biden issued Executive Order 14008 on January 27, 2021, to tackle environmental issues.<sup>110</sup> This order subsequently created what is known as the Justice40 Initiative. This initiative intends to deliver forty percent of the benefits of relevant federal investments to disadvantaged communities to combat environmental justice.<sup>111</sup> Disadvantaged

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103. *Id.*

104. EPA, PLAN EJ 2014 4 (2011).

105. *About EJ 2020*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/environmentaljustice/about-ej-2020> (last visited Jan. 10, 2022).

106. See Brady Dennis, *Trump's Budget Takes a Sledgehammer to the EPA*, THE WASHINGTON POST (Mar. 16, 2017), [https://www.washingtonpost.com/national/health-science/budget-reflects-trumps-vow-to-cut-epa-in-almost-every-form/2017/03/15/0611db20-09a5-11e7-a15f-a58d4a988474\\_story.html](https://www.washingtonpost.com/national/health-science/budget-reflects-trumps-vow-to-cut-epa-in-almost-every-form/2017/03/15/0611db20-09a5-11e7-a15f-a58d4a988474_story.html); Gina McCarthy, *Trump Budget Sashes EPA Funding, Environmental Programs*, THE HILL, <https://thehill.com/policy/energy-environment/482352-trump-budget-slashes-funding-for-epa-environmental-programs> (last updated Feb. 10, 2020, 2:18 PM).

107. *The Biden Plan To Secure Environmental Justice and Equitable Economic Opportunity*, JOEBIDEN.COM, <https://joebiden.com/environmental-justice-plan/> (last visited Nov. 29, 2020).

108. *Id.*

109. *Id.*

110. See generally Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 17, 2021).

111. *Id.* at 7641.

communities are defined by a combination of different variables, including, but not limited to, high unemployment, racial and ethnic residential segregation, distress neighborhoods, and access to healthcare.<sup>112</sup> Investments will go into various components of improving the environment in these disadvantaged areas. One of the main areas that will receive attention as a result of the Justice40 is the remediation and reduction of legacy pollution.<sup>113</sup> This will address the widespread toxic air pollutant exposure in underserved communities as critical in improving the livelihood of those residents. Justice40 appears to be a promising initiative in combating the deep-rooted problems of environmental injustice.

#### CONCLUSION

People of color and impoverished individuals have battled inequities for over 400 years. Many of the environmental injustice issues that we have seen and are seeing today stem from these systemic inequities. A reason for environmental injustice is racial segregation. 'Redlining' has created a chain reaction for many disparities in education, crime, health care, and employment. One of the most important disparities being the ones in environmental health and safety.

There have been positive strides towards environmental justice, but there is still a lot of work to be done. I am optimistic that things will get better with the assistance of fierce advocates and a receptive government.

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112. Memorandum from the Executive Office of the President to the Heads of Departments and Agencies for Implementation Guidance for Justice40 Initiative (July 20, 2021) (<https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>).

113. *Id.*