# **Battling Environmental Racism in Cancer Alley:** A Legislative Approach

# Antiracism Student Paper

 $Megan Resener Garofalo^{1}$ 

1. DEPAUL UNIVERSITY COLLEGE OF LAW, CHICAGO, ILLINOIS, USA.

**Keywords:** Environmental, Racism, Cancer, Alley, Petrochemical

Abstract: This Paper argues that to protect at-risk communities - and all Americans - from the deadly effects of environmental racism, Congress must pass the Environmental Justice for All Act. The Act is intended to "restore, reaffirm, and reconcile environmental justice and civil rights." It does so by restoring an individual's right to sue in federal court for discrimination based on race, ethnicity, or national origin regardless of intent under the Civil Rights Act of 1964, strengthening the National Environmental Policy Act, and providing economic incentives focused on environmental justice.

Cancer Alley is an eighty-five mile stretch of land between Baton Rouge and New Orleans, Louisiana, which contains approximately 150 petrochemical plants and refineries.<sup>1</sup> The communities that surround these facilities are predominately low-income and Black, and their residents have reported numerous health issues, including higher rates of cancer compared to the national average.<sup>2</sup> Yet these communities lack the necessary resources, support, and political power to protect themselves from the harmful impacts of the petrochemical industry.3 And while some have successfully prevented the installation of new facilities, current federal laws are failing to protect minority communities from the impacts of environmental racism.

To better protect the victims of environmental racism, Congress should pass the Environmental Justice for All Act ("EJAA").<sup>4</sup> The EJAA will strengthen individual rights under the Civil Rights Act of 1964 by allowing claimants to seek relief for acts of environmental racism,<sup>5</sup> as well as assist the Environmental Protection Agency ("EPA") by providing funding for research and program development related to environmental justice.6 While the EJAA will not make up for past instances of environmental racism, it will provide effective tools to prevent similar instances from occurring in the future.

This Paper will provide an overview of environmental racism and discuss the history of the environmental justice movement in the United States. It uses Cancer Alley as an example of environmental racism and discusses the role that the environmental justice movement has played in the region. Additionally, it will evaluate existing avenues to challenge acts of environmental racism-particularly in the context of the siting of petrochemical facilities-and how they are failing. Finally, this Paper will argue that passing the EJAA will help address some of the existing legal hurdles in the environmental justice movement and provide additional protections to underrepresented communities.

# I. Background

A. What is Environmental Racism? The father of the environmental justice movement, Dr. Robert Bullard, defined environmental racism as "any policy, practice or directive that differentially affects or disadvantages

Megan Resener Garofalo is a student at DePaul University College of Law.

(intended or unintended) individuals, groups or communities based on race."7 Environmental racism can take many different forms, including but not limited to the displacement of Black neighborhoods for urban renewal projects, the construction of hazardous waste facilities near minority communities, or the pollution of water supplies.8 Although there is no singular cause of environmental racism, scholars point to a number of contributing systemic issues. For example, red-lining, zoning, and the unequal enforcement of environmental regulations all

include other forms of environmental racism, including the disproportionate impact of lead poisoning on individuals of color.13 In particular, it highlighted that those from lowincome backgrounds, communities of color, and inner cities experienced higher rates of lead poisoning, with Black children being five times more likely than their white counterparts to suffer from lead poisoning.14 One of the most infamous examples of lead poisoning is the Flint water crisis, which began in 2014 when city officials switched the water supply source to the polluted Flint River

taken by early environmental activists, such as establishing national parks on ancestral Native lands, negatively impacted minority communities.<sup>19</sup> Many minority communities also face pressing issues like poverty and limited access to housing and are forced to prioritize their dayto-day survival over environmental concerns.<sup>20</sup>

In the early 1980s, individuals affected by environmental racism began forming the environmental justice movement, advocating for fair treatment and meaningful involvement of all people in environmental

This Paper will provide an overview of environmental racism and discuss the history of the environmental justice movement in the United States. It uses Cancer Alley as an example of environmental racism and discusses the role that the environmental justice movement has played in the region. Additionally, it will evaluate existing avenues to challenge acts of environmental racism—particularly in the context of the siting of petrochemical facilities—and how they are failing. Finally, this Paper will argue that passing the EJAA will help address some of the existing legal hurdles in the environmental justice movement and provide additional protections to underrepresented communities.

make it easier to select low-income, predominantly minority communities to shoulder these environmental burdens.<sup>9</sup>

The 1987 report by the United Church of Christ's Commission for Racial Justice extensively documented the presence of hazardous waste in racial and ethnic communities in the United States. 10 It revealed a clear correlation between race and the location of commercial hazardous waste facilities, with communities hosting multiple facilities having a significantly larger minority population compared to those without such facilities.11 In 2007, a follow-up report by the Commission confirmed that the disproportionate environmental harms faced by poor and minority communities had worsened over the previous two decades.12 This report expanded the investigation to

without proper testing and resulted in the predominantly Black population of Flint, Michigan, being exposed.<sup>15</sup> A study later revealed that 17% of water samples collected from residents exceeded federal lead levels, leading to adverse health effects, including new behavior issues in 54% of households with children.<sup>16</sup>

#### B. History of the Environmental Justice Movement

Historically, the environmental movement has been primarily led by white individuals from middle or upper-class backgrounds, creating a lack of minority participation.<sup>17</sup> This can be attributed to the racist history within the early environmental movement, where influential figures like John Muir held derogatory views toward Native Americans and Black people.<sup>18</sup> Furthermore, the actions

decision-making processes.<sup>21</sup> The movement gained traction with the events in Warren County, North Carolina in 1982 when a landfill was constructed in a predominantly Black community. Despite community protests and lawsuits, the hazardous waste was still placed in the landfill.<sup>22</sup> However, this incident inspired other successful community movements, such as the Mothers of East Los Angeles ("MELA"), who prevented the construction of a waste incinerator in a poor Hispanic community.23 MELA's efforts included legal action, community marches, and public awareness campaigns.<sup>24</sup> Ultimately, the California Court of Appeals ruled in favor of MELA, leading to the abandonment of the incinerator project.<sup>25</sup> Disproportionate placement of petrochemical facilities in minority communities is another concern

addressed within the environmental justice movement.

### C. The Impact of Petrochemical Facilities

The siting of petrochemical facilities in or around minority communities is a key area of concern within the current environmental justice movement. Petrochemicals plants utilize oil and gas to produce chemicals that are then used to make a variety of products, including plastics, industrial chemicals, textiles, cosmetics, medical devices, and pesticides.<sup>26</sup> As of 2022, the United States had 459 petrochemical facilities and refineries located in thirty-nine different states, with many located in the Appalachian and Gulf Coast regions because of their inexpensive real estate and powerful lobbying influence.<sup>27</sup> Eighty more petrochemical plants are expected to open in the United States by the year 2026.28

Petrochemical plants release several toxic chemicals into the air during production. These chemicals include particulate matter, carbon monoxide, nitrogen oxide, hydrogen sulfide, and volatile organic compounds.<sup>29</sup> The pollution produced by petrochemical facilities has been shown to result in adverse health impacts on those who live in the areas surrounding said facilities. For example, data from the European Union on the petrochemical industry found that individuals living around petrochemical facilities have a "significantly higher risk" of developing lung cancer.<sup>30</sup> And an Argentinian study found that children living near petrochemical plants had higher rates of asthma, increased respiratory symptoms, and lower lung function than children who did not live near these facilities.31

# **II.** Cancer Alley

Before becoming home to one the largest concentrations of petrochemical facilities, Louisiana was dominated by agriculture.<sup>32</sup> The state was full of "sugar, indigo, and cotton plantations," most of which had been built using slave labor.<sup>33</sup> After Abraham Lincoln announced the Emancipation Proclamation, many of these former slaves built homes and established unincorporated communities along the Mississippi River between Baton Rouge and New Orleans.<sup>34</sup> Those homes have often been passed down through generations to the current residents of Cancer Alley.<sup>35</sup> This is not just important historical context, but it also reveals another important fact: The individuals who have suffered the most exposure to petrochemical plants have lived in these same homes for generations, even prior to the existence of these facilities.<sup>36</sup>

#### A. Why Cancer Alley?

It is not a coincidence that petrochemical companies choose to locate their facilities near low-income communities of color. Although companies originally considered primarily white communities as possible locations for their facilities, these communities mounted successful opposition to these facilities and petrochemical companies changed their strategy to deliberately target communities of color.<sup>37</sup>

The socioeconomic characteristics of these communities reveal why they have been particularly vulnerable.38 Ascension, a parish located in Cancer Alley, is the home of fourteen petrochemical plants, and the parish's seat of Donaldsonville has a population that is seventy percent African American.<sup>39</sup> Seventy-three percent of Donaldsonville residents have no formal education beyond a high school diploma, and approximately a third of households in the town live below the federal poverty line.40 Because many of the individuals live in structurally deprived communities, they lack the necessary resources and ability to effectively fight back against the companies building these toxic facilities.

The EPA's underenforcement of environmental laws and regulations in predominantly minority communities is another reason that petrochemical companies often choose these communities as the location of their facilities.<sup>41</sup> For example, one study found that companies who harmed white communities received penalties that were 500% higher than penalties of those that harmed similarly situated communities of color.<sup>42</sup> Another study revealed that facilities found to be emitting pollutants beyond the legally specified amount "received lower penalties and lesser enforcement" if the facilities were located in communities of color as opposed to white communities.<sup>43</sup>

And while petrochemical corporations promise job creation and other economic benefits, those benefits often fail to materialize. Take, for example, the City of St. Gabriel, Louisiana.44 As of 2019, there were at least thirty petrochemical facilities within a ten-mile radius of St. Gabriel.45 Facilities have been in the area since the 1950s, and with each successive plant built in or near St. Gabriel, the citizens have been promised greater employment opportunities and other returns on community investment.46 However, a 1995 survey found that "less than [nine percent] of the fulltime industry jobs in St. Gabriel were held by local residents."47

Additionally, the local governments responsible for approving the facilities are seldom representative of the communities they represent.48 Many of the towns in Cancer Alley are unincorporated, meaning they do not have the power to govern their own affairs, and 49 instead, parish councils (county-level entities) are the decision makers that approve these petrochemical facilities.<sup>50</sup> For example, the predominantly white council for St. John the Baptist Parish approved the rezoning of the town of Wallace, which is predominantly African American, so that the petrochemical company, Formesa, couldbuild a petrochemical facility in the community.51

State agencies can also play a large role in allowing the siting of new petrochemical facilities in communities of color.<sup>52</sup> In order to build a petrochemical facility in Louisiana, a corporation must receive a permit from the Louisiana Department of Environmental Quality ("LDEQ"), which is the state agency responsible for regulating toxic air emissions.<sup>53</sup> These companies must request permission from LDEQ to increase the amount of toxic emissions allowed in the area surrounding the proposed facility.<sup>54</sup> And while LDEQ was

JOURNAL OF LAW, MEDICINE & ETHICS

designed to be a source of protection from harmful pollution for Louisiana citizens, they "often prioritize industrial and business interests over the health of the individuals in the communities where these polluting facilities are located."<sup>55</sup>

## B. Health Consequences

Petrochemical plants in Cancer Alley not only reduce property values and air quality but also pose serious health risks to nearby residents. A study revealed that individuals in Cancer Alley faced a significantly higher risk of developing cancer compared to the national average.<sup>56</sup> The air in the area contained elevated levels of compounds known to be cancer risk factors.57 Perhaps the most devastating research findings have been the associations between socioeconomic and demographic characteristics: the lower a household's income, the higher the cancer risks, yet "as the percentage of Black residents increases, so does the cancer risk."58

Additionally, ethnographic research conducted in Ascension Parish, a predominantly African American community, revealed that residents reported higher rates of health conditions such as cancer, diabetes, high blood pressure, and respiratory issues. 59 Furthermore, death records reveal that African Americans in the area experienced a notably shorter lifespan compared to their counterparts in other parts of Louisiana.<sup>60</sup> It is worth noting that this evidence does not establish a concrete causal link between these petrochemical plants and the negative heath impacts suffered by surrounding residents, largely due to the challenges with making causal inferences in the field of epidemiology. With that being said, there is clearly a correlation between these petrochemical plants and the high rates of certain health conditions. This correlation, at the very least, should indicate that we need more well-designed and targeted research to be conducted on the long-term health impacts these petrochemical plants have on surrounding communities.

A handful of legal challenges have successfully prevented the construc-

tion of new petrochemical plants in Cancer Alley. However, current federal law fails to protect communities in Cancer Alley, and throughout the country, from environmental racism and the devastating health impacts that result.

# III. Existing Legal Remedies

A. Constitutional Challenges Victims of environmental racism, such as the citizens of Cancer Alley, who decide to pursue legal recourse often do so by alleging a violation of the Equal Protection Clause of the Fourteenth Amendment of the Constitution.<sup>61</sup> Historically, the Equal Protection Clause has "been one of the primary means for remedying racial discrimination in this country."62 However, the Supreme Court's decision in Washington v. Davis has significantly reduced the Equal Protections Clause's effectiveness, including in cases of environmental racism.<sup>63</sup> In Washington, the Supreme Court held that for a party to succeed on an equal protection claim, they must prove discriminatory intent.64 Subsequently, in the Village of Arlington Heights v. Metropolitan Housing Development, the Supreme Court identified five factors that courts should use when deciding whether to infer intentional discrimination. These factors are the following: (1) whether the state action impacts one race more heavily than others; (2) whether the state action, even if facially neutral, creates a clear racial pattern; (3) the decision's historical background; (4) whether officials departed from normal procedures related to the decision-making process; and (5) "legislative or administrative history."65

Unfortunately, plaintiffs bringing an equal protection action for environmental racism have been unable to overcome this burden.<sup>66</sup> While the plaintiffs could often prove discriminatory impact, they were unable to prove that the defendants had intended for their actions to be discriminatory.<sup>67</sup> For example, in *R.I.S.E. v. Kay*, a group of minority citizens filed suit against the County Board of Supervisors for Queen and King Counties, located in Virginia,

to prevent them from building a new landfill.68 To prove discriminatory intent, the plaintiffs relied on statistical data that showed that the three existing landfills in the communities were surrounded predominantly by minority residents.<sup>69</sup> Additionally, the plaintiffs presented data that revealed that the proposed location of the new landfill would also be in an area with a high minority population.<sup>70</sup> Unfortunately, the Court denied their claim for relief.71 It found that while the statistics were compelling, they failed to satisfy the test outlined by the Supreme Court in the Village of Arlington Heights.72 As a result of R.I.S.E., and other similar cases, legal and environmental scholars have long considered stand-alone constitutional claims in environmental cases to be a "dead-end."73 Instead, if used at all, these constitutional challenges should be paired with "environmental and statutory civil rights claims."74

### B. Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 has served as one alternative cause of action for victims of environmental racism.<sup>75</sup> In these cases, the key provision of Title VI is Section 601, which states that, "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance."76 However, Section 601, alone, is not enough to protect victims of environmental racism because the Supreme Court has found that it only applies to acts of intentional discrimination.77 Victims must also rely on Section 602 of Title VI, which requires federal agencies to develop and implement rules that ensure they are properly complying with Section 601.78 When drafting these regulations, the Supreme Court has held that agencies may, as a condition to receiving federal funding, prohibit certain disparate and discriminatory impacts.<sup>79</sup> The EPA has adopted a regulation that prohibits "facially-neutral policies or practices that result in discriminatory effect ...

unless it can be shown that the effects are justified and that there is no less discriminatory alternative."<sup>80</sup> Unfortunately, the process for which victims of environmental racism can file claims with the EPA has proven to be burdensome and ineffective.

Residents of Cancer Alley have had some success in preventing the construction of new petrochemical plants using the Civil Rights Act of 1964. For example, in 1997, the Tulane Environmental Law Clinic filed a Title VI administrative complaint with the EPA's Office of Civil Rights on behalf of the town of Covthe use of grassroots community organizing.<sup>86</sup> However, the impact of this Executive Order was limited because it created no private cause of action or opportunity for judicial review.87 The EPA responded to President Clinton's Executive Order by implementing programs and policies aimed at achieving environmental justice.88 However, a National Law Journal study found that a significant gap existed between the EPA's enforcement of their policies in predominantly white versus predominantly minority communities.89 For example, it took twenty percent A federal court found that the EPA had broken the law, which required them to either dismiss a complaint or issue a preliminary finding within 180 days. Instead, the EPA, in many cases, had taken over a decade to investigate Title VI complaints.<sup>96</sup> The case was brought by community organizations in five states (California, Michigan, Texas, Alabama, and New Mexico), all of whom had filed Title VI complaints between 1992 and 2003, and by 2015, all of the complaints remained unresolved.<sup>97</sup>

Since this ruling, the EPA has made some improvements in

Residents of Cancer Alley have had some success in preventing the construction of new petrochemical plants using the Civil Rights Act of 1964. For example, in 1997, the Tulane Environmental Law Clinic filed a Title VI administrative complaint with the EPA's Office of Civil Rights on behalf of the town of Covenant, which is located in St. James Parish. The complaint alleged that LDEQ violated Title VI when they issued a permit to the plastics manufacturing company, Shintech. This led the EPA to open an investigation into Shintech. However, prior to the EPA releasing their official ruling on the complaint, Shintech suspended plans to build their petrochemical plant in Covenant.

enant, which is located in St. James Parish.<sup>81</sup> The complaint alleged that LDEQ violated Title VI when they issued a permit to the plastics manufacturing company, Shintech.<sup>82</sup> This led the EPA to open an investigation into Shintech.<sup>83</sup> However, prior to the EPA releasing their official ruling on the complaint, Shintech suspended plans to build their petrochemical plant in Covenant.<sup>84</sup>

#### C. The Environmental Protection Agency

On February 11, 1994, President Clinton issued an Executive Order entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations."<sup>85</sup> This order required all federal agencies to "develop strategies to achieve environmental justice," and particularly emphasized longer for hazardous waste sites in minority communities to be placed on the EPA's "National Priorities" list as compared to white communities.<sup>90</sup> And in the rare cases where polluters in minority communities were penalized, they were done so at a rate fifty-four percent lower than in White communities.<sup>91</sup>

In 2016, the U.S. Commission on Civil Rights found that the EPA had failed to comply with the Civil Rights Act of 1964 and President Clinton's 1994 Executive Order.<sup>92</sup> This 230page report found that the EPA dismissed nine out of every ten complaints and typically took a year to decide whether to accept the case.<sup>93</sup> Even more shocking, the EPA had never once issued a formal Title VI violation.<sup>94</sup> In 2020, the judiciary got involved with the EPA's failures in addressing environmental racism.<sup>95</sup>

addressing complaints in a timely manner.98 For example, in 2022, two complaints were filed with the EPA against the LDEQ and the Louisiana Department of Health ("LDH").99 The complaints allege that their licensing programs violated Title VI of the Civil Rights Act.100 More specifically, they alleged the permitting process LDEQ and LDH used for the chloroprene-producing Denka plant resulted in Black residents suffering from health issues at a disproportionate rate.<sup>101</sup> In their initial report, the EPA concluded there was "significant evidence that Louisiana regulators' actions or inactions have resulted and continue to result in disparate adverse impacts on Black residents."102 More specifically, it found that LDEQ had not taken residents' concerns seriously and had not followed the proper procedure regard-

JOURNAL OF LAW, MEDICINE & ETHICS

ing grievances. Additionally, the EPA found that LDH relied on inaccurate and outdated data during the permitting process.<sup>103</sup> However, the EPA has still struggled to adequately address claims of environmental racism.<sup>104</sup>

And while this acknowledgement is important for these communities, it is just a preliminary report and thus has no binding impact. Finally, even if these complaints are successful, they provide limited remedies because they are non-judicial, administrative actions.<sup>105</sup> This means that the only remedies are a violation notice, or "an order directing an individual, a business, or other entity to take action to come into compliance, or to clean up a site."106 However, it does not provide victims of environmental racism with any sort of monetary compensation for past pollution and their subsequent health issues.

#### D. Procedural Challenges

A final option for victims of environmental racism is to file a claim of action based on existing environmental law. This is typically the easiest option, as judges are often more familiar with these types of challenges and the statutes provide clear guidance.107 In cases related to permitting petrochemical facilities, it is most likely that the applicable state or federal environmental laws will be focused on procedure.<sup>108</sup> These procedures will outline specific steps that corporations must adhere to in order to be properly permitted to build and operate their facility. If victims of environmental racism can prove a corporation did not follow proper procedure, they have a good chance of succeeding in their suit. However, corporations are often given additional opportunities to follow procedure and receive the proper permits. If this occurs, the impacted individuals have no legal recourse under the environmental laws, regardless of the disparate impact the permitting had.

Recently, the citizens of St. James Parish, located in Cancer Alley, successfully prevented the construction of a new petrochemical plant based on procedural grounds. In September 2022, a Louisiana judge revoked the air permits for the \$9.4 billion petrochemical plant that Formosa Plastics planned to build in St. James Parish.<sup>109</sup> Judge Trudy White stated in her opinion that state regulators used "selective" and inconsistent data and had failed to consider the pollution effects on the predominantly Black community."<sup>110</sup> Formosa said it plans to move forward with the facility and will explore all of its legal options.<sup>111</sup>

It is clear, even with these current efforts to address environmental racism, that our country's laws fail to adequately protect minority communities. As a result, they are exposed to environmental toxins at a much higher rate than White communities, resulting in serious health impacts. Thus, it is crucial that Congress pass the Environmental Justice for All Act.

#### IV. Environmental Justice for All Act

It is evident that the existing laws in our country are not adequately protecting minorities from the health impacts of petrochemical facilities. Therefore, Congress must make it a priority to pass comprehensive legislation which tackles environmental racism. There is currently a proposed bill called the Environmental Justice for All Act ("EJAA"), which includes many provisions that will protect victims of environmental racism. The EJAA was introduced into the U.S. Senate by Senator Tammy Duckworth (D-IL) on March 18, 2021.112 It has also been co-sponsored by thirteen additional senators.<sup>113</sup> Immediately upon introduction, the bill was referred to the Senate's Environmental and Public Works Committee, but little progress has been made since this point.114 On the same date, Representative Raul Grijalva (D-AZ) introduced an identical bill into the U.S. House of Representatives, which has been co-signed by 112 representatives.<sup>115</sup> This bill was assigned to the Committee on Natural Resources who made revisions and, on December 30, 2022, recommended that the amended version be passed.<sup>116</sup> However, at this point the House of Representatives has yet to vote on this bill and it would be unlikely to pass, given the current GOP majority.<sup>117</sup> Despite the bleak

outlook for the EJAA in Congress, there is clear support for the bill from experts.<sup>118</sup> For example, a coalition of ninety organizations, led by Coming Clean and the Environmental Justice Health Alliance for Chemical Policy, sent Representative Grijalva a letter expressing their "strong support" for the EJAA.<sup>119</sup>

The EJAA states that the purpose of the bills is "to restore, reaffirm, and reconcile environmental justice and civil rights."120 Most importantly, the EJAA strengthens the Civil Rights Act of 1964 by restoring an individual's right to sue in federal court for discrimination based on race, ethnicity, or national origin, regardless of whether the discrimination was intentional or merely a disparate impact.<sup>121</sup> This is critical, because as it currently stands if a victim of environmental racism is only able to prove disparate impact, then they are left to rely on Section 602 of Title VI, which, as previously explained, does not create a private cause of action. Instead, it allows individuals to file complaints with federal agencies that have made federal funding conditional on not creating disparate impact. In cases of environmental racism, that agency is the EPA, which, as explained throughout this Paper, has continuously failed to properly address Title VI violations. Therefore, this provision of the EJAA will allow victims of environmental racism to bypass the EPA and file a private cause of action for disparate impact based on race, ethnicity, or national origin by getting rid of the impossible requirement of proving discriminatory intent.

Moreover, this bill goes beyond providing legal remedies for current or past cases of environmental racism. One way it does this is by strengthening the National Environmental Policy Act ("NEPA"), which is a longstanding federal law on public participation in federal governmental actions. Section 14 of the EJAA does this by "requiring federal agencies to provide early and meaningful community involvement opportunities for proposed projects that may affect an environmental justice community."<sup>122</sup> And if a federal agency pro-

poses an action that could potentially have adverse effects on the environment or health of a predominantly minority community, then the agency must prepare a Community Impact Report.<sup>123</sup> Among other things, this report must consider the cumulative health impacts.<sup>124</sup> Additionally, it requires any agency making permitting decisions under the Clean Air Act to consider the cumulative impacts of the proposed project.<sup>125</sup> It also provides that no permit should be issued if it cannot be shown there is a "reasonable certainty of no harm to human health."126

Moreover, the EJAA includes a number of economic initiatives focused on environmental justice.127 It provides seventy-five million dollars in grants to research and develop programs aimed at reducing health disparities in impacted communities.128 It also creates a fund, which is financed through taxes on oil, gas, and coal companies, to help support the transition to clean energy.<sup>129</sup> The EJAA would establish a health equity program to fund research on personal and childcare products that could have possible adverse health impacts, with a specific focus on products for women and children of color. Finally, this bill includes green-space programs that support increased access to parks and recreational opportunities in underserved communities.130

#### V. Conclusion

The impacts of systemic racism are seen throughout our country, including in workplaces, educational institutions, the criminal justice system, government, and even the distribution of housing. Thus, it is no surprise that environmental and health impacts of pollution from factories impact people of color at a much higher rate in this country. While this Paper focuses on environmental racism within the Cancer Alley region of Louisiana, the impacts are widespread, affecting a variety of minority populations.

A 2014 study found that Black people are seventy-five percent more likely than the average population to live near chemical facilities.<sup>131</sup> After Hurricane Harvey, in 2017, petrochemical plants in Houston released an additional 320 pounds of toxic pollution "nearly all of it concentrated within four miles of a neighborhood that is [ninety-eight percent] Latino."132 The original report produced by the Church of Christ's Commission on Racial Justice found that fifty percent of all Native Americans live near uncontrolled hazardous waste sites.133 And while communities have pursued legal remedies in cases of environmental racism, and have at times been successful, overall, our country's existing laws are not adequately protecting minorities from the dangerous health impacts caused by exposure to pollution and hazardous waste. To best protect all citizens of the United States, it is imperative for Congress to make environmental racism a priority by passing the Environmental Justice for All Act.

#### Note

The author has no conflicts of interest to disclose.

#### References

- J. Rosene, "Cancer Alley: A Case Study of Environmental Injustice and Solutions for Change," University of St. Thomas Journal of Law & Public Policy 16, no. 1 (2003): 501-515 at 503-04.
   Id., at 505.
- 3. *Id.*, at 510.
- Environmental Justice for All Act, S. 872, 117th Congress, 1st Session, (2021), available at <a href="https://www.congress.gov/bill/117th-congress/senate-bill/872/text">https://www. congress.gov/bill/117th-congress/senate-bill/872/text</a> (last visited March 25, 2024).
- H. Klaus, Environmental Justice for All Act Would Address Generations of Environmental Racism, Center for Progressive Reform, Aug. 29, 2022, available at https://progressivereform. org/cpr-blog/ej-for-all-act-wouldaddress-generations-environmentalracism/ ((last visited March 25, 2024)).
   Id.
- V. Peña-Parr, *The Complicated History* of Environmental Racism, University New Mexico Newsroom, Aug. 4, 2020, available at <a href="http://news.unm.edu/news/the-complicated-history-ofenvironmental-racism">http://news.unm. edu/news/the-complicated-history-ofenvironmental-racism</a>> (last visited on January 20, 2024).
- D'Jenaiya Bowser, 6 Types of Environmental Racism, Diversify Outdoors, July 20, 2022, available at <https://www.diversifyoutdoors.com/ blog/2022/7/20/6-types-of-environmental-racism> (last visited on January 20, 2024).

- 9. D. Taylor and G, Torres, *Yale Experts Explain Environmental Justice*, Yale Sustainability Oct. 1, 2020, *available at* <a href="https://sustainability.yale">https://sustainability.yale</a> edu/explainers/yale-experts-explainenvironmental-justice> (last visited on January 20, 2024).
- 10. *Id.* 11. *Id.* 
  - *Id.* . *Id.*, at 45.
- 12. *Id.*, at 45 13. *Id*.
- 10. Id. 14. Id.
- 15. Id.
- 16. Id.; Center for Disease Control and Prevention, Flint Water Crisis, May 28, 2020, available at <https://www.cdc.gov/nceh/casper/ pdf-html/flint\_water\_crisis\_pdf. html#:~:text=What%20was%20 the%20need%3F,contaminants%20 into%20municipal%20drinking%20 water> (last visited on January 20, 2024).
- 17. Lee, supra note 13, at xi.
- B. Melley, Sierra Club Calls out Founder John Muir for Racist Views, PBS, July 22, 2020, available at <a href="https://www.pbs.org/newshour/nation/sierra-club-calls-out-founder-john-muir-for-racist-views">https://www.pbs.org/newshour/nation/sierra-clubcalls-out-founder-john-muir-for-racist-views> (last visited on January 20, 2024).
- Ailsa Chang et al., National Parks Should Be Controlled by Indigenous Tribes, One Writer Argues, NPR, Apr. 15, 2021, available at <a href="https://www.npr.org/2021/04/15/987787685/">https://www.npr.org/2021/04/15/987787685/</a> national-parks-should-be-controlledby-Indigenous-tribes-one-writerargues> (last visited on January 20, 2024).
- 20. Lee, *supra* note 13, at xii.
- What Is Environmental Justice? Office of Legacy Management, Apr. 27. 2021, available at <a href="https://www.clientearth.org/latest/latest-updates/stories/what-is-environmental-justice/?gclid=CjwKCAjw9pGjBhB-EiwAa5jl3KNIQhvI3qEw80InGz-pRWPh5kClidbBhbXfk3qxQS107X-4eijaGALxoCRIsQAvD\_BwE>">https://www.clientearth.org/latest/latest-updates/stories/what-is-environmental-justice/?gclid=CjwKCAjw9pGjBhB-EiwAa5jl3KNIQhvI3qEw80InGz-pRWPh5kClidbBhbXfk3qxQS107X-4eijaGALxoCRIsQAvD\_BwE>">https://www.clientearth.org/latest/latest-updates/stories/what-is-environmental-justice/?gclid=CjwKCAjw9pGjBhB-EiwAa5jl3KNIQhvI3qEw80InGz-pRWPh5kClidbBhbXfk3qxQS107X-4eijaGALxoCRIsQAvD\_BwE>">https://www.clientearth.org/latest/latest-updates/stories/what-is-environmental-justice/?gclid=CjwKCAjw9pGjBhB-EiwAa5jl3KNIQhvI3qEw80InGz-pRWPh5kClidbBhbXfk3qxQS107X-4eijaGALxoCRIsQAvD\_BwE>">https://www.clientearth.org/latest/latest-updates/stories/what-is-environmental-justice/?gclid=CjwKCAjw9pGjBhB-EiwAa5jl3KNIQhvI3qEw80InGz-pRWPh5kClidbBhbXfk3qxQS107X-4eijaGALxoCRIsQAvD\_BwE>">https://www.clientearth.org/latest/latest-updatest-updatest/latest-updatest/latest-updatest/latest-updatest/latest-updatest/latest-updatest/latest-update
- 22. D. E. Taylor, Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility (New York University Press, 2014): at 13-19.
- B. Swart, The Passion of Aurora Castillo & The Militant Mothers of East L.A, 1992, available at <https://web. archive.org/web/20130927210647/ http://www.socialjusticephotography.com/images/militant\_mothers. pdf?b6e672e0> (last visited on January 20, 2024).
- 24. Swart, *supra* note 44.

25. Id.

- A. Sharma et al., "Hazardous Effects of Petrochemical Industries: A Review," *Recent Advances in Petrochemical Science* 25, no. 3 (Sept. 22, 2017).
- 27. 2022 Chemical Sector Profile, Cyber-Security & Infrastructure Security Agency, page 4, March 2022, available

*at* <https://www.cisa.gov/sites/default/ files/2023-02/chemical\_sector\_profile\_final\_508\_2022\_0.pdf> (last visited on January 20, 2024).

- Resolute Research, A Rise in Petrochemical Capacity Expected by 2026, Valve World Americas Publisher, September 10, 2021, available at <a href="https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expectedby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/>">https://valve-world-americas.com/a-rise-inby-2026/>">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/>">https://valve-world-americas.com/a-rise-inby-2026/">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/">https://valve-world-americas.com/a-rise-inby-2026/">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/">https://valve-world-americas.com/a-rise-inpetrochemical-capacity-expected-by-2026/">https://valve-world-americapetrochemical-capacity-expected-by-2
- A Guide to Petrochemicals, The Fossil Fuel Blindspot, FractTracker Alliance, available at <a href="https://www.fractracker.org/petrochemicals/guide/#ej">https://www.fractracker.org/petrochemicals/guide/#ej</a> (last visited on January 20, 2024).
- C.-Kuan Lin et al., "Risks and Burden of Lung Cancer Incidence for Residential Petrochemical Industrial Complexes: A Meta-Analysis and Application," *Environmental International* 121, no. 1 (2018): 404-14.
- 31. Id.
- 32. Id., at 19.
- 33. Id.
- 34. Id.
- 35. Id.
- 36. Castellón, supra note 56, at 17.
- 37. Id.
- 38. Id
- M. Singer, "Down Cancer Alley: The Lived Experience of Health and Environmental Suffering in Louisiana's Chemical Corridor," *Medical Anthropology Quarterly* 25, no. 2 (2011): 141-63 at 142.
- 40. Id.
- 41. Rosene, *supra* note 1, at 510.
- M. Lavelle and M. Coyle, "Unequal Protection: The Racial Divide in Environmental Law: A Special Investigation," *The National Law Journal* 15, no. 3 (1992): 1-7, at 5.
- 43. Rosene, supra note 1, at 510.
- 44. T. Baurick, Welcome to "Cancer Alley," Where Toxic Air Is About to Get Worse, ProPublica, Oct. 30, 2019, available at <a href="https://www.propublica.org/article/welcome-to-cancer-alley-where-toxic-air-is-about-to-get-worse">https://www.propublica.org/article/ welcome-to-cancer-alley-where-toxicair-is-about-to-get-worse> (last visited on January 20, 2024).
- 45. Id.
- 46. Id.
- 47. Id.
- 48. Castellón, *supra* note 56, at 23.
- 49. *Id*.
- 50. *Id.* 51. *Id.*
- 52. Castellón, *supra* note 56, at 28.
- 53. Id.
- 54. Id.
- 55. Id.
- W. James et al., "Uneven Magnitude of Disparities in Cancer Risks from Air Toxics," *International Journal of Environmental Research and Public Health* 9, no. 12 (2012): 4366-85 at 4369.
- 57. Cancer Alley to contain elevated levels of seven compounds (formaldehyde, benzene, acetaldehyde, carbon tetrachloride, ethylene oxide, butadiene,

and naphthalene) considered to be "risk drivers" for cancer, *Id*.

- 58. Id., at 4372.
- 59. Singer, *supra* note 66. at 152.
- 60. *Id*.
- The Fourteenth Amendment states, in relevant part, "no State shall...deny to any person within its jurisdiction the equal protections of the laws," U.S. Const. amend. XIV § 1 (1868); R. Gregory Roberts, "Environmental Justice and Community Empowerment: Learning from the Civil Rights Movement," *American University Law Review* 48, no. 1 (1999): 229-67, at 234.

- 63. Id.
- 64. 426 U.S. 229, 238-48 (1976).
- 65. B. Faerstein, "Resurrecting Equal Protection Challenges to Environmental Inequity: A Deliberately Indifferent Optimistic Approach," University of Pennsylvania Journal of Constitutional Law 7, no. 2 (2004): 561-89, at 566.
- 66. Roberts, supra note 100.
- 67. Id., at 235.
- 68. 768 F.Supp. 1144, 1146 (1991).
- 69. Id., at 1149-50.
- 70. Id.
- 71. Id.
- 72. Id.
- 73. Faerstein, *supra* note 104 at 568.
- 74. L. W. Cole, "Environmental Justice Litigation: Another Stone in David's Sling," Fordham Urban Law Journal 21, no. 3 (1994): 523-545, at 541.
- 75. Roberts, *supra* note 100.
- 76. Id.; 42 U.S.C. § 2000d (1994).
- See Alexander v. Choate, 469 U.S. 287 (1985).
- 78. Section 602 states in relevant part, "each Federal department and agency which is empowered to extend Federal financial assistance to any program or activity...is authorized and directed to effectuate the provisions of section 601...by issuing rules, regulations, or orders of general applicability which shall be consistent with achievement of the objectives of the statute authorizing the financial assistance in connection with which the action is taken," 42 U.S.C. § 2000-1; Roberts, *supra* note 100 at 236.
- 79. Roberts, *supra* note 100 at 236.
- 80. *Id*.
- J. B. Latham Worsham, "Disparate Impact Lawsuits Under Title VI, Section 602: Can a Legal Tool Build Environmental Justice," *Boston College Environmental Affairs Law Review* 27, no. 4 (2000): 631-706, at 657.
- 82. Id.
- 83. Id.
- 84. Id.
- 85. Exec. Order No. 12.898
- 86. Roberts, supra note 100, at 240.

89. Id., at 250.

#### 90. Id.

- 91. Id.
- T. Buford and K. Lombardi, Report Slams EPA Civil Rights Compliance, Center for Public Integrity, Mar. 2, 2023, available at <a href="https://publicintegrity.org/environment/pollution/ environmental-justice-denied/reportslams-epa-civil-rights-compliance/> (last visited on January 20, 2024).
   Id.
- 99. Id. 94. Id.
- 95. See Novak et al., Federal Court Still Requires EPA to Enforce Civil Rights, EarthJustice, Oct. 2, 2020, available at <a href="https://earthjustice.org/press/2020/federal-court-requires-epa-to-enforcecivil-rights">https://earthjustice.org/press/2020/ federal-court-requires-epa-to-enforcecivil-rights</a> (last visited on January 20, 2024).
- 96. *Id.* 97. *Id.*
- 98. M. Bruning, EPA Finds Evidence of Racial Discrimination in Cancer Alley, The Regulatory Review, Mar. 21, 2023, available at <a href="https://www.theregre-view.org/2023/03/21/bruning-epa-finds-evidence-of-racial-discrimination-in-cancer-alley/">https://www.theregre-view.org/2023/03/21/bruning-epa-finds-evidence-of-racial-discrimination-in-cancer-alley/</a> (last visited on January 20, 2024).

100. *Id*.

102. Id.

- 104. For more information on how the EPA failed to address claims of environmental racism see, Y. Cabrera, J. Smith Hopkins, and G. Moan, "EPA Promised to Address Environmental Racism. Then States Pushed Back," The Center for Public Integrity, Oct. 25, 2023, available at <a href="https://publicintegrity.org/">https://publicintegrity.org/</a> environment/pollution/environmentaljustice-denied/environmental-justiceepa-civil-rightsstory/#:~:text=For%20 decades%2C%20EPA%20has%20 effectively,discrimination%20by%20 federally%20funded%20programs> (last visited January 20, 2024).
- 105. Basic Information on Enforcement, U.S. Environmental Protection Agency, Dec. 18, 2023, available at <a href="https://www.epa.gov/enforcement/basic-infor-mation-enforcement">https://www.epa.gov/enforcement/basic-information-enforcement</a>> (last visited on January 20, 2024).
- 106. Id.
- 107. Cole, *supra* note 113, at 526.
- 108. Id. at 527.
- 109. L. Friedman, "In 'Cancer Alley,' Judge Blocks Huge Petrochemical Plant," *The New York Times*, Sept. 15, 2022, *available at* <a href="https://www.nytimes.com/2022/09/15/climate/louisiana-judge-blocks-formosa-plant.html">https://www.nytimes.com/2022/09/15/climate/louisiana-judge-blocks-formosa-plant.html</a> (last visited on January 20, 2024).
- 110. *Id.*
- 112. Environmental Justice for All Act, S. 872, 117th Congress, 1st Session, (2021), available at <a href="https://www.congress.gov/bill/117th-congress/senate-">https://www.congress.gov/bill/117th-congress/senate-</a>

<sup>62.</sup> Id.

<sup>87.</sup> *Id.*, at 241.

<sup>88.</sup> Id.

<sup>99.</sup> Id.

<sup>101.</sup> Id.

<sup>103.</sup> Id.

bill/872/text> (last visited on January 20, 2024).

113. Id.

- 114. Environmental Justice for All Act, S. 872, 117th Congress, 1st Session, (2021), available at <a href="https://www.congress.gov/bill/117th-congress/housebill/2021/cosponsors">https://www.congress.gov/bill/117th-congress/housebill/2021/cosponsors> (last visited on January 20, 2024).
- 115. Environmental Justice for All Act, H.R. 2021, 117th Congress, (2021), available at <a href="https://www.congress.gov/bill/117th-congress/senate-bill/872/committees">https://www.congress.gov/ bill/117th-congress/senate-bill/872/ committees> (last visited on January 20, 2024).
- 116. Environmental Justice for All Act, H.R. 2021, 117th Congress, (2021), available at <a href="https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/2021/all-actions>">https://www.congress.gov/bill/117th-congress/house-bill/2021/all-actions>">https://www.congress.gov/bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions>">https://www.congress/house-bill/2021/all-actions</a>

117. Id.

118. H. Klaus, Environmental Justice for All Act Would Address Generations of Environmental Racism, Center for Progressive Reform, Aug. 29, 2022, available at <a href="https://progressivereform.org/cpr-blog/ej-for-allact-would-address-generations-envi-</a> ronmental-racism/> (last visited on January 20, 2024).

119. *Id*.

- 120. Environmental Justice for All Act, H.R. 2021, 117th Congress, (2021), available at <https://www.congress.gov/ bill/117th-congress/house-bill/2021/ text#toc-H949238986B3348F3BE-22F028184A2BD> (last visited on January 20, 2024).
- 121. Id.
- 122. Y. Lam and S. Imperiale, The Promise of the Environmental Justice for All Act, Natural Resources Defense Council, Apr. 8, 2022, available at <a href="https://www.nrdc.org/bio/yukyan-lam/promise-environmental-justice-all-act">https://www.nrdc.org/bio/yukyan-lam/promise-environmental-justice-all-act</a>> (last visited on January 20, 2024).

125. Rep. R. Grijalva, Environmental Justice for All Act Fact Sheet, Office of Rep. Raul Grijalva, Mar. 2023, available at <a href="https://democrats-naturalresources.house.gov/imo/media/doc/2023.03%20Fact%20Sheet\_EJ%20for%20All%20Act.pdf">https://democrats-naturalresources.house.gov/imo/media/doc/2023.03%20Fact%20Sheet\_EJ%20for%20All%20Act.pdf</a>> (last visited on January 20, 2024).
126. Id.

127. Klaus, *supra* note 156.

128. Id.

129. Id.

- 130. Id.
- 131. P. Orum et al., Who's in Danger? Race, Poverty and Chemical Disasters, Environmental Justice and Health Alliance for Chemical Policy Reform, 26, May 2014, available at <a href="https://comingcleaninc.org/assets/media/images/">https://comingcleaninc.org/assets/media/images/ Reports/Who's%201m%20Danger%20 Report%20FINAL.pdf> (last visited on January 20, 2024).
- 132. Latino Communities and the Climate Crisis, Environmental Defense Fund available at <https://www.edf.org/ sites/default/files/documents/LatinosandtheClimateCrisis\_Factsheet\_ Oct2020\_Final3.pdf> (last visited on January 20, 2024).

<sup>123.</sup> *Id.* 124. *Id.* 

<sup>133.</sup> Lee, *supra* note 11.