

A TOOL TO BUILD A WORKING-CLASS ENVIRONMENTAL MOVEMENT: PROPOSAL FOR AN INDUSTRIAL WORKERS SAFETY ACT

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ABSTRACT

The consequences of climate change are far-reaching and ripple throughout various aspects of society; one such consequence is the urgent need for overhaul of systems across the energy production, transportation, and industrial manufacturing industries. Unfortunately, such system improvements run contrary to the interests of powerful, influential capital sectors, thus, needed reform will likely require a mass social movement amongst the working class. This Note seeks highlight the ways in which the mainstream environmental movement has positioned itself as separate from, and potentially antagonistic to, an industrial working class whose livelihood is tied to the production of consumer goods. However, the environmental justice movement has begun the critical work toward reform. This Note suggests that in order to successfully collaborate toward a more sustainable future, the environmental and labor movements need to deal not only with the economic effects associated with transition but also with the tangible health and environmental effects of unsafe labor practices and industrial pollution. The Author argues that this will require statutory protections because the current

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scheme is lacking; while the Occupational Safety and Health Act and federal environmental laws establish safety and pollution standards, the enforcement efforts are almost absent. This Note proposes an Industrial Workers Safety Act which would include a private right of action to sue for enforcement of safety standards, a procedural right to agency review of safety and environment violations, whistleblower protections, and a statutory definition of harm for purposes of federal environmental law.

INTRODUCTION

There is now little doubt that limiting the worst impacts of climate change will require “rapid, far-reaching and unprecedented changes in all aspects of society.”¹ In particular, it will require a massive overhaul of our systems of energy production, transportation, and industrial manufacturing.² Successfully creating this type of system change, in direct opposition to the interests of some of the most powerful capital sectors in history,³ is an undertaking that will require a mass social movement rooted

1. *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5 Degrees Celsius: Approved by Governments*, IPCC (Oct. 8, 2018), <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/> [<https://perma.cc/K5YY-TG37>].

2. *See Sources of Greenhouse Gas Emissions*, U.S. ENV'T PROT. AGENCY (last updated Aug. 5, 2022), <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#:~:text=The%20largest%20source%20of%20greenhouse,electricity%2C%20heat%2C%20and%20transportation> [<https://perma.cc/DM9T-9UYM>] (Showing that transportation, electricity production, and industry each account for approximately a quarter of total greenhouse gas emissions in the U.S.). *See also* David Roberts, *This Climate Problem is Bigger Than Cars and much Harder to Solve*, VOX (last updated Jan. 31, 2020), <https://www.vox.com/energy-and-environment/2019/10/10/20904213/climate-change-steel-cement-industrial-heat-hydrogen-ccs> [<https://perma.cc/DM9T-9UYM>]; *Chemicals*, IEA.ORG (last visited Dec. 21, 2022), <https://www.iea.org/fuels-and-technologies/chemicals> [<https://perma.cc/H8VS-W3NV>]; David G. Victor et al., *Introductory Chapter*, in *CLIMATE CHANGE 2014: MITIGATION OF CLIMATE CHANGE. CONTRIBUTION OF WORKING GROUP III TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 123* (Ottmar Edenhofer et al. eds. 2014), https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter1.pdf [<https://perma.cc/J29S-HCY4>].

3. Paul Griffin, *The Carbon Majors Database: CDP Carbon Majors Report 2017*, CARBON DISCLOSURE PROJECT 5, 8 (2017), <https://climateaccountability.org/pdf/CarbonMajorsRpt2017%20Jul17.pdf> [<https://perma.cc/F9BU-V6PE>] (demonstrating that more than half of all global industrial greenhouse gas emissions since the industrial revolution can be attributed to 100 fossil fuel producers, and more than half of emissions since anthropogenic climate change was officially recognized in 1988 can be traced to twenty-five producers).

in the working class.⁴ However, in many ways the mainstream environmental movement, with its focus on carbon footprints and reduced consumption, has positioned itself as separate from—and in many ways antagonistic to—an industrial working class whose livelihood is rooted in the production of consumer goods.⁵

Workers in the fossil fuels, petrochemical, and chemical industries in particular view the prominent environmental organizations with distrust at best.⁶ In addition to serving as major drivers of climate change, these industries are responsible for many environmental harms such as elevated cancer risk from air toxics and exposure to hazardous chemicals and industrial waste.⁷ But, in areas like West Virginia and the Gulf Coast, they are more than just the major employers, they are also deeply ingrained in many people's regional identities and have vastly outsized political influence.⁸ Cutting back fossil fuel consumption and petrochemical and chemical production will lead to inevitable job loss, community hardship, trauma, and grief.⁹ However, building mass power to fight climate change will require an environmental politics centered on working-class issues. Fossil fuel, petrochemical, and chemical workers are a part of that working class.

The environmental justice movement—which has gained increasing traction within the mainstream environmental movement over the past thirty years¹⁰—has begun the work. Environmental justice frameworks such as

4. Matt T. Huber, *Ecological Politics for the Working Class*, 3 CATALYST, No. 1, Spring 2019, <https://catalyst-journal.com/2019/07/ecological-politics-for-the-working-class> [<https://perma.cc/K85C-CGQQ>] (arguing that this is the only type of movement that has the power and leverage to use disruptive tactics such as strikes and union organizing to shut down industrial profits from the inside and historically has been the biggest “challenge to the rule of capital”).

5. *Id.*

6. J. MIJIN CHA ET AL., WORKERS AND COMMUNITIES IN TRANSITION: REPORT OF THE JUST TRANSITION LISTENING PROJECT 26-27 (2021), https://www.labor4sustainability.org/files/JTLP_report_2021.pdf [<https://perma.cc/78FR-P43A>].

7. *See infra*, part I (B)(ii).

8. MIJIN CHA ET AL., *supra* note 6, at 22.

9. *Id.* *See generally* Craig Holt Segall, *Just Transitions for Oil and Gas Communities*, 39 VA. ENV'T L. J. 177 (2021) (discussing the hardships that will be faced by oil and gas communities in transition).

10. *See Environmental Justice*, U.S. ENV'T PROT. AGENCY (last updated Jan. 10, 2023), <https://www.epa.gov/environmentaljustice> [<https://perma.cc/LWX2-JPQH>] (explaining that the EPA Office of Environmental Equity, later the Office of Environmental Justice, was created in 1992); Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994) (President Clinton's executive order on federal action to achieve environmental justice for low-income and minority populations); *Environmental*

Just Transition and the Green New Deal attempt to address working-class issues through the creation of new jobs and job retraining programs that prepare workers to support a more sustainable energy infrastructure.¹¹ Unfortunately, these types of movements, while forward-looking, fail to address the more immediate issues being faced by workers and their families, such as unsafe working conditions, polluted air and water, toxic waste sites in their neighborhoods, and disruptions to daily life caused by frequent shelter-in-place and evacuation orders.¹² Building an environmental politics that includes working-class people and meets the goals of environmental justice will require environmental organizations to demonstrate their commitment to making industrial workers' lives and communities better now, rather than simply asking people to trust that they will not be left behind as their industries are dismantled. To successfully work together to build a more sustainable future, the environmental and labor movements need to not only deal with the economic impacts of transition, but also the more immediate health and environmental impacts of unsafe labor practices and industrial pollution. This will require new statutory protections because existing labor and environmental laws are not up to the task.

While the Occupational Safety and Health Act and federal environmental statutes provide many safety and pollution standards, they

Justice Policy, SIERRA CLUB, <https://www.sierraclub.org/policy/environmental-justice> [<https://perma.cc/W82L-UDPZ>] (last visited Jan. 27, 2023) (Sierra Club's environmental justice policy adopted in Sept. 1993 and environmental justice principles adopted Feb. 17, 2001); Renee Skelton & Vernice Miller, *The Environmental Justice Movement*, NRDC: OUR STORIES, EXPLAINER (Mar. 17, 2016), <https://www.nrdc.org/stories/environmental-justice-movement> [<https://perma.cc/E9GR-LN65>] (discussing traditional environmental groups' partnerships with the growing number of environmental justice organizations).

11. LABOR NETWORK FOR SUSTAINABILITY & THE STRATEGIC PRAC. GRASSROOTS POL'Y PROJECT, "JUST TRANSITION"—JUST WHAT IS IT? 7 (2016) [hereinafter JUST TRANSITION REPORT 2016] https://labor4sustainability.org/files/Just_Transition_Just_What_Is_It.pdf [<https://perma.cc/EF5R-NTNT>] (explaining that the principle of Just Transition is that the cost of environmental protection should not bear disproportionately upon "toxic-related workers" and that industry should bear the economic burden of transition); Lisa Friedman, *What is the Green New Deal? A Climate Proposal, Explained*, N.Y. TIMES (Feb. 21, 2019), <https://www.nytimes.com/2019/02/21/climate/green-new-deal-questions-answers.html> [<https://perma.cc/FLC8-CNPT>].

12. See *infra* part 1A; Kate Mclean, *ITC Fire Extinguished Early Wednesday Morning, School Closures Continue*, HOUSTONPRESS (Mar. 20, 2019) <https://www.houstonpress.com/news/itc-tank-fire-extinguished-but-some-school-remain-closed-11258138> [<https://perma.cc/37JP-4MGL>]; *Fire Continues at Texas Plant; 50K Under Evacuations Order*, APNEWS (Nov. 28, 2019), <https://apnews.com/article/fires-us-news-houston-air-quality-tx-state-wire-ac4e863feb044755a946743b1a914991> [<https://perma.cc/SU4X-AFP8>].

often go unenforced leaving industrial workers in need of stronger legal tools to proactively protect themselves from violations. To address the need for better enforcement, better reporting mechanisms for violations, and more avenues for affected workers to assert their rights, this note proposes an Industrial Workers Safety Act. This act's major provisions would include a private right of action to sue for enforcement of safety standards, a procedural right to agency review of safety and environmental violations, strengthened whistleblower protections that extend to refusals to work in hazardous conditions, and a statutory definition of harm for the purposes of citizen suit provisions under federal environmental law.

As the region with the highest concentration of refineries and chemical plants in the world, and historically responsible for over a third of national refining capacity,¹³ this note focuses primarily on the Gulf Coast fossil fuels, petrochemical, and chemical industries. Part IA discusses the evolution of environmental justice and the state of environmental justice on the Gulf Coast today, while part 1B addresses the history of the labor movement in the Gulf Coast oil and gas industry and current workplace safety issues. Bringing these issues together, part 1C discusses the relationship between environmental justice, and industrial workers and organized labor. Part ID then summarizes the worker safety provisions of existing labor and environmental laws. Parts IIA and IIB address the importance of including worker safety issues in environmental justice work, as well as the failures of existing law to adequately protect workers. Finally, part IIC details each provision of the proposed Industrial Workers Safety Act and addresses their political and legal viability.

I. HISTORY: ENVIRONMENTAL JUSTICE AND ORGANIZED LABOR ON THE GULF COAST

A. The Beginning of the Environmental Justice Movement

In contemporary dialogue about climate change and decarbonization, the environmental justice movement has been the primary voice pushing the focus towards working-class issues such as Just Transition; but the fight for environmental justice has historically been rooted in issues of race.

13. Tyler Priest & Michael Bolton, *Bucking the Odds: Organized Labor in Gulf Coast Oil Refining*, in J. AM. HIST. 100, 100 (2012).

Environmental issues have been included in racial justice advocacy since the 1960s.¹⁴ The 1979 case *Bean v. Southwestern Waste Management* was the first to make a legal argument tying environmental harm to racial discrimination,¹⁵ contending that the siting of a landfill in a Black neighborhood in Houston was part of a racially motivated pattern and practice.¹⁶ The evidence showed that a disproportionate majority of Houston landfills were located in predominantly Black census tracts, nevertheless, the Southern District of Texas ruled against the plaintiffs on the grounds that they had failed to establish purposeful discrimination.¹⁷ Despite the courts' unwillingness to acknowledge environmental racism, environmental justice issues gradually gained recognition throughout the eighties and nineties, leading to further research, the organization of grassroots environmental justice groups, and the development and adoption of *Seventeen Principles of Environmental Justice* at the First National People of Color Environmental Leadership Summit in 1991.¹⁸ Academics such as Dr. Bullard, Bunyan Bryant, and Paul Mohai continued to publish environmental justice research. Bryant and Mohai also organized the 1990 Michigan Conference on Race and the Incidence of Environmental Hazards, which led to the formation of the Michigan Coalition, a group of academics and activists who advised EPA.¹⁹ These events, along with the founding of

14. Skelton & Miller, *supra* note 10 (noting that Cesar Chavez organized Latino farm workers for protection from harmful pesticides in the 1960s, Black students protested a garbage dump in 1967, and residents fought a sewage treatment plant in West Harlem in 1968); *Environmental Justice Timeline*, U.S. ENV'T PROT. AGENCY (last updated Jan. 10, 2023), <https://www.epa.gov/environmentaljustice> [<https://perma.cc/9WVG-XXWN>] (select heading "Memphis Sanitation Strike" within year 1968) (noting that the Memphis Sanitation Strike led by Dr. Martin Luther King, Jr. in 1968 was an action fighting environmental justice concerns).

15. See *Environmental Justice Timeline*, *supra* note 14, at 1979 (select heading "Bean v. Southwestern Waste Management Corp. and the Formation of NECAG"); Linda McKeever Bullard & Luke Cole, *A Pioneer in Environmental Justice Lawyering: A Conversation with Linda McKeever Bullard*, 5 RACE, POVERTY & ENV'T 17, 17 (1964).

16. *Bean v. Sw. Waste Mgmt. Corp.*, 482 F. Supp. 673, 677 (S.D. Tex. 1979).

17. *Id.* at 681; Bullard & Cole, *supra* note 15, at 18. The research used as evidence was conducted by Robert Bullard, a sociologist who became one of the pioneers of environmental justice research and activism. Bullard later developed the research from *Bean* into a study demonstrating that over 75% of all landfills and garbage incinerators in Houston were sited in Black neighborhoods despite Black people making up only 25% of the population. *Id.* at 18-19; *Environmental Justice Timeline*, *supra* note 14, at April 1983 (select heading "Publication of *Solid Waste Sites and the Houston Black Community*").

18. *Environmental Justice Timeline*, *supra* note 14; ROBERT D. BULLARD ET AL., TOXIC WASTES AND RACE AT TWENTY: 1987-2007, at 17-27 (Mar. 2007).

19. BULLARD ET AL., *supra* note 18, at 18; *Environmental Justice Timeline*, *supra* note 14, at 1990 (select heading "University of Michigan Conference on Race and the Incidence of Environmental

many academic research centers at universities across the South, seemed to indicate that environmental justice was becoming legitimized as an academic field.²⁰

The United States government also started to take notice after the residents of majority-Black Warren County, North Carolina blocked the road to a newly constructed hazardous waste landfill in 1982, inspiring six weeks of protests that lead to over 500 arrests.²¹ The Congressional Black Caucus Chair, Walter Fauntroy, participated in these protests. At Fauntroy's behest, the next year the United States General Accounting Office conducted a study on landfill siting, which ultimately showed a correlation between the siting of hazardous waste landfills and the racial and economic status of surrounding communities.²²

By 1990, EPA officials were meeting with both the Michigan Coalition and the Congressional Black Caucus to discuss their concerns about environmental racism, and EPA Administrator Reilly created the Environmental Equity Workgroup (later leading to the creation of the Office of Environmental Justice).²³ Finally, in 1994, President Bill Clinton issued Executive Order 12,898 directing all federal agencies to "make achieving environmental justice part of [their] mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects . . . on minority populations"²⁴

Today, the Gulf Coast region has some of the worst environmental indicators and environmental justice outcomes in the country, and the communities that suffer the most environmental injustice are the communities centered around oil refining, petrochemical production, and heavy industry. In Louisiana's Cancer Alley (the industrial corridor running along the Mississippi River between New Orleans and Baton Rouge) the cancer risk in primarily Black areas is more than forty percent higher than

Hazards").

20. BULLARD ET AL., *supra* note 18, at 20, 22 (noting that the Deep South Center for Environmental Justice at Xavier University in New Orleans was founded in 1992, and the Environmental Justice Resource Center at Clark Atlanta University and the Environmental Law and Justice Center at Texas Southern University Thurgood Marshall School of Law were founded in 1994).

21. Skelton & Miller, *supra* note 10.

22. *Id.*

23. *Id.*; *Environmental Justice Timeline*, *supra* note 14, at 1990 (various headings including "Congressional Black Caucus Meets with EPA Officials," and "EPA Administrator Creates the Environmental Equity Workgroup").

24. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994).

it is in predominantly white areas.²⁵ Despite national and international attention directed towards this racial disparity and concerns that further industrialization could exacerbate the problem, St. James Parish (part of the New Orleans-Metairie metropolitan area) approved the creation of one of the largest petrochemical complexes in the world, as well as the construction of further methanol complexes in 2018.²⁶

EPA's sixth National Air Toxics Assessment, released in 2014, shows that, in addition to Cancer Alley, Texas industrial hubs such as the eastern side of the Houston Metro area and the Beaumont/Lake Charles region have some of the biggest increases in cancer risk associated with air toxics in the country.²⁷ While the assessment showed that the national average cancer risk as a result of breathing 2014 levels of air toxics over a lifetime would be thirty per one million people,²⁸ in some Gulf Coast areas that risk ranges from fifty per million to over 150 per million.²⁹ EPA's Environmental Justice Screening and Mapping Tool also shows clear correlations between areas with higher cancer risks and areas where over fifty percent of the population is low income and over eighty percent are people of color.³⁰ The biggest drivers of this increased cancer risk are largely chemicals used in petroleum processing and petrochemical and plastics production such as ethylene oxide, chloroprene, and 1,3-butadiene.³¹ These communities exist

25. Press Release, United Nations, Environmental Racism in Louisiana's 'Cancer Alley' Must End, Say UN Human Rights Experts (Mar. 2, 2021), <https://news.un.org/en/story/2021/03/1086172> [<https://perma.cc/A8CC-QWBE>].

26. *Id.* (noting that President Biden specifically cited Cancer Alley while signing his Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis).

27. U.S. ENV'T PROT. AGENCY, 2014 NATA SUMMARY OF RESULTS 2 (Aug. 22, 2018), https://www.epa.gov/sites/default/files/2020-07/documents/nata_2014_summary_of_results.pdf [<https://perma.cc/W3R6-7N3Y>]. The National Air Toxics Assessment estimates cancer risk and some noncancer health effects from long term exposure to air toxics on an ongoing basis. It is meant to help specialists learn what sources raise health risks the most. U.S. ENV'T PROT. AGENCY, 2014 NATIONAL AIR TOXICS ASSESSMENT: FACT SHEET 1-2, https://www.epa.gov/sites/default/files/2018-08/documents/2014_nata_overview_fact_sheet.pdf [<https://perma.cc/V4UK-RN5Z>] (last visited Feb. 27, 2023).

28. 2014 NATIONAL AIR TOXICS ASSESSMENT: FACT SHEET, *supra* note 27, at 1.

29. EPA's *Environmental Justice Screening and Mapping Tool (Version 2020)*, U.S. ENV'T PROT. AGENCY, <https://ejscreen.epa.gov/mapper/> [<https://perma.cc/9HZW-JFBQ>] (select "EJSCREEN Maps" from the "add maps" drop-down; then select category "environmental indicators" and variable "NATA Cancer Risk") (last visited Jan. 7, 2022).

30. *Id.* (under EJSCREEN Maps select category "demographic indicators" and variables "people of color population" and "low income population").

31. 2014 NATA SUMMARY OF RESULTS, *supra* note 27, at 4.

because of the industries that are killing them, yet they rely on those industries for economic survival.³² A modern environmental justice movement needs a broad understanding of environmental justice that includes not only race, but its intersections with class, and worker's rights as well.

B. Gulf Coast Labor Issues and Environmentalism

i. Unionization in the Gulf Coast Oil and Gas Industry

While the environmental movement and organized labor do not have a history of collaboration, many of the environmental issues in the Gulf Coast region today are also workplace safety issues. Historically, it was unions that protected workers in the oil and gas industries from these hazards. However, the South has never been viewed as friendly toward organized labor. In the 1960s, only three southern states had a rate of union membership higher than 20%, compared to rates in the high thirties and low forties in many other parts of the country.³³ That picture is even more bleak today, with only 3% to 8% of workers belonging to a union in most southern states.³⁴ Nonetheless, during the peak of the United States' unionization, from 1945 through the 1950s, Gulf Coast oil and gas workers were an exception to the otherwise low rates of unionization in the South, with union representation in nearly every major refinery.³⁵

This comparatively high level of representation was partly a result of increased federal intervention during World War II,³⁶ but refineries in

32. See, e.g., *Beaumont-Port Arthur Area of Economic Development*, TEX. ECON. DEV. CORP., <https://businessintexas.com/texas-regions/texas-gulf-coast/beaumont-port-arthur/> [<https://perma.cc/8HHK-K5NH>] (last visited Jan. 19, 2023); *Major Employers*, PASADENA EDC, <https://www.pasadenaedc.com/site-selection/major-employers?page=1> [<https://perma.cc/B4PD-EMUC>] (last visited Dec. 21, 2022).

33. Quoc Trung Bui, *50 Years of Shrinking Union Membership, in One Map*, NPR.ORG: PLANET MONEY (Feb. 23, 2015), <https://www.npr.org/sections/money/2015/02/23/385843576/50-years-of-shrinking-union-membership-in-one-map> [<https://perma.cc/7EZ9-NESR>].

34. *Id.*; *Table 5. Union Affiliation of Employed Wage and Salary Workers by State*, U.S. BUREAU OF LAB. STATS: ECON. NEW RELEASE (Jan. 22, 2021), <https://www.bls.gov/news.release/union2.t05.htm> [<https://perma.cc/JU3P-PJEX>].

35. Priest & Bolton, *supra* note 13, at 101.

36. *Id.* at 104. The NLRB was created in 1934 and reigned in union busting activities. In 1942 the National War Labor Board also involved itself by tying defense contracts to union elections among other strategies. *Id.*

particular had already been well primed for unionization. They multiplied quickly along the Gulf Coast during the 1900s and 1910s and offered better than average wages, hours, and job security.³⁷ In an effort to fend off the advance of unions, many also established nonunion employee representation plans in the 1920s that included good benefits and employee representatives.³⁸ When the Depression caused layoffs and reduced wages and benefits, oil and gas workers were prepared to fight to keep the above average standards of living they enjoyed.³⁹ This allowed unions to gain a foothold. In the wake of the passage of the National Labor Relations Act of 1935, which recognized workers' right to bargain collectively, the Oil Workers' International Union (called International Association of Oil Field, Gas Well, and Refinery Workers of America at the time, but later "OWIU") was able to build power across the Gulf Coast, eventually winning refinery workers an eighteen percent wage increase through an industry-wide strike in 1945 that shut down refineries across the region.⁴⁰

By the 1950s unions began consolidating their power. The OWIU joined the United Gas, Coke, and Chemical Workers of America to form the Oil, Chemical, and Atomic Workers Union (OCAW).⁴¹ Minority workers also started to make gains and, after filing complaints with the federal government, they won contractual settlements allowing them to advance into more skilled positions.⁴² However, technological advances made during the 1950s and 1960s led to a decrease in employment levels for production-side refinery workers, even as output continued to grow.⁴³ As the refineries cut costs by eliminating jobs, combining craft jobs, requiring operators to perform more maintenance work, and bringing in outside contractors, OCAW shifted its focus primarily to protecting workers from layoffs.⁴⁴ Winning concessions from management had become significantly

37. *Id.* at 102-3.

38. *Id.*

39. *Id.*

40. *Id.* at 103, 107. President Truman appointed a government panel to mediate while authorizing the navy to seize the shutdown refineries. *Id.*

41. *Id.* at 108. This was shortly before the AFL and CIO merger. *Id.*

42. *Id.*

43. Edward J. Williams, *The Impact of Technology on Employment in the Petroleum Refining Industry in Texas, 1947-1966*, at 108 (Dec. 1971) (Ph.D. dissertation, University of Texas at Austin) (ProQuest). Because refining was already a highly automated process, productivity of refinery workers—with the consequent reductions in workforce—increased more quickly than workers in other industries. *Id.* at 103.

44. *Id.* at 117-18; Priest & Bolton, *supra* note 13, at 108-09.

more difficult by the 1960s as the union lost membership, leverage, and the power of its most important tool—a plant shutdown.⁴⁵ With increasingly high rates of automation, refineries were able to stay open and continue high rates of production even without their entire union workforce.⁴⁶ As jobs disappeared, racial polarization and mistrust of unions increased, leading to an even more rapid decline.⁴⁷ Eventually OCAW was forced to merge with the United Paper Workers, and then, in 2005, with the United Steelworkers (USW), to survive.⁴⁸

Without a strong union presence and with no incentive for companies to negotiate, industrial workers in Texas have had little ability to win better working conditions or wages in recent years. In a particularly extreme example of this phenomenon, rather than negotiate with workers, ExxonMobil simply locked the union out of its Beaumont refinery in May 2021, leaving approximately 600 workers without a job for ten months.⁴⁹ The National Labor Relations Board is now claiming the lockout was an unlawful effort to remove USW and an administrative law judge will decide whether ExxonMobil owes the workers back pay as negotiations continue.⁵⁰ Two years earlier, in April 2019, 235 workers at a Dow chemical plant were locked out for seven weeks after contract negotiations broke down because USW felt Dow had failed to address concerns about safety and understaffing, among other things.⁵¹ In both cases, the union expressed concern about the employer keeping their plant running with managers who had little experience handling the equipment while all of the experienced

45. Priest & Bolton, *supra* note 13, at 109. This was illustrated when the union lost leverage during an extended strike in 1961-62, because the refineries continued to run smoothly. *Id.*

46. Williams, *supra* note 43, at 118-19.

47. Priest & Bolton, *supra* note 13, at 110.

48. *Id.*

49. Erwin Seba, *Exxon refinery lockout 'unlawful,' back pay sought by U.S. Labor Board*, REUTERS (Oct. 3, 2022), <https://www.reuters.com/business/exxon-refinery-lockout-unlawful-back-pay-sought-by-us-labor-board-2022-10-03/> [<https://perma.cc/NMT9-BGYN>].

50. *Id.*; Erwin Seba, *Exxon accepted risk of a refinery lockout ahead of labor talks*, REUTERS (Feb. 16, 2023), <https://www.reuters.com/business/energy/exxon-accepted-risk-refinery-lockout-ahead-labor-talks-2023-02-16/> [<https://perma.cc/8CKE-FYVZ>].

51. *Lockout continues at Dow Texas chemical plant*, INDUSTRIALL GLOB. UNION (May 22, 2019), <https://www.industrialunion.org/workers-locked-out-of-dow-texas-chemical-plant> [<https://perma.cc/Z66C-2R3U>]; *USW Slams ExxonMobil Decision to Lock Out Workers in Beaumont, Texas*, UNITED STEELWORKERS (May 1, 2021), <https://www.usw.org/news/media-center/releases/2021/usw-slams-exxonmobil-decision-to-lock-out-workers-in-beaumont-texas> [<https://perma.cc/6CND-7L8P>].

workers were off the job, suggesting that this could increase the chances of an accident and put the local community at risk.⁵²

ii. Industrial Disasters and Unsafe Working Conditions

The track record of Gulf Coast refineries and chemical companies over the last few decades suggests that these concerns are not unfounded. In 1989, an explosion at the Philips 66 Houston Chemical Complex killed twenty-three workers and resulted in modernizations to process safety management programs and an overhaul of the Occupational Safety and Health Administration's process safety management standard.⁵³ However, major disasters have continued to occur on a regular basis⁵⁴ and they have been particularly catastrophic for workers. The 2005 Texas City explosion injured 180 BP refinery workers and killed fifteen; the 2010 Deepwater Horizon disaster killed eleven workers and resulted in what was potentially the largest marine oil spill in history;⁵⁵ and the 2014 LaPorte chemical spill at a DuPont facility killed four workers and resulted in the release of 24,000 pounds of the fatally toxic chemical methyl mercaptan.⁵⁶

This is not a trend to which government officials are oblivious. In the wake of Deepwater Horizon, the Senate Employment and Workplace Safety Subcommittee held a hearing on the ineffectiveness of safety processes in the oil and gas industry, and the failure of companies to learn from earlier

52. See sources cited *supra* note 51.

53. Ken P. Bloch & Bruce K. Vaughn, *Looking back at the Phillips 66 explosion in Pasadena, Texas: 30 years later*, HYDROCARBON PROCESSING (Oct. 2019), <https://www.hydrocarbonprocessing.com/magazine/2019/october-2019/special-focus-plant-safety-and-environment/looking-back-at-the-phillips-66-explosion-in-pasadena-texas-30-years-later?hootPostID=713c26a211f94d883e9ee399acf1c8e3> [https://perma.cc/K44Y-ZJ9Q].

54. A Freedom of Information Act Request in October 2018 found that the "incident screening database" maintained by the U.S. Chemical Safety Board had logged 1,890 industrial incidents in the five Gulf Coast states between 2001 and October 10, 2018. This accounts for twenty percent of the total incidents in that time period and a little over half occurred in Texas alone. Susan C. Anenberg & Casey Kalman, *Extreme Weather, Chemical Facilities, and Vulnerable Communities in the U.S. Gulf Coast: A Disastrous Combination*, 3 GEOHEALTH 122 (2019).

55. Kiah Collier, *Why Has Texas Decided to Break Tradition and Immediately Sue Industrial Polluters?* TEX. TRIB. (Apr. 9, 2019) (ProQuest).

56. Perla Trevizo, *Feds: safety deficiencies led to 2014 chemical release that killed 4 at DuPont's La Porte plant*, HOUSTON CHRON. (June 26, 2019), <http://www.houstonchronicle.com/news/houston-texas/houston/article/Feds-Safety-deficiencies-led-to-2014-incident-14047547.php> [https://perma.cc/64VQ-DQC3].

disasters.⁵⁷ In her opening remarks, the committee chair, Senator Patty Murray, noted that there had been an average of one fire per week at oil refineries in 2010 and that there had been nineteen deaths and twenty-five injuries resulting from fires in the previous two months alone.⁵⁸ After a major explosion at a Port Neches petrochemical plant owned by TPC Group in November of 2019—the fourth major industrial disaster in the Texas Gulf Coast region that year⁵⁹—Texas Commission for Environmental Quality (TCEQ) executive director, Toby Baker, also recognized that significant incidents appeared to be increasing, calling the trend “unacceptable.”⁶⁰ However, in the past, TCEQ has done almost nothing to incentivize companies to perform preventative maintenance or comply with their permits.⁶¹

Unfortunately, little seems to have changed in the three years since, with more deadly disasters⁶² and fewer consequences for companies in 2021 and

57. *Production Over Protections: A Review of Process Safety Management in the Oil and Gas Industry: Hearing Before the S. Subcomm. Emp. & Workplace Safety*, 111th Cong. (2010) (statement of Sen. Patty Murray, Chairwoman, S. Subcomm. on Emp. & Workplace Safety).

58. *Id.* at 2.

59. There were three chemical fires in the Houston area between March and April of 2019, resulting in the death of a worker and over 30 injuries. One of these, the ITC Fire, sent a plume of black smoke across the city for days and resulted in more than 21 million gallons of hazardous waste. Perla Trevizo, *The ITC fire created 20 million gallons of waste. Getting rid of it is no easy task.*, HOUSTON CHRON. (July 21, 2019), <http://www.houstonchronicle.com/news/houston-texas/houston/article/It-took-days-to-put-out-the-ITC-tank-fire-that-14109491.php> [<https://perma.cc/PZ2N-XY3G>].

60. Merrit Kennedy, *Massive Explosion Rips Through Texas Chemical Plant*, NPR: NAT'L (Nov. 27, 2019), <https://www.npr.org/2019/11/27/783263942/massive-explosion-rips-through-texas-chemical-plant> [<https://perma.cc/D842-BFDC>].

61. Kiah Collier & Ryan Murphy, *A Pass to Poison*, TEX. TRIB. (July 17, 2017), <https://apps.texastribune.org/pass-to-poison/> [<https://perma.cc/BVF6-B53E>] (finding that there were an average of ten emissions events per day in 2016 and that TCEQ only issued fines for four percent of the emissions events from 2012-2016).

62. Incidents at three facilities in July 2021 resulted in two deaths, thirty hospitalizations, and an evacuation of the half mile radius around a Dow plant. Paul Debenedetto & Katie Watkins, *2 Dead, 30 Hospitalized After 'Mass Casualty' Incident at LyondellBasell Chemical Plant Near La Porte*, HOUSTON PUB. MEDIA: ENERGY & ENV'T (July 28, 2021), <https://www.houstonpublicmedia.org/articles/news/energy-environment/2021/07/27/404355/at-least-2-dead-after-leak-at-lyondellbasell-chemical-plant-in-la-porte/> [<https://perma.cc/8JJ8-AWPA>]. Four workers were injured at an ExxonMobil's refinery in December 2021. Arpan Varghese, *Four injured in fire at Exxon's Baytown, Texas, oil refinery*, REUTERS: U.S. (Dec. 23, 2021), <https://www.reuters.com/world/us/some-injuries-after-fire-exxons-baytown-texas-facility-2021-12-23/> [<https://perma.cc/6EUZ-HU6B>]. Another two fires occurred in June 2022. Erwin Seba & Arpan Varghese, *Lyondell Houston refinery shuts coker after fire*, REUTERS: ENERGY (June 14, 2022), <https://www.reuters.com/business/energy/lyondell-houston-refinery-shuts-coker-after-fire-sources-2022-06-14/> [<https://perma.cc/UWP6-6M7E>]; Eileen Soreng, *Valero's Houston, Texas, refinery issues*

2022.⁶³ Although the Texas Attorney General sued TPC Group for nearly two years' worth of Clean Air Act violations following the Port Neches fire,⁶⁴ that has not prevented TCEQ from issuing a preliminary determination approving major expansions of the company's air quality permits for their Houston plant.⁶⁵ While local residents and the Houston Health Department voiced their opposition,⁶⁶ a contested case hearing ultimately resulted in a settlement that granted residents minor reliability

all-clear after fire, REUTERS (June 20, 2022), <https://www.reuters.com/markets/commodities/valeros-houston-texas-refinery-issues-all-clear-after-fire-2022-06-21/> [<https://perma.cc/D58B-A7GU>]. In November of 2022 there was a refinery fire in nearby Corpus Christi. Erwin Seba, *Valero says no injuries in Corpus Christi refinery fire*, WKZO (Nov. 3, 2022), <https://wkzo.com/2022/11/03/valero-says-no-injuries-in-corpus-christi-refinery-fire/> [<https://perma.cc/U3RP-SLE5>]. And in September of 2022, multiple power station employees were hospitalized following chemical exposure from cleaning up after a fire earlier in the year. Brandon Walker, *Chemical exposure linked to fire earlier this year at plant causes employee's hospitalizations*, CLICK2HOUSTON (Sept. 29, 2022), <https://www.click2houston.com/news/local/2022/09/30/chemical-exposure-linked-to-fire-earlier-this-year-at-plant-causes-employees-hospitalizations/> [<https://perma.cc/G3RY-NAR8>].

63. Savanna Strott, *Nearly all unplanned chemical releases in Texas go unpunished*, TEX. TRIB. (Aug. 17, 2022) <https://www.texastribune.org/2022/08/17/texas-unplanned-chemical-release-air-pollution/> [<https://perma.cc/MK8Z-39GV>] (out of an average of 3,605 illegal emissions events a year, TCEQ only issued 462 penalties between September 2015 and June 2022 and the median fine paid for an air-pollution violation was \$6,000).

64. Kiah Collier, *Texas Sues Company Whose Port Neches Chemical Plant Exploded*, TEX. TRIB. (Feb. 22, 2020), <https://www.texastribune.org/2020/02/22/attorney-general-port-neches-plant-explosion/> [<https://perma.cc/6V3C-C8BN>]. TPC Group averaged eight emissions events a year from 2019-2021, including massive releases in the two months following Winter Storm Uri in 2020 and thousands of pounds of carcinogenic 1,3-Butadiene. *Emissions Event Data for TPC Group, Houston Plant (RN100219526)*, TEX. COMM'N ENV'T QUALITY: CENT. REGISTRY (last updated Jan. 11, 2023), https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=iwr.eeincdetail&addn_id=562333362020108&re_id=534399762001134 [<https://perma.cc/WPX4-4PVX>]. The Houston plant also had a fire in 2018. Katie Watkins, *'We've Had Enough': Environmental Groups Raise Concerns About Chemical Plant's Proposed Expansion in Houston's East End*, NPR: HOUSTON PUB. MEDIA (Aug. 13, 2021), <https://www.houstonpublicmedia.org/articles/news/energy-environment/2021/08/13/405908/weve-had-enough-environmental-groups-raise-concerns-about-chemical-plants-proposed-expansion-in-houstons-east-end/> [<https://perma.cc/EZY3-6Y5J>].

65. Texas Commission on Environmental Quality, Notice of Hearing TPC Group LLC SOAH Docket No. 582-22-0799 TCEQ Docket No. 2021-1422-AIR (Nov. 22, 2021), https://www.tceq.texas.gov/assets/public/comm_exec/pm-ph/notices/2022/2022-01-06-tpc-group-llc-22052-cch.pdf [<https://perma.cc/SXK7-4L3F>].

66. Katie Watkins, *A petrochemical company wants to expand in Houston's East End*, HOUSTON PUB. MEDIA: ENERGY & ENV'T (Apr. 13, 2022), <https://www.houstonpublicmedia.org/articles/news/energy-environment/2022/04/13/422601/air-pollution-levels-already-too-high-near-proposed-east-end-plant-expansion-says-houston-health-department/> [<https://perma.cc/7464-3JD2>].

improvements and a community meeting with TPC executives, but did not prevent the approval of the expanded permit.⁶⁷

C. Industrial Workers and the Environmental Movements

In many ways, labor unions and industrial workers seem like natural allies of the environmental movement. As the previous section demonstrates, when industrial disasters happen, it is the workers on the ground who are the first to be injured or killed. They are exposed to much higher levels of toxic chemicals than anyone else—including nearby communities—and workplace conditions are estimated to cause 350,000 cases of serious illness and kill 60,000 workers every year.⁶⁸ Workers are also highly supportive of environmental policies. One study found that labor union members were fifty-four percent less likely than the general public to support a candidate who was in favor of environmental rollbacks.⁶⁹

However, this does not seem to have translated into support for the environmental movement. Many fossil-fuel workers in particular have a tenuous relationship with the environmental movement, predominately tied to fears of job loss and an understanding that there are few jobs available to a non-college-educated, blue-collar worker that offer equivalent, or even comparable, pay and benefits.⁷⁰ But the distrust runs deeper, reflecting a general sense that, with its mostly white, elitist beginnings; its focus on conservation of wild places; and its tendency towards NIMBYism,⁷¹ maybe the mainstream environmental movement does not really represent labor

67. Sim Kern, *TPC Group's Port Neches plant leaked chemicals, then exploded. Now they want Houston to trust them*, ONE BREATH P'SHIP (Nov. 1, 2022), <https://onebreathhou.org/newsroom/2022/11/tpc-group-houston-carcinogens-chemical-environment-health/> [<https://perma.cc/G5BQ-WRVJ>] (the settlement required TPC Group to install two additional fenceline air quality monitors and to have spare parts on hand to repair the plant's aging vent recovery system).

68. Richard Toshiyuki Drury, *Rousing the Restless Majority: The Need for a Blue-Green-Brown Alliance*, 19 J. ENV'T L. & LITIG. 5, 11-12 (2004).

69. *Id.* at 12.

70. MIJIN CHA ET AL., *supra* note 6, at 26.

71. NIMBY stands for "Not In My Back Yard" and in the environmental context refers to putting one's individual interest and property values over the needs of society at large (i.e. hypothetically supporting more fair distribution of landfills, but fighting vehemently to keep them out of one's own upper-class white neighborhood). See Jason Mark, *How the Environmental Movement Can Go Beyond NIMBY-ism*, SIERRA: THE MAG. OF THE SIERRA CLUB (Dec. 18, 2019), <https://www.sierraclub.org/sierra/2020-1-january-february/editor/how-environmental-movement-can-go-beyond-nimby-ism> [<https://perma.cc/ZK66-M7UW>].

unions, industrial workers, and minority communities.⁷² In his treatise, *Ecological Politics for the Working Class*, Matt Huber argues that current environmental politics cannot build a working-class base because of their focus on personal, consumer responsibility rather than the capitalist class.⁷³ An environmental movement focused on austerity is unlikely to appeal to a working class that has suffered stagnate wages and living standards for generations, and whose only means of survival is access to money and commodities.⁷⁴

The environmental justice movement is generally viewed as having arisen in part as a reaction to “mainstream environmentalism.” In his article *The Long Environmental Justice Movement*, Professor Jedediah Purdy argues that the shortcomings of the mainstream environmental movement were, in part, a product of a set of assumptions—that economic inequality was declining and that disparate environmental impacts could be addressed by other legal mechanisms—which were in operation when most of the major pollution control statutes were written in the 1970s.⁷⁵ As a result, these statutes largely failed to take distributive concerns, such as racial disadvantage and income inequality, into account.⁷⁶ Rather than a broad conception of “the environment” including neighborhoods, workplaces, public institutions, and urban life, the mainstream environmental movement has largely focused on the wilderness and natural phenomena such as waterways and forests.⁷⁷ This resulted in a narrowing of the set of problems addressed, leaving out many of the issues that impact low-income and minority communities and workers the most.⁷⁸ As both Professor Purdy and Professor Holt Segall point out, the existing environmental statutory regime has been successful in its pollution reduction goals, but it is not up to the

72. *Id.*; Drury, *supra* note 68, at 10, 13 (quoting Mark Dowie in pointing out that early environmentalist were not social activists fighting oppression, but mostly white land owners trying to preserve the wilderness for their leisure activities).

73. Huber, *supra* note 4.

74. *Id.*

75. Jedediah Purdy, *The Long Environmental Justice Movement*, 44 *ECOLOGY L.Q.* 809, 835, 864 (2018).

76. *Id.* at 835.

77. *Id.* at 818.

78. *Id.* at 812 (noting the focus on sources of pollution such as pesticides and toxins, litter, and urban congestion while ignoring other side effects such as agricultural workers health, urban decay, and disparate impacts of pollution, such as asthma and diabetes, in poor communities).

task of addressing the industrial and labor policy issues that are a necessary part of managing the climate crisis in an equitable way.⁷⁹

With the mainstream environmental movement now embracing environmental justice, there has been progress in bridging the labor and environmentalism divide in recent years. While environmental justice is rooted in the civil rights movement and its language still centers on environmental racism, many of the policy principles championed by the modern environmental justice movement are primarily centered on issues of class. For example, Just Transition, which originated in the labor movement, has been embraced by mainstream environmental organizations in the name of environmental justice.⁸⁰ OCAW leader Tony Mazzocchi, who was an early link between labor and the environmental movement, conceptualized the idea as a “superfund for workers” that would pay workers “to make the transition from one kind of economy—from one kind of job—to another.”⁸¹ Oil and gas communities are particularly vulnerable in the face of transition because there is no legal framework to sustain communities that will lose a major part of their tax base and that lack even the minimal protections of a public utility commission to manage refinery shutdowns.⁸²

The basic policy recommendations at the heart of Just Transition today are comprehensive support for workers “including wage replacement, alternative and comparable employment, health insurance coverage, relocation support, childcare, and pension and retirement contributions.”⁸³ Recommendations also include transitional service teams to provide support to spouses, mental health support, job retraining opportunities, and caseworkers to help people consider career pathways.⁸⁴ To support the economically impacted localities, there would need to be bridge funding to make up for lost tax revenues and economic transfer. Policies to ensure that

79. See Holt Segall, *supra* note 9, at 231; Purdy, *supra* note 75, at 853.

80. JUST TRANSITION REPORT 2016, *supra* note 11, at 9 (noting that Sierra Club uses just transition language in their major fossil fuels campaigns); Skelton & Miller, *supra* note 10 (noting that “traditional environmental groups have also formed partnerships to support environmental justice organizations.”).

81. Holt Segall, *supra* note 9, at 186-87.

82. *Id.* at 181-82 (noting that, in contrast to oil and gas communities, there is some transition assistance available to communities dependent on power plants and coal mines).

83. MIJIN CHA ET AL., *supra* note 6, at 61.

84. *Id.*

new industries use fair labor practices, pro-union contracts, and community benefit agreements are also critical.⁸⁵

The BlueGreen Alliance was founded by United Steelworkers and the Sierra Club in 2006 to bring labor and environmentalists together to push for clean jobs, sustainable infrastructure, and fair trade.⁸⁶ It has organized around the Just Transition concept since its founding.⁸⁷ Many major environmental organizations belong to the Alliance⁸⁸ and, while it has not endorsed the Green New Deal and refuses to take a position on fracking or pipeline debates, its 2019 Solidarity for Climate Action platform calls for the creation of high quality and accessible jobs and investment in sustainable infrastructure and energy production to get the United States to net zero emissions by 2050.⁸⁹ Even in Texas, an education campaign by union leadership led to the endorsement of a climate jobs program by 121 Texas unions in July of 2021.⁹⁰ The newly formed Texas Climate Jobs Project, a coalition of unions including USW and the Pipefitters Union, which represent thousands of oil and gas industry workers, will lobby for policy changes to enact the program's objectives.⁹¹ However, none of these initiatives and campaigns have attempted to address the ongoing refinery

85. *Id.* at 61-62; Holt Segall, *supra* note 9, at 230-31.

86. Rachel M. Cohen, *Climate Groups Begin Vying for Power in the Biden Era as Pressure for Unity Fades*, INTERCEPT (Jan. 21, 2021), <https://theintercept.com/2021/01/21/bluegreen-alliance-biden-climate/> [<https://perma.cc/LQ3K-FKPA>]; *American Federation of Teachers Joins BlueGreen Alliance*, BLUEGREEN ALL., <https://www.bluegreenalliance.org/the-latest/american-federation-of-teachers-joins-bluegreen-alliance/> [<https://perma.cc/VUV6-XM7T>] (last visited Feb. 21, 2023).

87. JUST TRANSITION REPORT 2016, *supra* note 11, at 9.

88. Natural Resources Defense Council, National Wildlife Federation, Union of Concerned Scientists, Environmental Defense Action Fund, and League of Conservation Voters are all members. *Members*, BLUEGREEN ALL., <https://www.bluegreenalliance.org/about/members/> [<https://perma.cc/BN6J-WC7S>] (last visited Jan. 14, 2023).

89. Cohen, *supra* note 86; Nives Dolsak & Aseem Prakash, *Labor Unions and the Green New Deal: Love, Hate, or Indifference*, FORBES (July 6, 2019), <https://www.forbes.com/sites/prakashdolsak/2019/07/06/labor-unions-and-the-green-new-deal-love-hate-or-indifference/?sh=4f1ec66426b8> [<https://perma.cc/K2Z3-JJC9>]; *Solidarity for Climate Action*, BLUEGREEN ALL., <http://www.bluegreenalliance.org/wp-content/uploads/2019/07/Solidarity-for-Climate-Action-vFINAL.pdf> [<https://perma.cc/342K-TFE2>] (last visited Jan. 14, 2023).

90. Michael Sainato, *How the US Labor Movement is Getting to Grips with the Climate Crisis*, GUARDIAN (Sep. 20, 2021), <https://www.theguardian.com/money/2021/sep/20/labor-climate-allies-green-union-jobs> [<https://perma.cc/F89C-2WTF>].

91. Press Release, Texas Climate Jobs Project, Texas Unions Launch Major Effort to Combat Climate Change, Tackle Inequality in US Energy Capital (June 26, 2021), <https://www.txclimatejobs.org/press/texas-unions-launch-major-climate-effort> [<https://perma.cc/X9D8-Y78M>].

fires and chemical spills that continue to pollute communities and injure workers, in part because they do not have the necessary tools.

D. What Does the Existing Law Do?

Existing environmental and workplace safety laws are insufficient to deal with environmental justice issues and workplace environmental hazards. The major federal environmental statutes are largely focused on pollution control across large areas, but do not take into account the cumulative impacts of many sources of pollution concentrated in a small area. While they contain citizen suit provisions, it has been difficult for workers to take advantage of those provisions as a result of the Supreme Court's standing jurisprudence. Furthermore, the Occupational Safety and Health Act, which was designed to protect workers from hazardous working conditions, has such minimal procedural protections and such low penalties that it is practically obsolete.

i. Environmental Law – Citizen Suit Provisions and Lujan

The United States' major environmental statutes were adopted in their modern form in the 1970s.⁹² The broadest pollution control measures—and the focus of this note—are the Clean Air Act (CAA), the Clean Water Act (CWA), and the Resource Conservation and Recovery Act (RCRA).⁹³ These three statutes establish frameworks to control air and water pollution and the disposal of hazardous waste. To ensure effective enforcement, Congress not only authorized permitting and enforcement by EPA and the states, but also created citizen suit provisions.⁹⁴

92. Jeffrey G. Miller, *Theme and Variations in Statutory Preclusions Against Successive Environmental Enforcement Actions by EPA and Citizens Part One: Statutory Bars in Citizen Suit Provisions*, 28 HARV. ENV'T L. REV. 401 (2004). The Clean Air Act also underwent major revisions in 1990. Clean Air Act Amendments, Pub. L. No. 101-549, 104 Stat. 2399 (1990).

93. The standards established in other major environmental statutes, including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Toxic Substances Control Act (TSCA), and the Safe Drinking Water Act (SDWA), are also included under this proposal but—for the sake of brevity—are not discussed in detail.

94. See Miller, *supra* note 92, at 401-02. These provisions authorize “interested persons” to bring suits directly enforcing the relevant statute and define “person” to include both private citizens and states. See *id.* at n.3.

The Clean Air Act's goals are to promote public health and productivity by "protect[ing] and enhanc[ing] the quality of the Nation's air resources."⁹⁵ The CAA manages air quality through both national air quality standards and through technology-based emissions limits, directing the EPA administrator to issue air quality criteria for all pollutants deemed to cause "air pollution which may reasonably be anticipated to endanger public health or welfare."⁹⁶ In a scheme of cooperative federalism, states are then required to develop "state implementation plans" to provide "for the implementation, maintenance, and enforcement" of the national air quality standards.⁹⁷

The Clean Water Act of 1977 takes a similar cooperative federalism approach, relying on both national standards and state permitting. Its declared objective is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."⁹⁸ The Act creates a permitting program with technology-based limit on all discharges from point sources,⁹⁹ which is intended to enable states to meet water quality standards established by the EPA Administrator.¹⁰⁰

Finally, the Resource Conservation and Recovery Act of 1976 was intended to address Congressional concern about waste disposal and increasing volumes of waste, in part as a result of technological progress and increased industrial production.¹⁰¹ Congress was worried both about the land use implications of contemporary solid waste management practices, and about the health and environmental consequences of improper solid and hazardous waste management.¹⁰² While solid waste management is generally left to the discretion of state plans, the hazardous waste provisions of RCRA are intended to document and federally regulate the treatment, storage, or disposal of hazardous waste from "cradle to grave" through what

95. 42 U.S.C. § 7401(b).

96. 42 U.S.C. § 7408(a)(1)(A).

97. 42 U.S.C. § 7410(a)(1).

98. 33 U.S.C. § 1251(a).

99. 33 U.S.C. § 1362(11). A point source is a source of pollutant discharge that is a "confined and discrete conveyance" such as a pipe, channel, or even a concentrated animal feeding operation. 33 U.S.C. § 1362(14).

100. 33 U.S.C. § 1311(a)-(b); 33 U.S.C. § 1342(a).

101. 42 U.S.C. § 6901(a).

102. 42 U.S.C. § 6901(b).

“is widely viewed as the most comprehensive regulatory program ever developed by the EPA.”¹⁰³

Congress included a citizen suit provision in every major environmental statute.¹⁰⁴ These provisions allow any person to sue an entity for violation of the environmental statute in question—including permitting requirements, regulations, orders, and standards—or to sue EPA for failure to undertake nondiscretionary action under the statute.¹⁰⁵ The citizen suit provisions were intended to counter skepticism about effective enforcement and the fears of regulatory capture reflected in the legislative records of the 1970s.¹⁰⁶ They were also a recognition that, while EPA has limited enforcement resources, enforcement of environmental regulations is often critically important to “those who live in close proximity to hazardous waste facilities.”¹⁰⁷

In keeping with their intended function as supplemental enforcement actions, before filing a citizen suit, the plaintiffs must give notice of the alleged violation to EPA and the defendant (and the state regulatory agency, if applicable).¹⁰⁸ The 1980s in particular saw broad use of citizen suits for private enforcement campaigns by national environmental organizations.¹⁰⁹ However, all of this changed in 1992 with Justice Scalia’s opinion in *Lujan v. Defenders of Wildlife*—a case that is monumental in its sweep and has been referred to as “one of the most important standing cases since World War II.”¹¹⁰ In vindication of his assertion a decade earlier that “the courts need to accord greater weight . . . to the traditional requirement that the plaintiff’s alleged injury be a particularized one,”¹¹¹ Justice Scalia’s ruling

103. 42 U.S.C. § 6925; John C. Chambers & Mary S. McCullough, *From the Cradle to the Grave: An Historical Perspective of RCRA*, 10 NAT. RES. & ENV’T 21, 22 (1995).

104. Cass R. Sunstein, *What’s Standing After Lujan? Of Citizen Suits, “Injuries,” and Article III*, 91 MICH. L. REV. 163, 165 n.11 (1992) (The Federal Insecticide, Fungicide, and Rodenticide Act does not have a citizen suit provision).

105. 33 U.S.C. § 1365(a); 42 U.S.C. § 6972(a); 42 U.S.C. § 7604(a).

106. Barry Boyer & Errol Meidinger, *Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizen Suits Under Federal Environmental Laws*, 34 BUFF. L. REV. 833, 846-47 (1985); JOHN D. ECHEVERRIA & JON T. ZEIDLER, BARELY STANDING: THE EROSION OF CITIZEN “STANDING” TO SUE TO ENFORCE FEDERAL ENVIRONMENTAL LAW 1, 14 (Env’t Pol’y Project ed. 1999).

107. *Sierra Club v. Chem. Handling Corp.*, 824 F. Supp. 195, 197-98 (D. Colo. 1993).

108. James T. Lang, *Citizens’ Environmental Lawsuits*, 47 TEX. ENV’T L. J. 17, 26-27 (2017).

109. Boyer & Meidinger, *supra* note 106, at 852.

110. Sunstein, *supra* note 104, at 164-65.

111. Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881, 881-82 (1983).

distinguished plaintiffs whose “asserted injury arises from the government’s allegedly unlawful regulation (or lack of regulation) of *someone else*,” as having a higher bar to reach to establish standing than a plaintiff who “is himself the object of [government] action.”¹¹² In essence, this limits access to the courts for victims of pollution and environmental harm, while leaving regulated industries free to fight regulations and permitting decisions.

Under the test laid out by Justice Scalia in *Lujan*, plaintiffs are required to demonstrate that they suffered an “injury-in-fact,” meaning “an invasion of a legally protected interest” that is “concrete and particularized” and “actual or imminent.”¹¹³ In addition, the plaintiff has to show that the injury is “fairly traceable” to the defendant’s action (or lack thereof), and that the injury is likely to “be ‘redressed by a favorable decision.’”¹¹⁴ However, it was the Court’s ruling with regard to the “procedural injury” standing claim that was most significant, essentially jettisoning the entire concept of a citizen suit as unconstitutional.¹¹⁵ According to Justice Scalia, the citizen suit provision conferred an “abstract” procedural right, which he explicitly differentiated from a mass fraud or mass tort where the same concrete injury has been suffered by many.¹¹⁶ Because he viewed citizen suit cases as raising “only a generally available grievance about government,” Justice Scalia equated them to other cases from the beginning of the 20th century that were dismissed for failure to meet the Article III case or controversy requirement on the basis that they challenged general legislative decisions (i.e., challenging the process of ratifying the Nineteenth Amendment or claiming taxpayer standing to challenge federal expenditures).¹¹⁷ In Justice Scalia’s view, the conversion of the “undifferentiated public interest . . . into

112. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561-62 (1992) (emphasis added). This is the first case to draw this distinction explicitly, although it had been implicit not only in Justice Scalia’s earlier writings, but also in *Allen v. Wright*, 468 U.S. 737 (1984) (finding that parents of black children attending public schools undergoing desegregation lacked standing to challenge a tax deduction granted to segregated private schools because they could not show that denial of the deduction would actually affect their children). See Sunstein, *supra* note 104, at 194, 199.

113. *Id.* at 560.

114. *Id.*

115. See Sunstein, *supra* note 104, at 200; ECHEVERRIA & ZEIDLER, *supra* note 106, at 10. The Court of Appeals referred to the respondent’s standing claim as a “procedural injury,” because the basis for the claim was the agency’s failure to comply with the procedures required under the Endangered Species Act. *Lujan*, 504 U.S. at 571-72.

116. *Lujan*, 504 U.S. at 572-73.

117. *Id.* at 573-74. Sunstein notes that Congress had not granted citizens the right to sue in any of these cases. Sunstein, *supra* note 104, at 201.

an ‘individual right’ vindicable in the courts” amounted to transferring the President’s duty to “take Care that the Laws be faithfully executed”¹¹⁸ to the courts and was a clear violation of separation of powers.¹¹⁹ Justice Kennedy (joined by Justice Souter) filed a separate concurrence qualifying Justice Scalia’s ruling by suggesting that the Court’s opinion did not prevent Congress from “defin[ing] injuries and articul[at]ing chains of causation that will give rise to a case or controversy,” so long as they identify the injury and related it to the class of persons entitled to bring suit.¹²⁰

While *Lujan* made it significantly more difficult to attain standing,¹²¹ it is not completely impossible. Environmental organizations are still able to bring citizen suits by finding plaintiffs who can meet the injury-in-fact requirements.¹²² Even before *Lujan*, the Court acknowledged that environmental and aesthetic injuries could constitute the basis for a standing claim in the widely cited 1972 case *Sierra Club v. Morton*.¹²³ In *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.*, the court found that discharges of mercury into a local river, in violation of the defendant’s CWA permit, “did not result in any health risk or environmental harm,” but did grant standing on the basis of “economic and aesthetic harms” because the Plaintiffs claimed they no longer used the river for recreational purposes out of fear of the contamination.¹²⁴ Finally, following the earlier case *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation, Inc.*,¹²⁵ the Court’s 1998 decision in *Steel Company v. Citizens for a Better Environment* created another barrier, holding that because the company had come into compliance during the course of litigation, the alleged injuries

118. U.S. CONST. art. II, § 3.

119. *Lujan*, 504 U.S. at 577.

120. *Id.* at 580 (Kennedy, J., concurring).

121. A number of suits decided in the wake of *Lujan* applied the injury-in-fact standard to find that plaintiffs failed to sufficiently demonstrate that the pollution at issue caused harm either to the plaintiff’s health or to the environment. Cassandra Stubbs, *Is the Environmental Citizen Suit Dead? An Examination of the Erosion of Standards of Justiciability for Environmental Citizen Suits*, 26 N.Y.U. REV. L. & SOC. CHANGE 77, 101-2 (2001).

122. Sunstein, *supra* note 104, at 221.

123. *Sierra Club*, 405 U.S. at 734-35 (but held that the Plaintiffs had failed to establish that they themselves were “among the injured”).

124. Robin Kundis Craig, *Removing “The Cloak of A Standing Inquiry”: Pollution Regulation, Public Health, and Private Risk in the Injury-in-Fact Analysis*, 29 CARDOZO L. REV. 149, 181-82 (2007) (internal quotations omitted) (quoting *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.*, 528 U.S. 167 (2000)).

125. *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*, 484 U.S. 49 (1987) (holding that citizen suits under the CWA could not be brought for wholly past violations).

were no longer redressable. The plaintiff's request for penalties under the citizen suit provision was not sufficient for standing because the treasury, rather than the plaintiff, would receive them. Because the case was now moot, the court also reversed the award of attorney's fees to the plaintiff.¹²⁶

As a result of Justice Scalia's narrow injury-in-fact requirement, workers seeking to protect themselves from future harm using existing violations to demonstrate potential risk may have a difficult time showing that the injury is "actual and imminent," or that there is sufficient harm to constitute a redressable injury. The *Gwaltney* line of precedent created further barriers in the form of increased financial risk, leaving even plaintiffs with clear cases vulnerable to sunk litigation costs if the defendant is able to come into compliance before the case comes to trial.

ii. Labor Law - the OSH Act and Section 7 of the NLRA

The main protections for workers faced with hazardous working conditions are the Occupational Safety and Health Act of 1970 (the "OSH Act"), which was intended "to assure safe and healthful working conditions for work[ers],"¹²⁷ and Section 7 of the National Labor Relations Act (NLRA), which has been held to protect workers from retaliation for refusing to work in hazardous conditions.¹²⁸ Section 7 (codified at 29 U.S.C. § 157) is the main source of labor rights for employees, granting them the right to organize, join unions, and "engage in other concerted activities for the purposes of collective bargaining *or other mutual aid or protection*."¹²⁹ The right to engage in concerted activities under section 7 applies regardless of an employee's union membership.¹³⁰ Generally, an activity that involves two or more employees acting together in an attempt to improve wages, hours, or working conditions is considered a protected concerted activity.¹³¹

126. ECHEVERRIA & ZEIDLER, *supra* note 106, at 12.

127. The Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, 84 Stat. 1590 (1970).

128. See Larry C. Backer, Note, *Refusals of Hazardous Work Assignments: A Proposal for A Uniform Standard*, 81 COLUM. L. REV. 544, 547-48 (1981) (explaining that workers must show the refusal was a "concerted activity"). The Labor Management Relations Act also creates an exemption to no-strike clauses in collective bargaining agreements if the work stoppage is related to dangerous working conditions. *Id.* at 545.

129. 29 U.S.C. § 157 (emphasis added).

130. JOHN DORAN ET AL., *Employee Rights and Unfair Labor Practices Under the National Labor Relations Act*, in PRAC. L. LAB. & EMP., Westlaw (database updated continually).

131. There are some limitations around which concerted activities fall within the Act's protection.

Interference with these rights constitute unfair labor practices and are adjudicated by the National Labor Relations Board under section 8 of the NLRA, which prohibits both unions and employers from interfering, restraining, or coercing employees exercising their section 7 rights.¹³² As long as more than one employee refuses to work in hazardous conditions, they will most likely be able to show that their action was protected under the NLRA.¹³³ In some cases, the National Labor Relations Board has also held that a single employee protesting hazardous conditions is engaging in a concerted activity because they are attempting to “enforce contract provisions in the interest of all the employees covered under that contract.”¹³⁴

The OSH Act requires employers to provide a workplace “free from recognized hazards that are causing or are likely to cause death or serious physical harm.”¹³⁵ The OSH Act also established the Occupational Safety and Health Administration (OSHA) within the United States Department of Labor to set and enforce safety standards and otherwise ensure working conditions are in line with the goals of the OSH Act.¹³⁶ In addition, the Act created the National Institute for Occupational Safety and Health to perform research, develop and establish recommended standards, and conduct training programs about workplace safety for employers and employees.¹³⁷ Finally, the Act created the Occupational Safety and Health Review Commission as an independent federal agency that functions as an administrative court to decide contested citations and penalties issued by OSHA.¹³⁸

For example, while economic strikes and strikes to protest an employer’s unfair labor practice are lawful and protected, strikes to force an employer to stop doing business with another employer or in violation of a no-strike clause in a collective bargaining agreement are not protected (with the exception noted *supra* note 128 for dangerous working conditions). *Id.*

132. *Id.*

133. Backer, *supra* note 128, at 548.

134. *Id.* at 549-50 (quoting *Roadway Express, Inc.*, 217 N.L.R.B. 278, 279 (1975)) (but noting that these arguments are generally stronger when there is a relevant safety provision in the collective bargaining agreement).

135. 29 U.S.C.A. § 654 (West).

136. *About OSHA*, U.S. DEP’T OF LAB.: OCCUPATIONAL SAFETY & HEALTH ADMIN., <https://www.osha.gov/aboutosha> [<https://perma.cc/PL76-EBQD>] (last visited Jan. 11, 2022).

137. 29 U.S.C.A. §§ 669-71 (West).

138. *About the Commission*, OCCUPATIONAL SAFETY & HEALTH REVIEW COMM’N, <https://www.oshrc.gov/> [<https://perma.cc/2A3U-3ZHP>] (last visited Jan. 11, 2022).

The OSH Act provides workers with a range of procedural rights regarding safety standards such as the right to petition for standard setting in a particular area, to participate in hearings, or to challenge standards that produce adverse conditions.¹³⁹ Employees also have a series of informational rights under the OSH Act. They must be kept informed of relevant OSHA standards and whether their employer requests a variance from a safety standard.¹⁴⁰ If an employer does request a variance, employees have a right to contest the application.¹⁴¹ Under the Hazard Communication Standard, employees must be provided with access to information about the identities and hazards of any chemicals they are exposed to on the job, and must be trained on how to handle them appropriately.¹⁴² Finally, employees have a right to accompany OSHA inspectors on tours of their workplace and consult with them regarding health and safety matters.¹⁴³

The OSH Act is enforced through inspection and penalty provisions carried out by OSHA inspectors, although in many states this enforcement is carried out by state inspectors under an OSHA-Approved State Plan.¹⁴⁴ In states without a State Plan, state and local government employees are excluded from coverage.¹⁴⁵ Between 2016 and 2020, the number of federal OSHA inspectors has ranged from 746 to 815, and on average they conduct a total of just under 30,000 inspections each year.¹⁴⁶ Meanwhile, the approximately 1,000 state OSHA inspectors nationwide conduct nearly 40,000 inspections each year.¹⁴⁷ Violations are subject to civil or criminal

139. See Backer, *supra* note 128, at 560 n.97.

140. *Id.* at 560 n.98

141. *Id.*

142. *Hazard Communication*, U.S. DEP'T OF LAB.: OCCUPATIONAL SAFETY & HEALTH ADMIN., <https://www.osha.gov/hazcom> [<https://perma.cc/M2LE-4RTR>] (last visited Aug. 20, 2022).

143. See Backer, *supra* note 128, at 560 n.99.

144. There are currently twenty-two State Plans covering private and state and local government workers and six state plans that cover only government workers. *State Plans*, U.S. DEP'T OF LAB.: OCCUPATIONAL SAFETY & HEALTH ADMIN., <https://www.osha.gov/stateplans/> [<https://perma.cc/Q8LM-YFN6>] (last visited Jan. 11, 2022).

145. AFL-CIO, DEATH ON THE JOB THE TOLL OF NEGLECT 25 (30th ed. 2021), https://aflcio.org/sites/default/files/2021-05/DOTJ2021_Final.pdf [<https://perma.cc/A5WS-7N7C>].

146. *Id.* at 26 (note that the pandemic resulted in a 35% decrease in federal inspections during 2020).

147. *Id.* (with a 24% decrease in state inspections due to the pandemic). Taking both federal and state OSHA inspectors into account there was approximately one inspector for every 63,000 workers in 2008, which is far below the International Labor Organization's standard suggesting one inspector per 10,000 workers in industrialized democracies. Lynn Rhinehart, *Workers at Risk: The Unfulfilled Promise of the Occupational Safety and Health Act*, 111 W. VA. L. REV. 117, 122 (2008).

penalties¹⁴⁸ and in the case of imminent dangers that could cause death or serious physical harm, OSHA may petition for an injunction or temporary restraining order in federal district court.¹⁴⁹ The statutory maximums for civil penalties range from \$7,000 per violation for most violations (and \$7,000 per day for failure to correct a violation after issuance of a citation) to \$70,000 per willful or repeated violation.¹⁵⁰ Criminal penalties, including those for willful violations that cause the death of an employee, are punishable by up to a \$10,000 fine, six months in prison, or both.¹⁵¹

Employees who believe there is an existing violation of a safety or health standard that creates imminent danger or threat of physical harm may request an inspection by providing a written and signed notice to OSHA.¹⁵² While section 11(c) of the OSH Act also prohibits retaliation against employees who report potential violations, these protections are generally considered quite weak compared to other whistleblower protections.¹⁵³ Workers who believe they have been fired or discriminated against in retaliation for filing an OSHA complaint must file a complaint within thirty days,¹⁵⁴ but are then bound by the determination of the Secretary of Labor, as there is no provision for administrative or judicial review if the Secretary chooses not to pursue the complaint.¹⁵⁵

148. 29 U.S.C.A. § 666 (West).

149. 29 U.S.C.A. § 662(a)-(b) (West).

150. 29 U.S.C.A. § 666(a)-(d) (West).

151. 29 U.S.C.A. § 666(e)-(g) (West). The maximum penalty is doubled in the case of second conviction for a willful violation that causes the death of an employee.

152. 29 U.S.C.A. § 657(f)(1) (West).

153. Rhinehart, *supra* note 147, at 127-28. *See also Protecting America's Workers Act: Modernizing OSHA Penalties: Hearing on H.R. 2067 Before the Subcomm. on Workforce Protections of the H. Comm. on Educ. and Lab.*, 111th Cong. 12 (2010) (statement of David Michaels, Assistant Secretary for Occupational Safety and Health).

154. 29 U.S.C. § 660(c).

155. Rhinehart, *supra* note 147, at 128.

II. ANALYSIS: WHY WE NEED AN INDUSTRIAL WORKERS SAFETY ACT

A. Worker Safety as a Critical Component of Environmental Justice

Environmental issues are labor issues and labor issues are environmental issues. This fact has been illustrated repeatedly by major disasters like the Deepwater Horizon oil spill¹⁵⁶ and the 2008 coal ash spill at the Tennessee Valley Authority's Kingston plant, which inundated 300 acres of land and three rivers in toxic sludge.¹⁵⁷ And it is not only sudden disasters that bring together environmental and labor issues by causing harm to workers and their communities. Chronic or long-term toxic exposure can cause increased risk of cancer or other illnesses, as demonstrated by the elevated cancer rates on the Gulf Coast caused by exposure to air toxics.¹⁵⁸

When it comes to corporate irresponsibility and environmental harm, workers are often the first to know when there is a problem. Frontline workers have the best visibility and awareness about when poor maintenance, understaffing, or inadequate safety procedures are likely to lead to an industrial accident. When the Hazard Communication Standards are being followed appropriately, workers are also aware of which dangerous chemicals are being used in their workplaces and can spot potential issues with disposal or contamination. And, as the Kingston disaster demonstrates, workers often find out the hard way when there is a hidden risk of toxic exposure. Many of the cleanup workers at Kingston began to get sick with mysterious illnesses within months or years, but—unable to afford to quit—they kept on working until their health forced them

156. In addition to the deaths of the eleven workers on the rig discussed in part I, a medical benefits class action settlement resulted in payments to thousands of cleanup workers and coastal residents for medical conditions that resulted from the exposure to the spill or cleanup process. *In re Deepwater Horizon Belo Cases*, No. 3:19CV963, 2020 WL 6689212 at *5 (N.D. Fla. Nov. 4, 2020), *aff'd sub nom.*, *In re Deepwater Horizon BELO Cases*, No. 20-14544, 2022 WL 104243 (11th Cir. Jan. 11, 2022)

157. Joel K. Bourne, Jr., *Coal's Other Dark Side: Toxic Ash That Can Poison Water and People*, NAT'L GEOGRAPHIC (Feb. 19, 2019), <http://www.nationalgeographic.com/environment/article/coal-other-dark-side-toxic-ash> [<https://perma.cc/D67M-MDW4>]. It took 900 workers seven years to clean up the mess and the contractor, Jacobs Engineering, refused to allow them to wear protective equipment while working with the toxic coal ash. A decade later, hundreds of the cleanup workers have developed health problems that are likely linked to coal ash exposure and at least thirty-six have died. *Id.*

158. See discussion *supra* part IA.

to stop.¹⁵⁹ Unfortunately, without adequate legal recourse or protections, workers are unlikely to bring health and safety concerns to light.

One of the major ways that the environmental justice movement has broadened the scope of environmentalism is through coalition building with organized labor.¹⁶⁰ While the Just Transition framework has shifted activists' and policymakers' understanding of what is necessary to achieve justice and address the climate crisis from an equity lens, it is a largely forward-looking approach. The economic impacts of decarbonization are still largely in the future, but industrial communities are also suffering the harm of industrial pollution and corporate irresponsibility now. Equity and environmental justice demand that these short-term needs be met as well. Furthermore, if the environmental movement hopes to build long-term coalitions with labor and a mass environmental movement based in the working class, it is critical to find common ground and build collective identity. Concerns about the health impacts of industrial pollution for workers and communities is one potential bridge.¹⁶¹

B. Existing Law Fails Workers – Why We Need a New Proposal

It is abundantly evident that the OSH Act's enforcement provisions are totally insufficient to meet its promise of "safe and healthful working conditions" for "every working man and woman."¹⁶² The OSH Act's civil penalties have not been updated since 1990 and were excluded from regular inflation adjustment under the Debt Collection Improvements Act of 1996.¹⁶³ As a result, the maximum penalty of just \$7,000 for most serious violations leaves the cost of regulatory compliance far higher than the penalty for noncompliance.¹⁶⁴ Even in cases where workers are killed, the

159. Bourne, Jr., *supra* note 157.

160. See discussion *supra* part IC.

161. Brian Mayer, *Cross-Movement Coalition Formation: Bridging the Labor-Environment Divide*, 79 SOCIO. INQUIRY 219, 225-26 (2009).

162. Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, § 2, 84 Stat. 1590 (1970); Jaime Rigel & Alexi T. Poulianos, *Take Your Paws Off Me: An Argument in Favor of Revising the Occupational Safety and Health Act and the Protecting America's Workers Act*, 28 HOFSTRA LAB. & EMP. L.J. 183, 191-97 (2010); AFL-CIO, *supra* note 145, at 27-29; Rhinehart, *supra* note 147, at 123-24.

163. Rigel & Poulianos, *supra* note 162, at 193.

164. Meredith Abrusley Guillory, *Refinery's Need for A Modern OSHA*, 39 S. UNIV. L. REV. 217, 223 (2011)

penalties are frequently orders of magnitude less than the associated environmental penalties,¹⁶⁵ and the OSH Act's criminal penalties are practically nonexistent. Although jail time is authorized for willful violations that cause an employee's death, only 151 cases—out of 200,000 workplace deaths—were referred to the Department of Justice between 1970 and 2002, and only eight resulted in jail time for a company official.¹⁶⁶ And once the chance of being cited for a violation at all is factored in, the cost benefit analysis weighs even more heavily in favor of noncompliance. OSHA is so severely under-resourced and understaffed that effective enforcement is essentially impossible.¹⁶⁷ At its 2000 staffing levels, OSHA would only have been able to inspect each American workplace once in a century.¹⁶⁸ Finally, OSHA's appeals process creates yet another roadblock to effective enforcement of workplace safety standards, allowing employers to avoid abating hazards simply by challenging a citation.¹⁶⁹ Because employers are allowed to wait until an appeal is decided to fix the problem, OSHA frequently settles in order to get immediate abatement and employers almost never have to pay the full amount of a citation.¹⁷⁰

Weak penalties are unfortunately not the only shortcoming of the OSH Act; it also lacks effective whistleblower protections. With such limited manpower for enforcement, OSHA is heavily reliant on workers to bring forward complaints; however, section 11(c) of the OSH Act has three fundamental weaknesses that make it the least protective of the seventeen whistleblower statutes administered by OSHA.¹⁷¹ First, employees must file a complaint within just thirty days of a claimed violation of the Act's anti-

165. *Id.* at 229 (comparing an OSHA penalty of \$175,000 for a worker's death with a \$10 million CWA violation stemming from the same sulfuric acid explosion).

166. Rigel & Poulianos, *supra* note 162, at 194. For comparison, 228 people served time in jail for environmental violations in just seven years from 1987 to 1993, and in 2001 that number was up to 738. Sidney A. Shapiro & Randy Rabinowitz, *Voluntary Regulatory Compliance in Theory and Practice: The Case of Osha*, 52 ADMIN. L. REV. 97, 112 (2000); Rhinehart, *supra* note 147, at 124 n.51. The OSH Act's 6-month sentences are also much shorter than many environmental violations, which can carry sentences of up to fifteen years for a knowing violation that puts another person "in imminent danger of death or serious bodily injury." 33 U.S.C. § 1319(c)(3)(A).

167. Guillory, *supra* note 164, at 230.

168. Shapiro & Rabinowitz, *supra* note 166, at 98-99.

169. Guillory, *supra* note 164, at 228.

170. *Id.* at 229.

171. *Protecting America's Workers Act: Modernizing OSHA Penalties: Hearing on H.R. 2067 Before the Subcomm. on Workforce Prots of the H. Comm. on Educ. and Lab.*, 111th Cong. 12 (2010) (Statement of David Michaels, Assistant Secretary for Occupational Safety and Health) [hereinafter *Protecting America's Worker's Act* hearing (statement of Assistant Secretary Michaels)].

retaliation provisions, a shockingly short window compared to other federal statutes such as the Mine Act (sixty days) and the Civil Rights Act (180 days).¹⁷² Second, workers are not entitled to preliminary reinstatement while their case is pending; also in contrast with the Mine Act, which reinstates workers immediately so long as their case is not frivolous.¹⁷³ And third, there is no private right of action, leaving workers dependent on the discretion of the Secretary of Labor to pursue their case.¹⁷⁴ Historically, this has left the majority of workers without recourse because the Secretary often dismisses complaints.¹⁷⁵ None of this is news to worker safety advocates, legislators, or even OSHA itself.¹⁷⁶ Various forms of the Protecting America's Workers Act (PAWA)—which would increase the OSH Act's penalty provisions and overhaul its whistleblower protections among other things—have been proposed regularly since it was first introduced by Senator Edward Kennedy in 2004,¹⁷⁷ however, the bill has never made it to a vote.¹⁷⁸

Other options for workers faced with hazardous working conditions are: suing under one of the citizen suit provisions of the major pollution statutes, refusing to work and claiming protection under the NLRA, or waiting until they are injured and bringing a common law tort action. While there are almost always tort suits in the aftermath of a major disaster,¹⁷⁹ the obvious

172. Rhinehart, *supra* note 147, at 128.

173. *Id.* at 129.

174. *Protecting America's Worker's Act* hearing (statement of Assistant Secretary Michaels), *supra* note 171.

175. Rhinehart, *supra* note 147, at 128 (in 2006 the secretary of labor dismissed two thirds of the complaints brought under anti-retaliation statutes). *See also* Daiquiri J. Steele, *Preserving Pandemic Protections*, 42 BERKELEY J. EMP. & LAB. L. 321, 338 (2021).

176. *See generally*, *Protecting America's Worker's Act* hearing (statement of Assistant Secretary Michaels).

177. *Bill Seeks to Increase Penalties for OSHA Violations*, 10 No. 11 OSHA GUIDE FOR HEALTH CARE FACILITIES NEWSL. 5 (Thompson Publishing Group, Inc.) 2004; Rigel & Poulianos, *supra* note 162, at 184 (introducing PAWA in 2009); *Protecting America's Workers Act*, S. 2621, 115th Cong. (2018) (as introduced in S. by Sen. Tammy Baldwin); Press Release, Congressman Joe Courtney, On 50th Anniversary of OSHA and Workers Memorial Day, Courtney Introduces the Protecting America's Workers Act—a bill to Modernize OSHA for the First Time in 50 Years (Apr. 28, 2021), <https://courtney.house.gov/media-center/press-releases/50th-anniversary-osha-and-workers-memorial-day-courtney-introduces> [<https://perma.cc/F5TB-CZP2>] (introducing PAWA in 2021).

178. *H.R. 1074 (116th) - Protecting America's Workers Act*, GOVTRACK, <https://www.govtrack.us/congress/bills/116/hr1074> [<https://perma.cc/8LG6-T47Q>] (last visited Feb. 6, 2022).

179. *See e.g.*, *US Deepwater Horizon explosion & oil spill lawsuits*, BUS. & HUM. RIGHTS RES. CENTRE (Apr. 25, 2010), <https://www.business-humanrights.org/en/latest-news/us-deepwater-horizon-explosion-oil-spill-lawsuits/> [<https://perma.cc/5QUM-SXKC>]; Anila Yoganathan, *6th U.S. Circuit*

disadvantage is that a worker must have already been harmed to sue for damages. For most companies, liability costs are likely just considered part of the risk of an accident and are far outweighed by the profits.¹⁸⁰

Refusing hazardous work under the NLRA is similarly problematic as a prevention strategy. While it is somewhat more proactive than a tort suit, it still requires workers to take a major risk in the hopes that the National Labor Relations Board or the courts will back them up later. Furthermore, while refusing hazardous work may be protected from retaliatory action by the employer, the NLRA does not require that the employer actually abate the hazard.¹⁸¹ To force their employer to fix the hazardous conditions, the employees would have to negotiate with management. Even with union support this may be a challenging negotiation to win if the recent lockouts at Texas refineries are any indication,¹⁸² but the majority of industrial workers on the Gulf Coast are not union members and would have to negotiate on their own.¹⁸³

Court of Appeals denies immunity in coal ash cleanup for TVA contractor Jacobs Engineering, KNOXVILLE NEWS SENTINEL (last updated May 18, 2022), <https://www.knoxnews.com/story/news/local/tennessee/tvacoalash/2022/05/18/federal-appeals-court-denies-immunity-tva-contractor-jacobs-engineering-coal-ash-case/9824978002/> [<https://perma.cc/F8UB-V3UP>]; Dietrich Knauth, *Chemical maker TPC Group reaches \$30 million bankruptcy settlement*, REUTERS (Oct. 27 2022), <https://www.reuters.com/legal/litigation/chemical-maker-tpc-group-reaches-30-million-bankruptcy-settlement-2022-10-27/> [<https://perma.cc/M2JH-TMRZ>]; Cameron Langford, *BP Will Settle 25,000 Claims From Toxic Texas City Refinery*, COURTHOUSE NEWS SERV. (Sept. 23, 2016), <https://www.courthousenews.com/bp-will-settle-25000-claims-from-toxic-texas-city-refinery/> [<https://perma.cc/6G4S-H4JV>].

180. For example, after fifteen years of litigation, DuPont paid \$670 million in individual damages claims stemming from contamination of local drinking water with PFOA. Ron Carucci, *Leadership Lessons From Rob Bilott's 20 Year Battle For Justice Against DuPont*, FORBES (July 12, 2021), <https://www.forbes.com/sites/roncarucci/2021/07/12/leadership-lessons-from-rob-bilotts-20-year-battle-for-justice-against-dupont/?sh=4de67ba06055> [<https://perma.cc/TL6R-2UFR>]. However, the contamination was the side-effect of product lines worth \$1 billion in annual profit and dated back to the 1950s. Nathaniel Rich, *The Lawyer Who Became DuPont's Worst Nightmare*, N.Y. TIMES MAG. (Jan. 6, 2016), <https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html> [<https://perma.cc/2ZJY-REKF>]. DuPont recently agreed to commit another \$4 billion to cover liabilities for its past use of PFOA and PFAS, but only after the lawsuits became the subject of major international attention including a feature film, a documentary, and multiple books and articles. *Bilott Involved in \$4B Settlement agreement with Chemical Giants on PFAS Liabilities*, TAFT: NEWS & EVENTS (Jan. 26, 2021), <https://www.taftlaw.com/news-events/news/bilott-involved-in-usd4b-settlement-agreement-with-chemical-giants-on-pfas-liabilities> [<https://perma.cc/U5XH-8KKC>].

181. 29 U.S.C. § 158. See also Backer, *supra* note 128, at 548-52.

182. See *supra* part IB.

183. *Id.*

The final option left to workers seeking to proactively protect themselves and their communities from the consequences of industrial pollution and unsafe working conditions are citizen suits under federal environmental statutes, particularly the CWA, the CAA, and RCRA. As we saw in the example of TPC Group, companies have frequently accumulated many violations long before they end up having a major disaster.¹⁸⁴ While the citizen suit provisions may be workers' best option, they still pose a number of challenges. The first is demonstrating injury-in-fact, causation, and redressability under the *Lujan* standing requirements. It may seem like workers in an industrial facility have an obvious case for alleging all three elements, but, in cases where a suit is meant to prevent *potential* future harm or disasters on the basis of existing air, water, or solid waste violations, injury-in-fact may not actually be so easy to establish. The injury must be "actual and imminent," and the plaintiff must demonstrate that enforcing the statute or issuing fines for the violation would actually prevent the potential harm to meet the redressability requirement.¹⁸⁵

As Robin Kundis Craig points out in her article, *Removing "The Cloak of A Standing Inquiry,"* standing jurisprudence's focus on injury-in-fact has moved the focus of citizen suits away from the statutes' environmental degradation and public health goals, and created a focus instead on aesthetic harms and loss of recreational use.¹⁸⁶ Craig argues that this has made it more difficult to bring suits based on increased risk of harm as a result of exposure to environmental pollution,¹⁸⁷ the exact type of harm that an industrial worker is likely to bring a suit to vindicate. As cases like *Laidlaw* illustrate, even seemingly obvious threats to health do not always constitute an injury-in-fact.¹⁸⁸

Another effect of the high standing bar and scientific complexity in environmental litigation is that costs are often prohibitive for individual plaintiffs.¹⁸⁹ While most citizen suit provisions allow for the recovery of

184. See *supra* notes 64-67 and accompanying text.

185. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992).

186. Kundis Craig, *supra* note 124 at 176, 182-85.

187. *Id.* at 223.

188. In *Laidlaw* the court found that mercury releases in a local river did not increase public health risks or result in environmental harm. See *supra* part 1D.

189. Lang, *supra* note 108, at 22. See, e.g., *Crow Indian Tribe v. United States*, No. CV 17-117-M-DLC, 2021 WL 3142155 (D. Mont. July 26, 2021) (awarding one plaintiff \$515,740.50 and the other \$356,034.50 in costs and attorney's fees).

costs and attorney's fees if the plaintiff prevails on the merits, the plaintiff still has to be able to pay the costs upfront and winning is never a guarantee. Furthermore, under the "wholly past violations" precedent of *Steel Company*, plaintiffs can potentially lose out on costs and fees, even if they had a good case on the merits, simply because the violator came into compliance during the course of litigation.¹⁹⁰

Finally, bringing a lawsuit against one's employer is always a risky business, particularly without the anti-retaliation protections contemplated in the labor context. This is only exacerbated by the citizen suit notice provisions,¹⁹¹ which gives an employer plenty of time to find a reason to fire an employee, effectively removing their standing.

C. Proposal: The Industrial Workers Safety Act

In light of these challenges, we clearly need new legislation to provide more effective legal tools to protect industrial workers and their communities from the environmental and health consequences of toxic pollution, hazardous leaks, and chemical fires. The Industrial Workers Safety Act (IWSA) would bring together existing safety and environmental standards with a set of procedural rights to allow workers to report violations and enforce those standards in court. The major provisions of IWSA are:

- 1) a private right of action to sue for enforcement of OSH Act safety standards,
- 2) a procedural right to agency review of violations of both safety and environmental standards reported to the relevant federal agencies,
- 3) a non-retaliation provision including a right to judicial review,
- 4) a uniform standard for refusal to work in hazardous conditions, and
- 5) a congressional determination that violations of federal environmental statutes are per se injuries-in-fact to employees of the violator.

190. ECHEVERRIA & ZEIDLER, *supra* note 106, at 16-17.

191. Generally, the notice must be sixty days prior to filing suit, but in some cases it is longer. Lang, *supra* note 108, at 27.

A private right of action to sue for OSH Act enforcement is a critical first step towards safer workplaces. As we saw in section IA, the Gulf Coast fossil fuels, petrochemical, and chemical industries have significant problems with workplace safety. OSHA's lack of resources, ineffective penalty provisions, and weak whistleblower protections have made the OSH Act's safety standards seem like a false promise for many workers. However, it is clear that a comprehensive overhaul of the Act—similar to PAWA—is unlikely to get through Congress in the near future. Much of the criticism of PAWA has been directed at the increased penalties, although critics have also argued that the increased level of regulation would create a more adversarial relationship between OSHA and employers and lead to less cooperative compliance.¹⁹² Granting workers a private right of action to enforce their right to a safe work environment under the OSH Act's safety standards and OSHA regulations would supplement public enforcement efforts and provide recourse for workers whose claims OSHA fails to follow through on, without stepping into these existing areas of controversy.¹⁹³ And finally, an IWSA private right of action would not be vulnerable to court challenges, because, like the Agricultural Workers Protection Act, it does not risk “restrict[ing], duplicat[ing], or interfer[ing] with any OSHA right of action.”¹⁹⁴

Concurrent with the private right of action to bring suit in federal court, the IWSA would create a reporting procedure to allow workers to report violations of federal safety and environmental standards directly to OSHA or EPA. This would include a right to an evidentiary hearing and to judicial review on the record.¹⁹⁵ An agency adjudication process is an important component of a hybrid public and private enforcement scheme because it

192. Guillory, *supra* note 164, at 237; Rigel & Poulianos, *supra* note 162, at 218.

193. Scholars have identified a variety of benefits of supplementing public enforcement efforts with private rights of action, significantly: bringing additional private resources and attention to underenforced areas of regulation and freeing up agency resources for other priorities, gaining more immediate and comprehensive information about violations, and avoiding nonenforcement driven by regulatory capture, or political and bureaucratic constraints. Michael Sant'Ambrogio, *Private Enforcement in Administrative Courts*, 72 VAND. L. REV. 425, 437-38 (2019)

194. Daniel B. Conklin, *Assuring Farmworkers Receive Their Promised Protections: Examining the Scope of AWPAs' "Working Arrangement"*, 19 KAN. J.L. & PUB. POL'Y 528, 539 (2010).

195. OSHA has a complaint process for workers to request inspections of possible violations and allows them to accompany the inspector, however this proposal contemplates a much more comprehensive review procedure than currently exists. See *Federal OSHA Complaint Handling Process*, DEPT. OF LAB.: OCCUPATIONAL SAFETY & HEALTH ADMIN., <https://www.osha.gov/workers/handling> [<https://perma.cc/7SCN-9A3V>] (last visited Feb. 6, 2022).

creates a more accessible forum for private parties who would like to assert their rights but lack the resources to file a lawsuit. Agency adjudications are not only more informal; less expensive; and able to operate on a shorter timeline than a lawsuit, they also provide for more expertise in adjudication, which is particularly important in the context of enforcing complex environmental regulatory structures.¹⁹⁶ This element of the IWSA is particularly important for the enforcement of environmental standards that can lead to ongoing toxic exposure as there is currently no statutorily mandated reporting process for environmental violations.¹⁹⁷

As one of the OSH Acts major shortcomings has been its weak whistleblower protections, including stronger protections for reporting both safety and environmental violations is a critical component of the IWSA. These new protections would have an extended reporting period, preliminary reinstatement for nonfrivolous claims, and a right to judicial review of a determination that the employer's action was not retaliatory. These whistleblower protections, like the original non-discrimination provision of Section 11(c) of the OSH Act (codified at 29 U.S.C. § 660(c)), would extend to employees who refused to work when conditions are such that a reasonable person would think that they create "a real danger of death or serious injury."¹⁹⁸ To be protected, an employee's refusal to work would have to meet the standard created by the regulations issued by the Secretary of Labor in 1973, which also require that there be insufficient time to eliminate the danger through a complaint to OSHA, that the employee have sought a correction of the condition from their employer when possible, and that the refusal to work be in good faith.¹⁹⁹ Additionally, the whistleblower protections would explicitly extend to employees who bring citizen suits against their employer for violations of federal environmental laws.

Finally, to reduce the litigation costs and complexity of establishing standing under Justice Scalia's *Lujan* standard, the IWSA would include a

196. Sant'Ambrogio, *supra* note 193, at 455.

197. EPA has a website for reporting environmental violations, but the only procedural protection is the OSHA whistleblower provision. *Reporting Environmental Violations*, EPA ENF'T AND COMPLIANCE HIST. ONLINE, <https://echo.epa.gov/report-environmental-violations> [<https://perma.cc/X6C8-2QUF>] (last visited Feb. 6, 2022).

198. Backer, *supra* note 128, at 563 (internal quotations omitted) (citing 29 C.F.R. § 1977.12(b)(2) (1980)).

199. *Id.* Backer argues that the OSH Act standard should supplant the refusal to work standards of section 7 of the NLRA and section 502 of the Labor Management Relations Act. *Id.* at 580. The proposal includes this provision to avoid the confusion Backer points out in his article.

statutory definition of harm, making environmental violations by an employer a cognizable injury-in-fact to the violator's employees. Unlike a general citizen suit provision, the class of people entitled to bring suit under this definition is clearly limited to a group of people who are at particular risk of a specific type of injury by virtue of their relationship to the violator.²⁰⁰ The injury this provision "seeks to vindicate"²⁰¹ would be characterized as an increased risk of personal harm based on exposure to pollution as a result of the employer's violation. Since the criteria for regulating pollutants are their ability endanger human health,²⁰² an employee who is continually exposed to the source of such pollutants at work is faced with a risk of harm that is clearly non-speculative.²⁰³ And, although many potential adverse health impacts of pollution exposure such as cancer or lung damage may not manifest until many years later, the injury is imminent because the increased risk begins with the exposure and increases as the exposure continues.²⁰⁴ Finally, because the injury is defined based on increased risk, we can apply the holding of *Massachusetts v. EPA* that a reduction in risk is sufficient to show redressability.²⁰⁵

CONCLUSION

Existing law is insufficient to protect industrial workers from workplace hazards. While federal environmental laws almost universally include citizen suit provisions to enforce their pollution regulations, standing jurisprudence in the wake of *Lujan* has made it increasingly difficult and

200. Sunstein, *supra* note 104, at 226 ("Under *Lujan* ... Congress must at a minimum 'identify the injury it seeks to vindicate and relate the injury to the class of persons entitled to bring suit.'" (quoting *Lujan*, 112 S. Ct. at 2147 (Kennedy, J., concurring))).

201. *Id.*

202. *See, e.g.*, 42 U.S.C. § 6903(5) (defining hazardous waste as causing or significantly contributing to an increased risk of mortality or "serious irreversible, or incapacitating reversible, illness"); 42 U.S.C. § 7412(b)(2) (directing the EPA Administrator to add pollutants that present "a threat of adverse human health effects" to the list of regulated "hazardous air pollutants").

203. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1993).

204. *Id.* *See, e.g.*, Wendee Nicole, *PFOA and Cancer in a Highly Exposed Community: New Findings from the C8 Science Panel*, 121 ENV'T HEALTH PERSPECTIVES 11-12 (2013) (discussing the impact of cumulative PFOA exposure on cancer risk); 2014 NATIONAL AIR TOXICS ASSESSMENT: FACT SHEET, *supra* note 27, at 2 (discussing the long-term risks of breathing air with elevated levels of air toxics).

205. *Massachusetts v. Env't Prot. Agency*, 549 U.S. 497, 526 (2007).

expensive to litigate a citizen suit in federal court.²⁰⁶ The OSH Act has extremely weak and outdated penalty provisions, insufficient whistleblower protections, and OSHA lacks adequate resources to enforce its safety standards.²⁰⁷ Other options include claiming protection from retaliatory actions for refusal to work in hazardous conditions under the NLRA or suing in tort law. However, using either of these options leads to uncertain and retroactive relief,²⁰⁸ making them poor choices for a movement seeking to proactively address the consequences of industrial pollution and workplace hazards.

Given these shortcomings, there is a need for better legal tools to enforce safety and pollution standards and enable industrial workers to assert their rights in court. The IWSA is designed to fill these gaps in existing law, providing workers with a private right of action to enforce the OSH Act, procedural protections to report violations or refuse to work in hazardous working conditions, and a congressional definition of cognizable harm under federal environmental statutes making it easier to achieve citizen suit standing.

The IWSA is particularly important to help bridge the disconnect between industrial workers and the mainstream environmental movement, and to support the goals of environmental justice through building coalitions with organized labor in the fossil fuels, petrochemical, and chemical industries. There has been progress in recent years with major environmental organizations and labor unions coming together to form the BlueGreen Alliance and pushing for Just Transition policies.²⁰⁹ However, these policies, while helpful in the long run, are not enough to address the needs that already exist. After years of industrial pollution, the Gulf Coast has some of the worst environmental justice indicators in the country and continues to experience industrial disasters and chemical fires on a regular basis.²¹⁰ These disasters present safety hazards for workers as well as the communities they live in, and the decline of unionization in the region has made it much harder for workers to demand safer working conditions.²¹¹ To succeed against the interests of the capitalist class and industrial interests,

206. *See supra* part ID.

207. *Id.*

208. *Id.*

209. *See supra* part IC.

210. *See supra* part IA.

211. *See supra* part IB.

environmentalists need to build a mass social movement rooted in working-class issues. The IWSA would provide tools for environmental nonprofits and labor organizations to build working-class solidarity and stronger coalitions by working together to address the impacts of industrial pollution on workers and communities.

