“Individually Minor But Collectively Significant”: The Right to Cumulative Impact Analyses and Substantive Protections in Wilmington, California

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INTRODUCTION

In Wilmington, California, a neighborhood in Los Angeles, one oil refinery has been a fixture of the area since 1919.1 The refinery has been in operation for over one hundred years and currently produces more than 139,000 barrels of crude oil per day.2 Two-thirds of the toxic chemicals emitted in Wilmington since 2000 have come from this refinery, now owned by Phillips 66.3 The refinery has been plagued by leaks, and the site has consistently underreported its emissions.4 Wilmington residents sued the facility and the local air quality management authority in 2017.5 The California Air Resources Board also pursued a case against Phillips 66 and written commitments to reduce emissions, the benefits have been severely restricted.6 Both cases ended in meager settlements.8 Meanwhile, the Wilmington refinery helped

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1 See Sam Gnerre, Wilmington’s Phillips 66 Oil Refinery Has Been a Fixture Since Union Oil Opened It in 1919, S., BAY HISTORY (May 6, 2022), https://sbhistoryblog.wordpress.com/2022/05/06/wilmingtons-phillips-66-oil-refinery-has-been-a-fixture-since-union-oil-opened-it-in-1919 [https://perma.cc/T8DQ-6G3W].
2 See id.
7 See Mahoney, supra note 3.
Phillips 66 secure record revenues in 2022, and both the refinery and the company show no signs of decline. This refinery—which has contributed to negative health outcomes in Wilmington and has cost residents significant time and money as a result of litigation, activism, and organizing—is only one of a plethora of facilities polluting Wilmington’s air. Refineries, major interstate highways, the world’s busiest ports, numerous oil drilling operations, waste management facilities, sewage treatment plants, and a variety of industrial facilities like chrome plating facilities all occupy and surround Wilmington, pumping pollutants into the air. To put Wilmington’s pollution woes in context, major stationary sources in the District of Columbia, which has a population more than ten times that of Wilmington, emitted just one-sixth the quantity of the most prominent air pollutants as sources in Wilmington did in 2020. As a result, Wilmington possesses nearly the worst air quality of all the neighborhoods in one of America’s most polluted cities—Los Angeles. Meanwhile, government at all levels has not sufficiently attended to the cumulative burdens that these pollution sources place on Wilmington residents.

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11 See infra Part I.


When environmental impact statements—which are required by federal and state law\(^\text{15}\)—are prepared for new projects in Wilmington, these documents often trivialize the cumulative pollution burdens that Wilmington residents already confront. For example, in one document analyzing the effects of a major expansion of a container terminal in the Port of Los Angeles, which abuts Wilmington, a government agency declared that the expansion’s impacts would be “significant and unavoidable” because greenhouse gas emissions from the project “would contribute to the causes of global climate change.”\(^\text{16}\) The agency fails to discuss any specific existing sources of air pollution in Wilmington or how the container expansion will add to existing pollution burdens on residents.\(^\text{17}\) Sometimes, like in the environmental impact report for a marine oil terminal project at the Port of Los Angeles, a more thorough consideration of cumulative impacts does occur.\(^\text{18}\) That consideration carries little force, though, as projects like this may conclude that cumulative impacts would be extremely significant but still gain approval and undergo construction.\(^\text{19}\)

As the concept of environmental justice has increasingly permeated law and policy debates around the world, a heightened awareness of communities facing disproportionate pollution burdens has emerged. In Wilmington, residents—the vast majority of whom are Hispanic—largely find themselves without legal solutions to the cumulative pollution burdens they endure.\(^\text{20}\) Part I of this Article describes the origin and nature of the pollution sources harming residents of Wilmington and the negative health consequences that have resulted from cumulative pollution impacts. Part II first identifies the limited substantive legal protections available to Wilmington residents and then turns

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\(^{15}\) See infra Part II.


\(^{17}\) See id.


\(^{19}\) See City News Service | Los Angeles, LA Harbor Commission Approves $1.9B Budget for Port of LA, SPECTRUM NEWS 1 (June 8, 2022), https://spectrumnews1.com/ca/la-west/transportation/2022/06/08/la-harbor-commission-approves-1-9-billion-budget-for-port-of-la [https://perma.cc/SNK3-MRWP] (reporting that a portion of new Port of LA budget will be used for the approved Shell marine oil terminal project).

to existing procedural mechanisms for deterring environmental harms. These include the National Environmental Policy Act (“NEPA”), which requires the preparation of an environmental impact statement (“EIS”) prior to the initiation of any major federal actions in the United States, and the California Environmental Quality Act (“CEQA”), which imposes similar obligations for state-supported actions in California.\(^{21}\) Environmental impact assessment (“EIA”) requirements exist in jurisdictions around the world. Accordingly, Part III compares NEPA and CEQA with EIA laws in Guatemala and South Africa, spotlighting the virtues of the Guatemalan and South African laws given their broader scope and substantive force.

Part IV first investigates the shortcomings of existing proposals and then offers a three-part solution to the legal barriers faced by Wilmington residents. Federally, Congress should amend NEPA to require the consideration of cumulative impacts in environmental documents and give agencies discretion to apply NEPA to preexisting projects. In California, the legislature should amend CEQA to allow petitions for environmental assessments of existing projects and include substantive environmental justice requirements. Lastly, the limitations built into largely procedural statutes like NEPA and CEQA necessitate more fundamental substantive protections for frontline communities. Therefore, California should adopt an environmental rights amendment (“ERA”) protecting residents’ rights to a healthy environment.

I. POLLUTION BURDENS AND HUMAN SUFFERING IN WILMINGTON

Wilmington epitomizes a community overburdened with air pollution from a variety of sources. This Part begins by surveying the sources of pollution in Wilmington. Importantly, these sources were all sited in one concentrated location because of a history of redlining and environmental racism in Los Angeles, whereby city planners and agencies deliberately located industrial and waste management facilities in Black and Latinx neighborhoods.\(^{22}\) This Part then turns to the deadly effects of this pollution, identifying the negative health consequences in Wilmington, including disease and death, that are attributable to poor air quality.

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A. Environmental Racism and Pollution Sources in Wilmington

Wilmington is a neighborhood within the city of Los Angeles and adjacent to the city of Long Beach. It is located on the coastline, and the city covers 9.14 square miles with a population of 53,815 people. Between 82% to 93% of Wilmington’s population is of Hispanic origin. About 20% of the city’s population lives in poverty. Wilmington residents are exposed to air pollution from over 400 sources, ranging in structure, use, and pollutant emitted.

First, the neighborhood is home to five oil refineries, largely because Wilmington sits atop the third most historically productive oil field in the continental United States. In 2020 alone, the five oil refineries in and around Wilmington emitted over 6,000 tons of criteria pollutants—carbon monoxide, ground-level ozone, lead, nitrogen dioxide, particulate matter, and sulfur dioxide—and over 1.3 million pounds of toxic pollutants such as benzene. Because it is completely surrounded by oil wells and refineries, Wilmington has previously been dubbed “an island in a sea of petroleum.” In 2016, the average distance between an oil drilling operation and a school or home was 139 feet.

Second, Wilmington is located next to the Port of Los Angeles and the Port of Long Beach, which together account for 29% of all

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containerized international trade in the U.S. These two ports are the largest fixed sources of air pollution in Southern California and are responsible for more daily emissions than six million gas-powered cars. Freight systems associated with the ports, including boats, trucks, and trains, account for half of the air pollution in the entire state of California. Between 400 and 600 trucks pass through Wilmington every hour, spewing nitrogen oxide that contributes to asthma, lung failure, and cancer.

Third, hazardous waste and toxic chemicals have plagued Wilmington for years. Thirteen facilities releasing toxic chemicals—including the century-old Phillips 66 oil refinery—call Wilmington home, mostly emitting ammonia and hydrogen cyanide into the air. Releases of toxic chemicals have increased since 2011 despite regulatory efforts. Waste management companies in Wilmington have a poor history of mitigating these harms, as evidenced by a settlement reached between the U.S. Environmental Protection Agency (“EPA”) and Clean Harbors Wilmington LLC in September 2022, after the company failed to monitor or detect leaks and inadequately maintained air pollution control equipment. Finally, the EPA tracks two Superfund sites in Wilmington and has archived forty-three former Superfund sites in the city, demonstrating a history of contamination surrounding residents.
CalEnviroScreen 4.0, a tool created by California’s state government that quantifies overall exposure to environmental harms in communities across California, shows that Wilmington contains census tracts that are in the 99th percentile for exposure to environmental hazards and in the 98th percentile for air pollution burdens specifically.40 Most tracts in Wilmington lie above the 90th percentile for both.41

B. Cumulative Impacts Kill

The array of sources bombarding Wilmington with harmful pollutants, chemicals, and toxins has resulted in severe negative health outcomes for the neighborhood’s residents. The California Healthy Places Index lists one of the census tracts in the heart of Wilmington as less healthy than 98% of the state’s population, and many other tracts in Wilmington fall in the bottom 10%.42 The air toxics cancer risk experienced by Wilmington residents is 664 parts per million, which has declined in recent years but is still higher than 98% of the neighborhoods in Southern California.43 Most of this risk is caused by emissions of diesel particulate matter, which predominantly comes from diesel trucks traversing the roads and highways near Wilmington with freight from the nearby ports.44 Researchers estimate that air pollution from the city’s two ports alone causes 1,300 premature deaths annually, most of which are concentrated in and around Wilmington.45

Non-cancer-related health risks are abnormally high in Wilmington, and elevated air pollution levels have been linked to higher rates of heart disease, diabetes, and high blood pressure.46 An anecdotal survey of seventy-five households in Wilmington found that one-third of households reported an individual with cancer, more than half reported an individual with asthma, and

40 See CalEnviroScreen 4.0, supra note 14.
41 See id.
44 See id.
70% reported an individual experiencing depression.\textsuperscript{47} The impacts of these pollution burdens are apparent: “Of the city of Los Angeles’ 35 community plan areas, Wilmington has the sixth-lowest life expectancy.”\textsuperscript{48} Air pollution in Wilmington has been linked to other causes of death—namely gun violence, as more polluted air functions as an environmental stressor.\textsuperscript{49} Wilmington residents also consistently document headaches, nosebleeds, and other symptoms attributable to air pollution exposure.\textsuperscript{50}

While some of the health consequences of air pollution have been dampened in recent decades because of improving air quality in Los Angeles, the last few years reversed that trend.\textsuperscript{51} From 2020 to 2021, Wilmington experienced 236 more deaths relative to mortality experienced in previous years, and only some of those deaths were caused by the COVID-19 pandemic.\textsuperscript{52} More than one-third of the excess deaths are attributable to factors that correlate with high levels of air pollution.\textsuperscript{53} Wilmington residents are suffering from devastating acute health impacts, and they face the prospect of a variety of long-term health conditions caused by chronic exposure to air pollution.\textsuperscript{54} The pollution causing these adverse health outcomes has been ongoing for generations, and its persistence has catalyzed vigorous activism and advocacy from residents seeking legal redress.

II. SUBSTANTIATIVE AND PROCEDURAL SAFEGUARDS FOR WILMINGTON RESIDENTS

The litany of environmental woes that Wilmington residents face severely hinders quality of life, and these developments have forced many residents and community groups to search for any possible form of relief. Residents have filed suit in court; petitioned

\begin{footnotesize}
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\item See id.
\item Adam Mahoney, \textit{Deaths Have Spiked in this Polluted Port Community. COVID is Only Part of the Story.}, GRIST (Mar. 31, 2022) https://grist.org/health/excess-deaths-wilmington-california-covid-pollution/ [https://perma.cc/XR2Z-C796].
\item See Anakaren Andrade et al., \textit{Urban Oil Drilling and Community Health: Results from a UCLA Health Survey}, UCLA INST. OF THE ENV'T SUSTAINABILITY, https://www.foes.ucla.edu/project/stand-la/ [https://perma.cc/5PW4-764N] (last visited Mar. 20, 2023); see also Kirk, supra note 27.
\item See Mahoney, supra note 48.
\item See id.
\item See, e.g., Ewa Konduracka & Pawel Rostoff, \textit{Links Between Chronic Exposure to Outdoor Air Pollution and Cardiovascular Diseases: A Review}, 20 ENV'T CHEMISTRY LETTERS 2971, 2974–75 (2022).
\end{enumerate}
\end{footnotesize}
local boards, commissions, and councils; lobbied state government; and launched protests. A review of the potential paths for Wilmington residents to obtain redress reveals that each of these options involves significant challenges. Consequently, one of the most powerful tools available to environmental advocates is a procedural mechanism: environmental impact assessments.

A. Substantive Protections

In the context of pollution sources, substantive protections might include restrictions on the kinds of facilities that can be built, enforceable emissions limitations, civil rights or anti-discrimination laws preventing disproportionate impacts, and common law doctrines like nuisance. Wilmington residents have attempted to utilize all of these available mechanisms. Environmental activists sued the City of Los Angeles in 2015 for a “pattern or practice of rubber stamping oil-drilling applications” in violation of an anti-discrimination provision in California’s state code. The plaintiffs asked the court for extensive injunctive relief to prohibit the city from approving oil extraction activities with disparate impacts. The city settled the lawsuit in September 2016 and agreed to environmental assessments for proposed oil and gas drilling sites and public hearings on new oil and gas facilities, but the city and environmental activists became embroiled in countersuits by the oil and gas industry for the next five years. Moreover, the city did not agree to—and the court did not grant—the more ambitious injunctive relief sought by community members.

57 See id. at 41.
California’s anti-discrimination law used by Wilmington litigants resembles Title VI of the Civil Rights Act of 1964 at the federal level. Title VI prohibits any person from being “subjected to discrimination under any program or activity receiving Federal financial assistance” on the basis of their race, color, or national origin. Because so many organizations, developers, and municipalities receive federal financial assistance, Title VI could be a comprehensive blockade against environmental injustice. In 2001, the Supreme Court eliminated that possibility, holding that Title VI confers no private right of action on individuals for claims involving disparate impacts.

Disparate impact lawsuits under Title VI must now be filed by federal agencies. In recent years, the EPA accrued a hefty backlog of Title VI claims submitted to the agency by individuals and groups—that the agency did not have the capacity to file in court. Many of these claims involved cumulative pollution burdens similar to those experienced in Wilmington. The EPA backlog has finally been eliminated, but critics maintain that the requirement that individuals pursue accountability indirectly through a federal agency hampers enforcement, takes discretion and autonomy away from community members, and leads to fewer cases being brought.

The Clean Air Act (“CAA”) is the primary federal law regulating air pollution. The CAA itself has been credited with

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60 See 42 U.S.C. § 2000d.
61 Id.
62 See Bradford Mank, Environmental Justice and Title VI: Making Recipient Agencies Justify Their Siting Decisions, 73 TUL. L. REV. 787, 794 (1999) (“Because the EPA provides grants to almost all state and regional siting or permitting agencies, Title VI clearly applies to these agencies.”).
63 See Michael Fisher, Environmental Racism Claims Brought Under Title VI of the Civil Rights Act, 25 ENV’T L. 285, 289 (1995) (“Title VI can be an important weapon against environmental racism.”).
68 See Julie Narimatsu et al., Improved EPA Oversight of Funding Recipients’ Title VI Programs Could Prevent Discrimination, U.S. ENV’T PROT. AGENCY, OFF. OF INSPECTOR GEN. (Sept. 28, 2020).
substantial air pollution reductions nationwide, but its reliance on regional and representative air pollution metrics has subdued its ability to address localized disparities in air quality, like those that exist in Wilmington.\textsuperscript{70} Despite the CAA’s defects regarding the local distribution of pollution, the comprehensive nature of the statute led the Supreme Court to conclude that the CAA displaces all federal nuisance claims based on air pollution impacts, eliminating another potential form of substantive relief.\textsuperscript{71} State nuisance claims are still available whereby residents can sue polluters for substantially impairing the use and enjoyment of private property or of a public space.\textsuperscript{72} Many obstacles make this litigation difficult, though, such as establishing standing, causation, and attribution;\textsuperscript{73} proving substantial harm or impairment; obtaining adequate remedies\textsuperscript{74}; overcoming statutes of limitation; and bypassing state exemptions.\textsuperscript{75}

California offers its own slate of potential substantive protections. To many observers, California has become a national model for climate legislation.\textsuperscript{76} Several pieces of landmark legislation in the state, including the California Global Warming Solutions Act of 2006,\textsuperscript{77} require dramatic emissions reductions, and the state has policies in place to achieve a goal of carbon neutrality by 2045.\textsuperscript{78} To address oil and gas production in communities, the state voted to prohibit new oil wells within 3,200 feet of residential neighborhoods,\textsuperscript{79} but the law does not apply to

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\textsuperscript{70} See Meredith Fowlie et al., Brookings Econ. Stud., Climate Policy, Environmental Justice, and Local Air Pollution 7 (2020) (citations omitted) ("The problem is that regionally representative monitor measurement can mask enormous differences in air quality across neighborhoods within the region. Thus, there are communities in areas that the Environmental Protection Agency (EPA) deems in ‘attainment’ (a.k.a. compliance) that regularly experience pollution levels above the regulatory standard.").
\textsuperscript{73} See David Bullock, Public Nuisance and Climate Change: The Common Law’s Solutions to the Plaintiff, Defendant and Causation Problems, 85 Modern L. Rev. 1109, 1138–40, 1154 (2022).
\textsuperscript{75} See NER. REV. STAT. § 2-4403 (West 2019).
\textsuperscript{76} See Aimee Barnes et al., Ctr. for Am. Progress, Learning from California’s Ambitious Climate Policy (Apr. 16, 2021), https://www.americanprogress.org/article/learning-californias-ambitious-climate-policy/ [https://perma.cc/6LA9-4K28].
\textsuperscript{77} See CAL. HEALTH & SAFETY CODE §§ 35500–99 (West 2019).
\textsuperscript{79} See CAL. PUB. RES. CODE §§ 3280–91 (West 2023).
\end{flushleft}
existing oil wells.80 Los Angeles has also set ambitious emissions reduction goals through its Sustainable City pLAn,81 and the city announced a ban on new oil and gas wells and a phaseout of existing drilling operations.82 These efforts address city- or statewide emissions levels but, like the CAA, they often do not account for disproportionate localized pollution burdens.83 Further, Los Angeles’ measure to curtail oil and gas drilling may not survive litigation, as oil companies allege it violates state law, the state constitution, and the federal constitution.84

Some of California’s substantive environmental actions have singled out Wilmington. Legislators passed a law in 2017 directing the California Air Resources Board (“CARB”) to protect overburdened communities from disproportionate air pollution by developing monitoring programs.85 In 2018, Wilmington was selected as one community to be included in CARB’s Community Air Monitoring Plan and Community Emissions Reduction Program.86 While this inclusion channeled important attention and resources to Wilmington, the programs are limited to monitoring, community engagement, and economic incentives.87 In the words of environmental justice activists in Wilmington, the program “do[es] not require or propose to require the development

83 See, e.g., Vien Truong, Addressing Poverty and Pollution: California’s SB 535 Greenhouse Gas Reduction Fund, 49 HARV. C.R.-C.L. L. REV. 493, 525 (2014) (explaining that statewide climate legislation “is not perfect and is not the silver bullet to solve decades of dumping and pollution in our communities”).
of quantifiable, permanent, and enforceable emissions reductions beyond what is already required by existing law.”

Finally, assisted temporary relocation has occurred for California residents impacted by wildfires, but this has not been extended to residents in communities overburdened by air pollution. Many residents also repudiate relocation because of their desire to preserve their communities, and some argue that relocation circumvents accountability for those responsible for causing environmental harms. In light of the impediments to substantive redress for disproportionate and harmful pollution burdens, individuals and community groups have had to get creative with the legal strategies they pursue. Some are turning to consumer protection statutes, or constitutional law theories, or the public trust doctrine in the hopes of preserving the possibility of direct substantive relief. These approaches are all fairly novel and have not been fully embraced by courts. Two long-standing procedural statutes, though, afford community members the opportunity to deter or delay developments by mandating an evaluation of environmental impacts.

B. The National Environmental Policy Act

NEPA was passed in 1970 in response to worsening environmental damage, a lack of information about the environmental impacts of industrial activity, and growing public outcries for environmental action. Although some scholars have argued that Congress drafted NEPA with substantive obligations

94 See, e.g., Juliana v. U.S., 947 F.3d 1159, 1165 (9th Cir. 2020).
in mind, courts have interpreted it to be a purely procedural statute. Agencies and individual actors are under no substantive obligations to refrain from any particular activity or project so long as NEPA’s procedures are followed.

NEPA requires the preparation of an EIS for all “major Federal actions significantly affecting the quality of the human environment,” meaning the law only applies where there is federal government involvement, such as constructing, funding, or permitting a project. NEPA also created the Council on Environmental Quality (“CEQ”) in order to assist and counsel the president on issues of environmental policy. Because NEPA itself does not thoroughly prescribe the procedural steps involved in preparing an EIS, CEQ promulgated regulations in 1978 to specify what agencies must do. Ever since, NEPA’s requirements have been dictated by CEQ regulations.

CEQ regulations have been amended in recent years, but the core procedures under NEPA have remained the same. If an agency action is not categorically excluded from NEPA, then the agency prepares a brief environmental assessment (“EA”). An EA concisely summarizes the environmental impacts of a proposed action and lists alternative actions considered. If the EA concludes that environmental impacts will not be significant, the agency writes a finding of no significant impact (“FONSI”) and need not prepare a full EIS. The decision not to prepare an EIS

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99 Id. (“Although these procedures are almost certain to affect the agency’s substantive decision, it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.”).

100 42 U.S.C. § 4332(2)(C).


107 See id.

108 See id.
is a frequent target for litigation.109 Alternatively, agencies can use a categorical exclusion (“CE”) to exempt an entire category of actions from the NEPA process.110

If the agency concludes that the environmental impacts of an action will be significant, it can either identify potential mitigation efforts sufficient to render those impacts insignificant,111 or it must prepare a lengthy EIS discussing the affected area of the environment, the environmental impacts of the project, and alternatives the agency considered.112 An EIS must discuss all environmental impacts of a proposed action—and any connected actions113—about which the agency can reasonably obtain information.114 The severity of the environmental impacts of a project, therefore, is relevant both in deciding whether or not an EIS is required and in determining the scope of an EIS.115 Ultimately, the agency must publish a record of decision that conveys what action the agency is taking and recounts alternatives considered and any mitigation efforts the agency hopes to pursue.116

Notably, NEPA’s procedural mechanisms only apply to “new and continuing activities” by the federal government and not to past activities or projects,117 meaning that preexisting pollution sources like those that have occupied Wilmington for generations are immune from the NEPA process.118 CEQ regulations do provide that once an agency has submitted an EIS, it may later have to submit a supplemental EIS if the “agency makes

109 See NAT’L ASS’N OF ENV’T PROS., 2021 ANNUAL NEPA REPORT OF THE NATIONAL ENVIRONMENTAL POLICY ACT WORKING GROUP 29 (Charles P. Nicholson ed., 2022) [hereinafter 2021 ANNUAL NEPA REPORT] (finding that of the eighteen substantive NEPA cases brought in 2021, only five challenged an EIS that had already been prepared).
112 See 40 C.F.R. § 1502 (2020); see also Friends of Southeast’s Future v. Morrison, 153 F.3d 1059, 1065 (9th Cir. 1998) (“The agency must look at every reasonable alternative within the range dictated by the nature and scope of the proposal.”).
113 See 40 C.F.R. § 1501.9(e) (2020).
substantial changes to the proposed action”\textsuperscript{119} or if “significant new circumstances or information relevant to environmental concerns” arise.\textsuperscript{120} NEPA does not include any monitoring requirements, meaning agencies need not ascertain whether their predictions of project impacts end up accurately reflecting actual environmental outcomes.\textsuperscript{121}

Current CEQ regulations require that an EIS to discuss “cumulative effects” or impacts, defined as “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions.”\textsuperscript{122} These impacts “can result from individually minor but collectively significant actions taking place over a period of time,” and they must be assessed regardless of who caused them.\textsuperscript{123} The text of NEPA itself does not mention cumulative impacts at all; they have only been addressed via regulations. CEQ’s initial 1978 regulations required agencies to consider a project’s contribution to cumulative environmental impacts.\textsuperscript{124} In 2020, CEQ deleted any mention of cumulative impacts from the NEPA regulations, leaving agencies free to ignore them.\textsuperscript{125} CEQ restored the previous version of the regulations in 2022,\textsuperscript{126} resulting in the current definition of cumulative impacts cited above. CEQ is in the process of comprehensively updating the NEPA regulations.\textsuperscript{127} Although cumulative impacts will almost certainly be included in the new regulations, these frequent regulatory modifications leave cumulative impacts requirements vulnerable in the future.

\textsuperscript{119} 40 C.F.R. § 1502.9(d)(1)(i) (2020).
\textsuperscript{120} 40 C.F.R. § 1502.9(d)(1)(ii) (2020); see also Coal. on W. Valley Nuclear Wastes v. Chu, 592 F.3d 306, 312 (2d Cir. 2009) (“Agencies have wide discretion to change the scope of an EIS as ‘significant new circumstances or information arise.’” (citation omitted)).
\textsuperscript{122} 40 C.F.R. § 1508.1(g)(3) (2022).
\textsuperscript{123} Id.
\textsuperscript{124} See Protection of Environment, 43 Fed. Reg. 55,978, 56,004 (Nov. 29, 1978) (to be codified at 40 C.F.R. § 1508.7).
\textsuperscript{127} See National Environmental Policy Act Implementing Regulations Revisions Phase 2, 88 Fed. Reg. 49,924 (July 31, 2023) (to be codified at 40 C.F.R. § 1500 et seq.).
Some commentators have argued that categorical exclusions ("CEs") render NEPA meaningless.\textsuperscript{128} Bolstering that critique, CEQ estimated in 2014 that "about 95 percent of NEPA analyses are CEs, less than 5 percent are EAs, and less than 1 percent are EISs."\textsuperscript{129} Regardless, when NEPA has included a cumulative impacts requirement, the law has helped deter environmental harms by incentivizing the government and polluting facilities to invest in emissions controls or other environmental benefits rather than risk a lengthy and costly EIS process.\textsuperscript{130} Pollution reductions have also been seen within the EIS process: NEPA has led to "reductions . . . for the air quality parameters PM10, PM2.5, and NOx, which all saw initial impacts reduced by 23% or more between draft EIS and the agency’s record of decision."\textsuperscript{131} Thus, solidifying the cumulative impacts requirement in NEPA would seemingly serve emissions reduction goals.

When NEPA lawsuits are filed, litigants often base their claims on cumulative impacts failures by a government agency.\textsuperscript{132} Twelve out of eighteen NEPA cases in courts of appeal in 2021 and five out of twenty-four cases in 2020 centered on cumulative impacts.\textsuperscript{133} Court cases have elucidated the nature and breadth of the NEPA cumulative impacts requirement. For example, one court held that considering cumulative impacts requires analyzing the effects of suburbanization and urban sprawl on a community where a proposed project would be located.\textsuperscript{134} The Ninth Circuit recently held that the discussion of cumulative impacts even in an initial EA must be "more than perfunctory" and required the


\textsuperscript{129} U.S. GOV’T ACCOUNTABILITY OFF., GAO-14-369, NATIONAL ENVIRONMENTAL POLICY ACT: LITTLE INFORMATION EXISTS ON NEPA ANALYSES 7 (2014).

\textsuperscript{130} See Bradley C. Karkkainen, Toward a Smarter NEPA: Monitoring and Managing Government’s Environmental Performance, 102 COLUM. L. REV. 903, 935–36 (2002) (arguing EIS production serves as a “penalty default” imposing the “price” of disclosure on regulated entities that they can avoid by mitigating adverse environmental impacts in the first place).

\textsuperscript{131} John C. Ruple & Mark Capone, NEPA—Substantive Effectiveness Under a Procedural Mandate: Assessment of Oil and Gas EISs in the Mountain West, 7 GEO. WASH. J. ENERGY & ENV’T L. 39, 46 (2016).

\textsuperscript{132} See 2021 ANNUAL NEPA REPORT, supra note 109, at 27, 31.


agency to redo its analysis. These interpretations indicate that, while purely procedural, NEPA’s requirements meaningfully constrain the federal government’s ability to harm the environment.

C. The California Environmental Quality Act

While NEPA governs federal actions, many states have enacted laws that impose similar procedural requirements on proposed state actions—so-called “Little NEPAs.” Sixteen states and several localities have enacted NEPA-like laws, and twenty-one other states require some form of environmental review in more limited circumstances. California has arguably one of the strongest and most comprehensive Little NEPAs. CEQA dictates the procedures that must be followed for projects undertaken, funded, or approved by a state agency. CEQA requires the preparation of an environmental impact report (“EIR”—analogous to an EIS)—when “there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment.” Demonstrating its strength, CEQA contains a substantive component, stating that each “public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.” CEQA’s requirements, like NEPA’s, only apply to newly proposed projects and not existing ones. Unlike under NEPA, though, if an agency

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135 Killgore v. SpecPro Pro. Servs., LLC, 51 F.4th 973, 989 (9th Cir. 2022); see also Barnes v. U.S. Dep’t of Transp., 655 F.3d 1124, 1141 (9th Cir. 2011) (“An EA must fully assess the cumulative impacts of a project.”).

136 Bolstering that argument, the Ninth Circuit recently held that an agency must consider cumulative impacts from greenhouse gas emissions even if an individual project’s contribution to climate change is not precisely discernable or is small relative to global emissions. See 350 Montana v. HaaLand, 50 F.4th 1254, 1269–70 (9th Cir. 2022).


140 See CAL. CODE REGS. tit. 14, § 15002(b)–(c) (2023).

141 Id. § 15064(a)(1).

142 CAL. PUB. RES. CODE § 21002.1(B) (West 2023); see also CAL. PUB. RES. CODE § 21002 (“[P]ublic agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.”).

chooses not to prepare an EIR because it plans to mitigate environmental effects, a reporting or monitoring program must be implemented to ensure that mitigation occurs.144

CEQA contains provisions requiring the consideration of the cumulative impacts of a project. First, CEQA defines cumulative impacts in a way that closely resembles how the federal CEQ regulations currently define them.145 Second, CEQA requires the completion of a full EIR if the “project has possible environmental effects that are individually limited but cumulatively considerable.”146 Third, when writing an EIR, agencies must discuss significant cumulative impacts—including their severity and likelihood of occurrence—or explain why such impacts are not significant.147 The report must also “examine reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects.”148

Unlike with NEPA, a cumulative impacts analysis is required by both CEQA’s statutory language and its implementing regulations.149 One concern that courts have expressed, though, is that both of the methods that CEQA guidelines provide for analyzing cumulative impacts involve worrying downsides.150 Using a list of currently planned projects in the area (option one) will omit future projects not yet in the planning stages, while using environmental projection models (option two) entails uncertainty and is limited by gaps in available data.151

CEQA offers specific guidance on the significance of greenhouse gas emissions as environmental impacts, explaining that a project can incrementally contribute to greenhouse gas emissions in a way that is cumulatively considerable and directing the relevant agency to focus on “the reasonably foreseeable incremental contribution of the project’s emissions to the effects of climate change.”152 Courts have subsequently required agencies to take reasonable future greenhouse gas emissions into account.153

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144 See CAL. PUB. RES. CODE § 21081.6.
146 Id. § 15065(a)(3).
147 See id. § 15130.
148 Id. § 15130(b)(5).
149 See CAL. PUB. RES. CODE §§ 21083, 21100, 21156, 21158 (West 2023).
151 See League to Save Lake Tahoe, 290 Cal. Rptr. 3d at 286.
152 CAL. CODE REGS. tit. 14, § 15064.4(b) (2023).
153 See Golden Door Props., LLC v. County of San Diego, 264 Cal. Rptr. 3d 309, 359–61 (Ct. App. 2020) (holding that cumulative impacts analysis in an EIR was inadequate because agency failed to consider greenhouse gas impacts of pending general plan amendments).
but courts have clarified that this does not obligate agencies to consider the generalized impacts of climate change on a community.\textsuperscript{154}

Some scholars argue that CEQA, due to its substantive force, has effectively promoted environmental well-being,\textsuperscript{155} and community groups in California consistently defend CEQA as a key tool in advancing environmental justice.\textsuperscript{156} For example, one court, after finding an EIR inadequate, enjoined ongoing construction of an oil refinery.\textsuperscript{157} CEQA litigation also prevented a school from being built on a hazardous waste site containing toxic chemicals in the city of Cudahy, California, just twenty miles north of Wilmington.\textsuperscript{158} These victories have partially stemmed from expansive interpretations of cumulative impact requirements in California, under which very small individual contributions become significant when compounded with increasing preexisting pollution levels.\textsuperscript{159} One court specifically addressed cumulative impacts in the context of environmental justice communities like Wilmington, insisting that “[t]he magnitude of the current air quality problems in the [community] cannot be used to trivialize the cumulative contributions” of new projects.\textsuperscript{160} Another court recently strengthened CEQA’s environmental justice implications by holding that every EIR must “make[] a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.”\textsuperscript{161} Notably for this Article’s proposal, these courts conducted reviews

\textsuperscript{154} See League to Save Lake Tahoe, 290 Cal. Rptr. 3d at 289 (“[C]limate change in its nature and global scope is fundamentally different from other types of cumulative impacts reviewed under CEQA, and CEQA in its language and structure does not lend itself well to evaluating impacts caused by something other than a physical project.”).

\textsuperscript{155} See Ferester, supra note 97, at 230–31.


\textsuperscript{157} See Cmtys. for a Better Env’t v. City of Richmond, 108 Cal. Rptr. 3d 478, 484 (Ct. App. 2010).


\textsuperscript{160} Bakersfield Citizens for Loc. Control v. City of Bakersfield, 22 Cal. Rptr. 3d 203, 231 n.10 (Ct. App. 2004).

\textsuperscript{161} See Sierra Club v. County of Fresno, 241 Cal. Rptr. 3d 508, 510 (Cal. 2018).
of CEQA challenges under a mixed “abuse of discretion” standard.\textsuperscript{162}

CEQA has been the subject of harsh criticism due to the perception that it has been used to block affordable housing and even renewable energy in California, with opponents arguing CEQA has been a bulwark for not-in-my-backyard (“NIMBY”) residents.\textsuperscript{163} But these critics often overstate CEQA’s reach. Fewer than 200 CEQA cases have been litigated per year since 2002, and only about two percent of all development projects that are subject to CEQA review have been taken to court over CEQA.\textsuperscript{164} Further limiting CEQA’s reach, state agencies have ample discretion to determine when cumulative impacts qualify as significant and set the relevant geographic scope.\textsuperscript{165} A conclusion that cumulative impacts are not significant need only be briefly explained.\textsuperscript{166} Where an agency issues a finding of no significant impact, it does not have to mention cumulative impacts at all.\textsuperscript{167} Lastly, the California legislature has carved out certain exceptions to CEQA for residential projects that are consistent with local land use laws\textsuperscript{168} and for “ministerial projects” that require “little or no personal judgment by a public official.”\textsuperscript{169}

Relevant to this Article’s proposal, California has not joined the recent trend of states adopting ERAs, a term for state constitutional amendments guaranteeing the right to a clean or healthy environment.\textsuperscript{170} Some ERAs have been held to require

\begin{footnotesize}
\textsuperscript{162} See CAL. PUB. RES. CODE § 21168.5 (West 2023). An agency’s factual conclusions need only be supported by substantial evidence, while an agency’s compliance with proper CEQA procedures is reviewed de novo. See Sierra Club, 241 Cal. Rptr. 3d at 312; infra Section IV.B.


\textsuperscript{165} See S. of Mkt. Cntry. Action Network v. City & County of San Francisco, 245 Cal. Rptr. 3d 174, 189–93 (Ct. App. 2019) (discussing significant deference to and discretion for agencies in defining what to include in a cumulative impacts analysis).

\textsuperscript{166} See CAL. CODE REGS. tit. 14, § 15064(h)(2) (2023).

\textsuperscript{167} See id. § 15071.

\textsuperscript{168} See CAL. PUB. RES. CODE § 21159.28(a) (West 2023).


\textsuperscript{170} See generally Johanna Adashek, Do It for the Kids: Protecting Future Generations from Climate Change Impacts and Future Pandemics in Maryland Using an Environmental Rights Amendment, 45 PUB. LAND & RES. L. REV. 113 (2022) (describing how enactments of ERAs in several states since the 1970s codify, with varying success, environmental rights for future generations).
\end{footnotesize}
consideration of cumulative impacts at the state level, but this requirement would be duplicative in California given CEQA’s existing cumulative impacts provisions. An ERA in California, though, would go far beyond requiring the consideration of cumulative impacts by creating substantive individual rights and offering “protection equally against actions with immediate severe impact on public natural resources and against actions with minimal or insignificant present consequences that are actually or likely to have significant or irreversible effects in the short or long term.”

III. LESSONS FROM GUATEMALA AND SOUTH AFRICA

Outside of the U.S., the practice of requiring the preparation of an EIA has been permeating the international community for decades. NEPA motivated many other countries to adopt similar EIA laws requiring projects to undergo an environmental review process, and now such laws proliferate in a variety of forms. The United Nations (U.N.) has partially defined the purpose of an EIA law as “mak[ing] sure that all critical information to predict future impact on the environment is supplied and considered in the decision-making process.”

EIA laws exist in nearly all U.N. member nations. In a study of EIA laws in 186 countries, 113 of those laws were found to contain cumulative impact provisions. Numerous international human rights and environmental treaties, as interpreted by international courts, similarly require states to assess the environmental impacts of significant actions in various contexts, frequently mandating the consideration of cumulative impacts.

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171 Sullivan v. Resisting Env’t Destruction of Indigenous Lands, 311 P.3d 625, 637 (Alaska 2013) (“We hold that the State is constitutionally required to consider the cumulative impacts at later phases of an oil and gas project.”).
175 See id.
176 See id. at vii.
requirements has become so widespread that many scholars and jurists believe the obligation to prepare an EIA has become customary international law. Today, “[i]t is increasingly recognized that states are under a general obligation to assess the environmental impacts of their activities, regardless of where those activities are located or where impacts will take place,” and “[t]he duty of a state to conduct an EIA has gradually gained the status of a fundamental principle in international law.” Thus, in Wilmington and elsewhere, access to information about the environmental impacts of government decisions is properly seen as a human right.

Implementation of EIAs has been more successful in some countries than in others, and any call to reform NEPA or CEQA in the U.S. should look to the best practices of other nations. As established, laws like NEPA and CEQA have built-in constraints. If these procedural tools are to be bolstered to empower Wilmington residents to ameliorate disproportionate pollution burdens, these laws must borrow from EIA models from other countries. This Article highlights two such models in Guatemala and South Africa, both of which have enacted EIA laws that require the consideration of cumulative impacts and expand the scope of EIA responsibilities beyond what NEPA and CEQA mandate.

A. Guatemala’s Environmental Impact Assessment Law

In 2003, the Guatemalan legislature enacted a law regulating environmental evaluation, control, and monitoring. The law—Reglamento de Evaluación, Control y Seguimiento Ambiental (“RECSA”)—was amended several times and the version of the law currently in force was passed in 2016. RECSA requires the government to compile a list of “[a]ny project, work, industry or any other activity which can produce deterioration of renewable

179 See Yang, supra note 173, at 563–64.
182 See supra Sections II.B–C.
185 See Reglamento de Evaluación, Control y Seguimiento Ambiental, Acuerdo Gubernativo Número 137-2016 [hereinafter RECSA] (Guat.).
natural resources or the environment; or which modifies landscapes or cultural national heritage.” An EIA must be prepared for any project on that list that is undertaken in the country. The level of detail necessary in an EIA is determined by a tiering system in which RECSA categorizes actions as high impact, moderate impact, moderate to low impact, or low impact. Projects must prepare environmental management plans which describe how a project will prevent or mitigate its negative environmental impacts. Government-certified officials then conduct environmental audits to ensure compliance with those mitigation plans, going beyond CEQA’s monitoring requirements. RECSA also defines cumulative impacts and requires their inclusion in any EIA. Substantively, RECSA directs agencies to reject a project when its cumulative impacts will exceed the empirically established carrying capacity (“la capacidad de carga”) of the affected environment.

Importantly, RECSA also provides that EIAs can be required for existing projects. The law outlines two environmental evaluation documents that apply to preexisting projects which have adverse environmental impacts and clarifies that these documents are meant to determine what corrective actions must be taken to mitigate environmental harms. RECSA then authorizes fines against existing projects that fail to implement these corrective actions, offering an enforcement mechanism that NEPA and CEQA lack. This coverage of existing projects likely accounts for the fact that the Guatemalan government conducts about 2,000 EIAs annually, while the U.S. government only completes 530. Moreover, Guatemalan courts have consistently upheld RECSA. One court affirmed the validity and utility of the

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188 See RECSA art. 3(62), 21.
189 See id. art. 19, 23–26.
190 See id. art. 3(73), 15(d).
191 See id. art. 88–90.
192 See id. art. 3(20).
193 See id. art. 15(c).
194 Id. art. 33(f).
195 See id. art. 3(18)–(19).
196 See id. art. 109(b).
law while framing it as a part of “the obligation to satisfy the right to a healthy environment that the State has.”

RECSA has experienced some implementation challenges. Part of the law mandates strategic environmental assessments (“SEAs”), which involve the government incorporating environmental analyses into how it designs national programs and policies. No system has been implemented to conduct such assessments, and no SEAs have been completed as of 2020. The law also purports to promote transparency and public participation, but scholars have noted that the government frequently excludes the public from the EIA process under RECSA due to agency resource constraints and manipulation by companies and their hired consultants.

B. South Africa’s Environmental Impact Assessment Law

In 1998, the South African government enacted the National Environmental Management Act (“NEMA”). NEMA requires the consideration, investigation, and assessment of the environmental, socio-economic, and cultural impacts “of activities that require authorisation or permission by law and which may significantly affect the environment.” Similar to RECSA, the government proactively compiles a list of activities that require the preparation of an EIA. The EIA prepared through this process must evaluate cumulative impacts when determining an

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198 Corte de Constitucionalidad [Constitutional Court] Oct. 5, 2017, Expediente Número 5956-2016, at 48, translated in Sentencia de Corte de Constitucionalidad (Expediente nº 5956-2016), 05-10-2017, VLEX-JUSTIS [The Court stresses the importance of the obligation to satisfy the right to a healthy environment that the State has; that is, to take the actions necessary to prevent and eradicate pollution and other causes that affect the ecological balance. That is why it is established that this state duty is not . . . isolated to be fulfilled by the Congress of the Republic, but the Executive branch must also take part in the issuance of regulations that regulate the actions of human beings when using natural resources.” (Guat.).

199 See RECSA art. 3(29), 13.


201 See Javier Rodrigo-Illarri, Lidibert González-González, María-Elena Rodrigo-Cavero & Eduardo Cassiraga, Advances in Implementing Strategic Environmental Assessment (SEA) Techniques in Central America and the Caribbean, 12 SUSTAINABILITY 4039, 4047–50 (2020).


204 Id. § 24(1).

205 See id. § 24(2).
activity’s potential effect on the environment. Mirroring the broader application of Guatemala’s law, NEMA can apply to existing projects, but the law defers to agency officials on whether this tool should be used. Specifically, NEMA allows the Minister of Environmental Affairs and Tourism to “identify existing authorised and permitted activities which must be considered, assessed, evaluated and reported on.” Like RECSA, NEMA requires agencies to provide for “the monitoring and management of impacts” after the EIA stage. In a rarity for EIA laws and unlike RECSA, NEMA expressly references environmental justice: “Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.”

Another key distinction between RECSA and NEMA is their background legal frameworks. South Africa’s constitution provides all people with the right “to an environment that is not harmful to their health or well-being” and directs the government to “secure ecologically sustainable development and use of natural resources.” This national guarantee has aided the Constitutional Court of South Africa in interpreting NEMA to “embrace[] the concept of sustainable development” and to require an assessment of existing socio-economic conditions and cultural heritage affected by a proposed project. The Court broadly held that “NEMA requires all developments to be socially, economically, and environmentally sustainable.” This decision affirmed the substantive nature of NEMA when paired with South Africa’s constitution, and it essentially requires the consideration of environmental justice implications in all government decision-making. Again, however, South Africa has experienced implementation challenges. Some scholars have argued that EIAs under NEMA have mutated into devices for rubber stamping development, including environmentally harmful mining projects.

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206 See id. § 24(7)(b).
207 See id. § 24(2)(d).
208 Id.
209 Id. § 24(7)(f).
210 See id.
211 National Environmental Management Act 107 of 1998 § 2(4)(c) (S. Afr.).
213 Fuel Retailers Ass’n of S. Afr. v Director-General: Env’t Mgmt., Dep’t of Agric., Conservation and Env’t, Mpumalanga Province 2007 (13) ZACC 1 (CC) at 33 (S. Afr.).
214 Id. at 42.
The EIA laws on the books in Guatemala and South Africa offer a model for a more expansive and protective deterrent against environmental harms in the U.S. While criticisms of the Guatemalan and South African EIA systems abound given their failures to generate transparency and involve affected communities, those flaws are often the result of a lack of government resources or overt corruption and conflicts of interest. The implementation challenges that these laws face would be mitigated in the U.S. because of the greater financial resources available to the government and the more stringent enforcement of anti-corruption laws.

IV. STATUTORY REFORMS AND ENVIRONMENTAL RIGHTS FOR WILMINGTON RESIDENTS

Communities like Wilmington that are subjected to disproportionate pollution burdens can utilize procedural statutes like NEPA and CEQA, but holes in the scope and enforceability of those statutes limit their power. This Article proposes amendments to NEPA and CEQA to better address the pollution burdens in communities like Wilmington, offer some substantive redress, and reflect a modern understanding of human rights.

Existing proposals for reform to mitigate cumulative impacts either fail to sufficiently expand statutory frameworks to cover preexisting facilities or pose political impossibilities due to their overambition. Some scholars propose revising CEQ regulations to improve cumulative impacts analyses or account for climate change, but these proposals overlook the political vulnerabilities inherent in relying on CEQ regulations that can vary by administration. Other scholars propose amending NEPA to include substantive requirements that would block particularly harmful projects, or amending NEPA or CEQA to simply require

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217 See John J. Loomis et al., Environmental Federalism in EIA Policy: A Comparative Case Study of Paraná, Brazil and California, US, 122 ENV’T SCI. & POL’Y 75, 80 (2021) (highlighting the greater financial resources and lower levels of corruption in EIA implementation in the U.S. compared to Brazil).

218 See Lauren Giles Wishnie, NEPA for a New Century: Climate Change & the Reform of the National Environmental Policy Act, 16 N.Y.U. ENV’T L.J. 628, 644–46 (suggesting amending NEPA regulations to eliminate cumulative impacts in the context of greenhouse gas emissions given that these emissions are not geographically bound).

an environmental justice analysis in every statutorily required document. These proposals would achieve laudable aims but possess key shortcomings in isolation. First, an expansion of NEPA or CEQA to integrate more substantive requirements would still leave preexisting pollution sources untouched. Second, adding a substantive component to NEPA would result in political hurdles that are likely insurmountable. Circumventing NEPA entirely, some have argued that “cumulative impacts are so centrally relevant to environmental and natural resources law that failure to account for those impacts when making regulatory decisions is arbitrary and capricious,” meaning that a cumulative impacts analysis would be required independent of NEPA’s provisions. This proposal would necessitate a dramatic shift in the way courts have interpreted NEPA and have reviewed agency compliance with the statute. It would also do nothing to target the preexisting pollution sources excluded by NEPA.

Recognizing and learning from the deficiencies in these proposals, this Article first suggests amending NEPA to explicitly cover cumulative impacts and allow agencies to require an EIS for preexisting projects like the decades-old pollution sources in Wilmington. This Article then recommends the California legislature amend CEQA to create a process for residents to petition for CEQA review of preexisting projects and block projects that exacerbate environmental injustice. Lastly, to firmly enshrine environmental rights in the law, California should enact an environmental rights amendment.

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221 See supra Section II.B.
222 See Emma Dumain & Kelsey Brugger, The House Democrat Trying to Mover His Party on NEPA Reform, E&E NEWS (Feb. 17, 2023, 6:27 AM), https://www.eenews.net/articles/the-house-democrat-trying-to-move-his-party-on-nepa-reform/ [https://perma.cc/Q7TB-XTUA] (“The reason [a House Democrat advocating for NEPA reform] could become all but radioactive, however, is because he is saying the quiet part out loud: Reopening NEPA will almost certainly be necessary for passing permitting reform legislation.”).
225 See supra Section II.B.
A. Expanding NEPA’s Scope

Wilmington residents were deprived of a significant portion of NEPA’s protections in 2020 because cumulative impacts were no longer a necessary part of an EIS.\textsuperscript{226} They also remain unable to obtain any NEPA review of existing projects—like the oil wells and refineries, ports, waste management facilities, and highways permeating the community\textsuperscript{227}—despite the enormous environmental impacts these sources cause. NEPA needs reform to address these and other flaws.

First, Congress should amend Section 102(2)(C)(i) of NEPA to read “the environmental impact, including the cumulative impacts, of the action.”\textsuperscript{228} Congress should then define cumulative impacts in the statute—likely in a new Section 106 of the Act—to codify the current CEQ definition.\textsuperscript{229} The primary legal effect of this amendment would be that no subsequent administration could use CEQ regulations to preclude agencies from considering cumulative impacts in an EIS. Because almost all countries around the world have an EIA requirement and most of these laws incorporate cumulative impacts in their text, the consideration of cumulative impacts in an EIA can be viewed through a rights-based framework.\textsuperscript{230} EIA obligations have been treated as “customary international law”\textsuperscript{231} and as a “fundamental principle in international law,"\textsuperscript{232} yet an EIA that does not analyze cumulative impacts “does not capture the whole picture.”\textsuperscript{233} Environmental documents that omit cumulative impacts assessments misconstrue the environmental toll of a project on communities like Wilmington rife with preexisting pollution sources,\textsuperscript{234} so codifying the inclusion of cumulative impacts will

\begin{footnotesize}
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  \item \textsuperscript{226} See supra Section II.B.
  \item \textsuperscript{227} See supra Section I.A.
  \item \textsuperscript{228} 42 U.S.C. § 4332(2)(C)(i) (2018 & Supp. 2021). The word “proposed” has been removed from this NEPA provision. This is to accommodate this Article’s proposal to apply NEPA requirements to preexisting pollution sources. See infra notes 236–40 and accompanying text.
  \item \textsuperscript{230} Yang, supra note 173, at 563–64.
  \item \textsuperscript{231} Id.
  \item \textsuperscript{232} Pannu, supra note 181, at 113.
  \item \textsuperscript{233} Romina Sciberras, Effectiveness of Environmental Impact Assessment Process in the Maltese Islands 28 (Apr. 2013) (M.S. dissertation, James Madison University) (Environmental Sciences Commons).
\end{itemize}
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guarantee that NEPA analyses are thorough, accurate, and protect human rights.235

Second, Congress should amend NEPA to authorize agencies to apply NEPA review processes to existing projects in a manner resembling South Africa’s NEMA. NEMA gives the Minister of Environmental Affairs and Tourism, in conjunction with the appropriate local government official, the discretion to apply the EIA process to existing activities.236 EIAs under NEMA are undertaken by the private owner or operator of a project—usually through an independent environmental specialist hired as a consultant—and submitted to a government agency for approval.237 Similarly, NEPA should be amended to give the secretaries of all federal agencies the authority to order an EIS to be conducted for a particular preexisting project. A sentence could be added in Section 102(2)(C) stating: “Any Federal agency may require such a detailed statement for any past or ongoing project significantly affecting the quality of the human environment when the head of such agency concludes that such a statement would be appropriate.”238 This amendment would not radically alter NEPA

235 Access to accurate and comprehensive information about the environmental impacts of projects in a community is increasingly seen through a human rights lens. The breadth of scholarship on that trend is beyond the scope of this Article, but for initial insights into the trend, see Dinah Shelton, Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized, 35 DENV. J. INT’L L. & POL’Y 129, 134–39 (2006) (explaining how the right to environmental information like that contained in an EIA is incorporated in human rights treaties and has been enforced by entities like the European Court of Human Rights).


238 Together with the previous proposed NEPA amendment, see supra text accompanying note 228, § 102(2)(C) would now read (with added language in italics and omitted language indicated by empty brackets): “include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact, including the cumulative impacts, of the [ ] action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the [ ] action,
(iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and
(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Any Federal agency may require such a detailed statement for any past project significantly affecting the quality of the human environment when the agency concludes such a statement would be appropriate . . . .” 42 U.S.C. § 4332(2)(C) (2018 & Supp. 2021).
procedures but would broaden the pool of projects that could fall under NEPA’s purview.

For example, if the EPA—after investigating potential enforcement actions against a pollution source, hearing public complaints, and conducting site visits—concludes that a source is significantly affecting the environment or human health, it could direct the operator to prepare an EIS, even if a supplemental EIS would not have been required. The EIS should be written by an independent environmental specialist, like under NEMA, to eliminate conflicts of interest and to avoid the disincentives agencies would have to order a new EIS if they were required to shoulder all the costs of preparing it. Currently, an EIS under NEPA often includes information largely compiled by a project proponent or a government contractor, so this delegation would not be unfamiliar to the NEPA system.239 This process would conclude with something akin to a record of decision.240 Instead of announcing whether or not the agency will approve the project, though, the record of decision would discuss how the new EIS informs the agency’s ongoing work, including enforcement priorities, future permitting processes, and funding decisions.

This amendment would vastly expand the potential scope of NEPA while maintaining the administrability of the statute by preserving agency discretion. Projects would not be paused or enjoined because, without a “major Federal action,” these preexisting sources would not necessarily have any pending agency permit approval or funding that a court could order the agency to halt.241 Nevertheless, the enforcement capabilities of agencies would vastly improve, as agencies like the EPA or the Bureau of Land Management contemplating enforcement actions against companies could leverage this new power to gather useful information and data.242 In Wilmington, for example, the EPA could conduct an environmental assessment of Phillips 66’s

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239 See 40 C.F.R. § 1506.5(b) (2022) (authorizing an agency to require information from a project proponent, to direct the project proponent to prepare an EIS, or to hire a consultant to do so); Ezekiel J. Williams, The Role of the Project Proponent in the NEPA Process, FAEGRE DRINKER, https://www.faegredrinker.com/webfiles/Role%20of%20the%20Project%20Proponent%20in%20NEPA%20Process.pdf [https://perma.cc/9UVU-PKSP] (last visited Apr. 13, 2023).
240 See supra Section II.B.
241 See Wesley B. Hazen, The Birds, the Bees, and Equitable Relief: Limitations and Restrictions on Judicial Relief Under NEPA, Through the Lens of Lakes and Parks All. of Minneapolis v. Fed. Transit Admin., F.3d 759 (8th Cir. 2019), 7 OIL & GAS NAT. RES., & ENERGY-J. 127, 134–35 (2021) (discussing the federal action component of projects under NEPA review and how courts allow actions to proceed if there is no federal-action-like funding).
Wilmington refinery, and the Department of Transportation could evaluate the roads in and out of the Ports of Los Angeles and Long Beach. These analyses would not shut down projects but could catalyze future agency enforcement action, equip Wilmington residents with the data and science they need to hold polluters accountable, and signal to Wilmington residents—who have felt “put down,” “overlooked,” and “squelched” by the government for generations—that the federal government is working to correct historical injustices.

In the context of civil rights, the EPA has signaled an increased investment in Title VI cases by creating a new Office of Environmental Justice and External Civil Rights, releasing guidelines on environmental justice and permitting, and announcing several Title VI investigations. But the EPA still routinely gets inundated with Title VI complaints and needs more resources to effectively investigate and manage claims, let alone negotiate or litigate the cases that proceed. The ability to order an EIS for existing projects that otherwise would not fall under NEPA—increasing the information available to the EPA—would reduce and streamline the investigatory burden on the agency and ultimately improve Title VI enforcement, allowing a procedural amendment to inform substantive rights.

Both of these suggested amendments to NEPA would benefit Wilmington residents, and they would help the statute fulfill its bold commitment “to use all practicable means . . . [to] assure for

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243 Saraiva, supra note 20.
all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings [and] attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."

B. Giving CEQA Environmental Justice Teeth

CEQA imposes more rigorous procedural requirements than NEPA, and it has been interpreted to possess some substantive components. But CEQA’s scope is still limited, and its incorporation of environmental justice concerns is weak. Wilmington residents have attempted to use CEQA to address existing pollution sources but have mostly encountered roadblocks. Thus, two CEQA reforms are needed. First, CEQA should be amended to create a process through which individuals or organizations can petition state agencies for a CEQA environmental review of an existing pollution source. State agencies should be required to review and investigate all petitions. If the agency concludes, mirroring RECSA in Guatemala, that the source significantly deteriorates natural resources, the environment, or community and cultural welfare, the agency would be required to evaluate the preexisting source under the CEQA process. Pursuant to judicial interpretations of CEQA, that evaluation would have to include the “health consequences” of the source’s operations.

The objective of this amendment, similarly to the NEPA amendment described above, is to expand CEQA’s scope and address preexisting pollution sources like the ones besetting Wilmington. This amendment differs from the NEPA amendment in that it would provide community members an opportunity to directly identify harmful pollution sources and petition the government to gather more information by preparing an EIR. This amendment is suggested for California and not NEPA because it will be more politically possible in California, an environmentally ambitious and progressive state, and because this participatory

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248 42 U.S.C. § 4331(b).
249 See supra Section II.A, II.C.
250 This requirement would resemble the EPA’s obligation to “promptly investigate” all Title VI complaints filed with the agency. See 40 C.F.R. § 7.120 (2023).
251 See RECSA art. 3, 5, 18.
252 Cnty. of Fresno, 431 P.3d at 1158.
petition process is best managed by state and local governments, not federal agencies.\textsuperscript{253}

Once the state establishes this petition process, state agency decisions to deny such petitions could be reviewed by courts under CEQA’s “abuse of discretion” standard.\textsuperscript{254} Factual conclusions the agency made would receive deference, but an agency’s compliance with newly required procedures would be reviewed de novo.\textsuperscript{255} This judicial review process would incentivize agencies to conduct thorough evaluations of petitions and accept plausible ones to avoid litigation risk, meaning that Wilmington residents would have more opportunities to present evidence of environmental harms and that state officials would more frequently scrutinize decades-old polluting infrastructure. Crucially, this process would then trigger CEQA’s mitigation requirements.\textsuperscript{256}

After CEQA’s provision directing state agencies to mitigate effects,\textsuperscript{257} a new subsection should be added stating that “[e]ach owner or operator of a private project required to comply with the provisions of this division shall mitigate or avoid the significant effects on the environment projects that it owns or operates whenever it is feasible to do so.” With this substantive force, sources like Wilmington’s oil refineries or hazardous waste facilities, if subjected to CEQA after a public petition, would be required to reduce their air pollution impacts or point to specific “economic, social, or other conditions [that] make it infeasible to mitigate.”\textsuperscript{258} As seen in prior CEQA cases,\textsuperscript{259} if a source fails to comply, a court could order the project to suspend operations until feasible mitigation is achieved, delivering tangible emissions relief to Wilmington residents. Imitating RECSA,\textsuperscript{260} this amendment could even go further and authorize fines against projects that fail to mitigate.

Second, for new projects, the California legislature should amend CEQA to explicitly require an environmental justice...
analysis in every CEQA document, and to impose a substantive environmental justice obligation. Using NEMA as inspiration, CEQA should be amended to expressly incorporate environmental justice. An independent environmental justice analysis should be required for every EIR and finding of no significant impact. This additional duty would ensure that impacts on overburdened communities like Wilmington are always considered and that new projects cannot skirt the CEQA process by ignoring environmental justice implications. Again, this requirement would implicate other CEQA provisions, requiring agencies to mitigate any significant effects identified in these environmental justice analyses and to consider feasible alternatives.

Further, CEQA should emulate NEMA and require that a state agency shall not approve, fund, or permit a new project or a project modification if it will create or exacerbate an intolerable level of environmental harms in disadvantaged communities. Just as NEMA and its judicial interpretations obligate all development to be socially and environmentally sustainable, CEQA should adopt a firm, substantive barrier to prevent the kinds of deadly cumulative burdens that are seen in Wilmington. “Disadvantaged communities” in California are already defined by the California Environmental Protection Agency (“CalEPA”) pursuant to statewide legislation, so CEQA should adopt this definition and prohibit disproportionate cumulative impacts in those areas. CalEPA would likely be best equipped to set the

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261 See supra Section III.B.
262 These provisions would likely be located at CAL. PUB. RES. CODE § 21002.1 (West 2023) for EIRs and CAL. CODE REGS. tit. 14, § 15071 (2023) for so-called “negative declarations,” finding no significant impacts.
264 New Jersey’s recently enacted Environmental Justice Law requires an “environmental justice impact statement” and directs the state to deny permits where cumulative impacts will disproportionately harm an overburdened community. See N.J. STAT. ANN. § 13:1D-160(4)a(1) (West 2020). New York also recently enacted a law with very similar requirements. See N.Y. ENV’T CONSERV. LAW § 70-0118(3)(b) (McKinney 2023). These two laws are important and merit more discussion in future scholarship.
level at which cumulative impacts become intolerable. Another holistic approach would be to replicate RECSA’s provision mandating that the government reject a project when its cumulative impacts exceed the carrying capacity of the affected environment.266

Despite CEQA’s potential to incorporate powerful substantive duties, seeking to significantly reduce pollution burdens through a largely procedural statute possesses inherent challenges. CEQA’s plethora of exemptions and carve-outs also hampers its utility. More importantly, even the most ambitious CEQA reforms do not legally recognize the rights of Wilmington residents and others to live in a clean and healthy environment. This Article therefore seeks to briefly connect the dialogue around procedural environmental obligations with the increasingly prominent discussion of a substantive human right to a healthy environment.267

C. An Environmental Rights Amendment in California

California does not have an explicit right to a healthy or clean environment in its state constitution. Given the historical importance of water rights in California, the state constitution does provide that all water in the state must be “put to beneficial use” and that the state must prevent “waste or unreasonable use.”268 The state constitution also includes a right to fish,269 it codifies the public trust doctrine for navigable waters,270 and it declares a public interest in “protecting the environment.”271 Regardless, courts in California have confirmed that “[n]either the state nor federal Constitution guarantees a right to a healthful or contaminant-free environment.”272 California has refrained from joining other states that have adopted state constitutional

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266 See supra Section III.B. Along with CalEPA’s definition, the Inflation Reduction Act and the Justice40 Initiative define and direct resources to disadvantaged communities. See Inflation Reduction Act & Justice40, supra note 263. These definitions should be consulted if California does incorporate environmental justice directly into CEQA.

267 See G.A. Res. 76/300, ¶ 20 (July 28, 2022) (recognizing “the right to a clean, healthy and sustainable environment as a human right”).

268 CAL. CONST. art. X, § 2; accord United States v. State Water Res. Control Bd., 227 Cal. Rptr. 161, 186–88 (Cal. Ct. App. 1986) (holding that impairing water quality was a sufficient basis for concluding that a water use was unreasonable under the state constitution).

269 CAL. CONST. art. I, § 25.

270 CAL. CONST. art. X, § 4; see also Friends of Martin’s Beach v. Martin’s Beach 1, 201 Cal. Rptr. 3d 516, 532 (Cal. Ct. App. 2016).


272 Coshow v. City of Escondido, 34 Cal. Rptr. 3d 19, 31 (Ct. App. 2005) (holding there is no fundamental right in California to contaminant-free public drinking water).
amendments enshrining such a right. These constitutional provisions or ERAs have been adopted by seven states but range in their scope, specificity, and subsequent interpretation by courts. New York’s ERA, approved in 2021, simply reads: “Each person shall have a right to clean air and water, and a healthful environment.” Massachusetts’ ERA involves more particular rights: “The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment.” Despite the differences between ERAs, they all generally spur on and streamline the legislature’s ability to enact environmental legislation, aid courts in broadening interpretations of environmental statutes, and increase access to justice.

Importantly for the residents of Wilmington, ERAs can help address cumulative impacts in several ways. First, although ERAs do not provide a cause of action to every citizen of a state, ERAs support standing for individuals and public interest groups, thereby lowering the barriers to legal redress faced by residents in overburdened communities. In the face of all of the obstacles to obtaining substantive legal relief experienced by Wilmington residents, including the judicial interpretation of Title VI, an ERA in California would greatly assist Wilmington residents in bringing claims for pollution-related harms in court. Second, courts have interpreted ERAs to require the consideration of a broader range of impacts than NEPA or CEQA require, including remote interstate greenhouse gas emissions. Thus, an ERA in California could expand the spectrum of cumulative impacts considered for any new project in Wilmington.

274 See Adashek, supra note 170, at 130 n. 117 (listing the seven states as Hawaii, Illinois, Massachusetts, Montana, New York, Pennsylvania, and Rhode Island but acknowledging that there is debate over how many states have ERAs based on how an ERA is defined).
275 N.Y. CONST. art. I, § 19.
276 MASS. CONST. art. XCVII.
277 See Adashek, supra note 170, at 131–33.
278 See id. at 145–47.
280 See supra Section II.A.
Third and most importantly, ERAs provide extensive substantive protections to communities like Wilmington. The ERA enacted in Montana, which California should use as a blueprint, illustrates this protection. Montana’s ERA, which establishes “the right to a clean and healthful environment” for “[a]ll persons,” was held to confer a “fundamental right” that cannot be violated by state nor private actors. Courts in Montana “will apply strict scrutiny to state or private action which implicates” the right, meaning the action will rarely be upheld. With an ERA like Montana’s in California, no new or existing facility could violate an individual’s right to clean and healthy air, and no triggering federal or state action—such as funding or permitting—would be required as it is under NEPA and CEQA. While procedural statutes like NEPA and CEQA may require the consideration of cumulative impacts, ERAs impose obligations on governments and companies alike to refrain from overburdening communities in the first place. In a ruling that could be applied to any number of pollution sources in Wilmington and across California, one court interpreting New York’s ERA concluded that “the [l]andfill is still causing [o]dors and [f]ugitive [e]missions which plague the community, therefore more needs to be done to protect [the plaintiffs’] constitutional rights to clean air and a healthful environment.”

There have been some legislative efforts in California to codify environmental rights for children, and several bills have asserted a right to a healthy environment in definitions or in aspirational preamble language. But no real movement has

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282 Many argue that the use of the word “healthy” rather than “healthful” provides stronger environmental protection and avoids anthropocentrism. See Adashek, supra note 170, at 139–41. Thus, California should use the word “healthy.”

283 MONT. CONST. art. II, § 3.

284 Montana Env’t Info. Ctr. v. Dept of Env’t Quality, 988 P.2d 1236, 1246 (Mont. 1999) (holding that Montana statute which exempted incidental leakage from public water and sewage systems from a general policy against water quality degradation violated the state constitution).


286 ERAs also increase the willingness of courts to find cumulative impacts analyses inadequate, as seen in Montana. See Matthew Brown & Amy Beth Hanson, Judge Cancels Montana Gas Plant Permit Over Climate Impacts, AP NEWS (Apr. 7, 2023, 12:32 PM), https://apnews.com/article/yellowstone-power-plant-permit-climate-3e6281661f5fa00ee81a02a5dd8d31 [https://perma.cc/9YEU-CLQ9].


coalesced in California to pass an ERA, which belies the state’s status as a bastion for climate action. In fact, a ballot initiative was proposed in 2012 that would have amended California’s constitution and “[e]stablish[ed] new inalienable rights to produce, distribute, use, and consume air, carbon dioxide, water, food, habitat for humanity, universal heal thyself care, and energy generating natural resources,” essentially codifying a right to pollute. California politicians, organizations, and voters should now follow the example set by other state environmental leaders and enact an ERA that will undeniably guarantee the right of Wilmington residents and Californians at large to breathe clean air.

CONCLUSION

Wilmington residents have to live and work in their community every day in a toxic environment. They are surrounded by industries and polluting facilities that were sited in Wilmington deliberately over decades. Wilmington’s people often do not share in the benefits of these industries and production processes. But they do experience the burdens. Highways, ports, oil wells, refineries, Superfund sites, and waste management facilities make every breath in Wilmington a liability. It is incumbent upon society, particularly political leaders, to offer some sort of path toward redress for this community.

Substantive legal safeguards for Wilmington residents fall well short, rarely preventing projects from being built or continuing to operate even where the air quality proves deadly. NEPA and CEQA have surely served laudable roles in defending against environmental abuses. Both statutes have reorganized government functioning such that environmental impacts must be considered throughout the decision-making process, and both have resulted in tangible emissions reductions. Yet these statutes do not do enough. NEPA is purely procedural, and CEQA is rife with exemptions. Neither law applies to the preexisting sources of pollution that make Wilmington an air pollution catastrophe. Both statutes must be shored up by legislatures in order to maximize their efficacy, address the cumulative impacts wrought by preexisting pollution sources, and ensure environmental justice is integrated into any environmental review process.

Countries around the world continue to enact and bolster their own EIA laws. The U.S. can learn from the best practices of other nations and import the most effective portions of others’ EIA statutes. First, Guatemala’s EIA law expressly incorporates cumulative impacts, applies to preexisting facilities, and prohibits projects that environmentally overburden communities. Second, South Africa’s EIA statute performs similar functions and also requires post-project monitoring, specifically addresses environmental justice, and carries substantive force when read in tandem with the country’s constitution.

The U.S. should borrow from these statutes to improve air quality in communities like Wilmington and correct for the inevitable drawbacks of substantially relying on procedural laws to ensure environmental well-being. Congress should amend NEPA to reflect the positive attributes of Guatemala’s and South Africa’s laws, including by allowing NEPA’s application to preexisting facilities and defining cumulative impacts within the language of the statute rather than in administrative regulations. In California, CEQA must be reformed to apply to preexisting sources like those in Wilmington and to embrace environmental justice. Such reforms would be possible and fitting in a state that has led the charge on environmental protections and repeatedly shone a light on environmental injustice.

Ultimately, though, reducing devastatingly harmful cumulative pollution burdens should not depend on a few provisions in procedure-based EIA statutes. If human rights and environmental law overlap at all, Wilmington residents and others like them lie at the heart of that intersection. Any reasonable rights-based framework should acknowledge that the basic rights of these residents are being violated. An ERA in California, and a growing movement for more ERAs around the country, would be a tremendous step towards a more equitable future.