

This memorandum relates to the **MODEL STATUTE REQUIRING INDIRECT SOURCE PERMITS FOR NEW OR EXPANDED FACILITIES GENERATING SIGNIFICANT VEHICULAR TRAFFIC.**

Introduction

This model bill aims to reduce the pollution generated by new indirect sources, which are facilities and other developments that attract or produce increased vehicle traffic and other mobile sources of pollution.¹ Indirect sources can include highways, e-commerce distribution centers and warehouses, shopping centers, and other large facilities. Whether viewed in isolation or in conjunction with other sources of pollution in the area, indirect sources can have detrimental health effects on those who live, work, attend school, or recreate nearby.

While an indirect source itself may not be a significant source of emissions, the mobile sources that it attracts can increase air pollution in the surrounding area. For example, a 2020 study found that the opening of a large delivery warehouse increased truck and vehicle traffic in the surrounding area by up to 40 percent, with observed increases in air pollution and noise as a result.² The project's environmental assessment failed to identify areas where traffic increased, underestimating the impact of the new facility on the surrounding neighborhoods.

High-traffic facilities and major roadways are disproportionately located in low income communities and communities of color,³ which are also more likely to be burdened by other sources of pollution and public health stressors.⁴ Overlapping environmental, social, and socioeconomic factors can limit the ability of some communities to engage fully in public decision-making processes that can influence where environmental hazards are located.⁵ While these communities are more likely to be burdened by pollution, residents are more likely to suffer from medical conditions that increase susceptibility to the negative health effects of pollution.⁶ The legacy of racism, income inequality, and marginalization exacerbates these effects. Limited access to essential services like affordable housing, quality healthcare, clean water, and reliable home heating and energy, combined with obstacles to social and economic

¹ Phillip E. Rothschild, The Clean Air Act and Indirect Source Review: 1970-1991, 10 U.C.L.A. L. Rev. 337 (1992), <https://escholarship.org/content/qt71q986z0/qt71q986z0.pdf>.

² Jenni A. Shearston et al., Opening a Large Delivery Service Warehouse in the South Bronx: Impacts on Traffic, Air Pollution, and Noise, Int. J. Envir. Res. & Pub. Health (2020).

³ Kaven Waddell, When Amazon Expands, These Communities Pay the Price, Consumer Reports (Dec. 9, 2021), <https://www.consumerreports.org/corporate-accountability/when-amazon-expands-these-communities-pay-the-price-a2554249208/>.

⁴ Rachel Morello-Frosch et al., Understanding the Cumulative Impacts of Inequalities in Environmental Health: Implications for Policy, Health Affairs (May 2011), at 882, <https://www.healthaffairs.org/doi/10.1377/hlthaff.2011.0153>.

⁵ Morello-Frosch et al., *supra*, at 883.

⁶ Morello-Frosch et al., *supra*, at 882.

mobility, increase a community's susceptibility to environmental harms and toxins.⁷ Exposure to the pollutants generated by indirect sources contributes to a number of serious negative health effects, including childhood asthma, impaired lung function, cardiovascular disease, and premature death.⁸

As e-commerce continues to expand and the demand for new warehouses and distribution centers increases, emissions from shipping trucks, last-mile delivery vehicles, and other polluting sources pose an increased risk to communities located near this expanding infrastructure.⁹ As a result, greater attention must be paid to the siting of facilities that can draw hundreds of additional vehicle trips to the surrounding area each day.¹⁰ By requiring a permit for the development of a new indirect source in or near a designated environmental justice area, this model law increases government review and creates new opportunities for community engagement in the siting of these facilities.

Functions of the Bill

In order to reduce pollution from indirect sources, this bill imposes new permitting requirements on the construction or expansion of facilities and other developments that are likely to attract significant traffic in designated environmental justice areas, which are discussed in more detail below. The bill's definition of "indirect source" captures major roadways and facilities with on-site parking exceeding specific thresholds, which are used as a proxy for the amount of vehicle traffic that the source is likely to generate.

In order to apply for an indirect source permit from the state's environmental protection agency,¹¹ an applicant must submit detailed information about the proposed construction or expansion, including estimates of vehicle traffic in and around the site, an air impact assessment evaluating the emissions associated with the indirect source, the locations of nearby community gathering places, and estimates of additional development that may result from the project. The bill includes bracketed placeholders for legislators to specify the radius that the application must

⁷ Equitable and Just National Climate Platform, September 2021, <https://www.weact.org/wp-content/uploads/2023/05/Defining-EJ-Community-for-Mandatory-Emissions-Reduction-Policy.pdf>.

⁸ American Lung Association, Living Near Highways and Air Pollution, <https://www.lung.org/clean-air/outdoors/who-is-at-risk/highways#:~:text=They%20concluded%20that%20traffic%20pollution,cardiovascular%20diseases%20and%20cardiovascular%20morbidity;> Morello-Frosch et al., *supra*, at 881.

⁹ Inside Climate News, In the Crossroads State of Illinois, Nearly 2 Million People Live Near Warehouses Shrouded by Truck Pollution (Apr. 30, 2023), https://insideclimatenews.org/news/30042023/in-the-crossroads-state-of-illinois-nearly-2-million-people-live-near-warehouses-shrouded-by-truck-pollution/?utm_source=InsideClimate+News&utm_campaign=6cfadb8a7-EMAIL_CAMPAIGN_2023_05_06_01_00&utm_medium=email&utm_term=0_29c928ffb5-6cfadb8a7-330336466.

¹⁰ Earthjustice, Minimizing the Negative Impact of E-Commerce: Why We Need an Indirect Source Rule, https://earthjustice.org/wp-content/uploads/earthjustice_isr_factsheet_2022.pdf.

¹¹ The bill and this memo both use the generic "state environmental protection agency" to refer to the state agency tasked with overseeing environmental conservation, quality, and protection.

cover when providing information about the area surrounding the site. A minimum of one-quarter mile is suggested,¹² although legislators may wish to extend this distance based on the needs of their jurisdiction.

As part of the application process, the applicant must also provide a description of the steps they are taking to or plan to take to reduce the environmental impact of the project, and the agency or local residents may also request that the applicant meet with the agency to discuss methods for further reducing the project's impact. Because the agency is empowered to impose conditions on the issuance of the indirect source permit, these provisions enable the agency to understand the scope of the proposal's impact and develop tailored solutions for mitigating emissions from the project, which could include a requirement that the applicant abide by the impact reduction plans described in its application. The agency should also consider conditions to improve the facility's engagement with affected communities, such as regular public meetings. In some cases, permit conditions can have constitutional implications, which are discussed in more detail below.

Each permit application is also required to go through a public comment period lasting a minimum of 90 days and including at least two public meetings. The bill includes provisions to ensure that this process is inclusive and accessible to members of the public who are most likely to be impacted by the project under consideration. The agency is required to consider and address the input received through this process in its final decision.

In approving any permit application, the agency is required to make at least one of two specific findings regarding the impact of the proposed project on the nearby environmental justice area. First, the agency may approve the permit if it finds that emissions from the indirect source will not exceed certain thresholds. The bill includes baseline thresholds for this provision, which legislators may consider raising based on the environmental and public health needs of their jurisdiction. These thresholds should also be periodically reevaluated to reflect developments in pollution control technology and scientific understanding of the health risks associated with exposure to air pollutants.

Alternatively, the agency may approve the permit if it determines that the indirect source is necessary for the public interest of the environmental justice area and no suitable alternative exists. In making the public interest determination, the agency can take into account whether the benefits of the indirect source to the impacted community will outweigh the negative environmental impacts it generates. The agency may also consider the existence of a community benefit agreement as evidence that the indirect source is necessary for the public interest. However, in instances where the agency is considering the expansion of an existing indirect source, it may also consider failure to abide by an existing community benefit agreement to be evidence that the expansion is not necessary for the public interest. This provision is designed to

¹² U.S. EPA, Near Roadway Air Pollution and Health: Frequently Asked Questions, https://www.epa.gov/sites/default/files/2015-11/documents/420f14044_0.pdf (noting that major roadways can influence air pollution levels within "a few hundred meters" of their location).

prevent the permitting of burdensome development based on vague promises of potential benefits for the area.

Environmental Justice Area Definition

This bill uses the term “environmental justice area” to designate areas that are known to experience or are likely to experience disproportionate environmental hazards, as well as communities that may face increased obstacles to participating in public decision-making processes.¹³ Only indirect sources that are to be located in these areas are subject to this bill’s permitting requirements. The bill’s definition of “environmental justice area” is critical to ensuring that the benefits of the bill flow to the communities most at risk of carrying a disproportionate pollution burden.

To that end, the definition uses four criteria to identify qualifying areas: 1) areas that qualify based on a single demographic factor that is closely tied to increased risk or decreased public participation; 2) areas ranking highly on national indices of susceptibility to environmental pollution; 3) lands of federally recognized tribes; and 4) specially designated areas.

1. Demographics

First, an area may be designated as an environmental justice area based on the demographics of its residents, as determined by the most recent U.S. Census or American Community Survey. Communities with more low-income households and households with limited English proficiency or limited formal education are included, as these demographics correspond to increased vulnerability to environmental hazards¹⁴ or decreased ability to participate in public decision-making processes.¹⁵ Information on these demographics is widely available, regularly updated, and fairly high-resolution, making these neighborhood

¹³ The language used in similar legislation can vary, but this bill uses the term “environmental justice area” rather than “overburdened” or “disadvantaged community” because it intends to capture communities that are most likely to be affected by cumulative impacts, therefore warranting additional attention in decision-making processes. It does not assume that all communities that meet these criteria are necessarily overburdened or disproportionately impacted by environmental stressors. Similarly, the word “area” is used in place of “community” to acknowledge that the boundaries used by the definition do not necessarily correspond with organic community boundaries and that multiple communities may overlap or intersect within a single qualifying area.

¹⁴ Lori M. Hunter, *The Spatial Association Between U.S. Immigrant Residential Concentration and Environmental Hazards*, *Int. Migration Rev.* 460 (2000), <https://doi.org/10.2307/2675910>; California Office of Environmental Health Hazard Assessment, *Cumulative Impacts: Building a Scientific Foundation* 7 (2010), <https://oehha.ca.gov/media/downloads/calenviroscreen/report/cireport123110.pdf>.

¹⁵ Janet A. Phoenix, *Anti-Resilience Factors of Environmental Justice Communities*, in Environmental Justice and Resiliency in an Age of Uncertainty 72, 74 (2022) (“This has the potential to reduce the number of residents in environmental justice communities who are able to interpret what data exists documenting exposures, leaving communities more vulnerable. ... Reports that are released for public comment may be written in technical language and/or at a high reading level or in language that cannot be understood by affected community members.”).

characteristics well-suited to use in statewide legislation, particularly in jurisdictions that do not have resources to conduct additional data collection.¹⁶

The demographic category also incorporates racial demographics¹⁷ based on the close correlation between race and exposure to environmental hazards.¹⁸ Racial demographics are a significant predictor of the distribution of environmental burdens because of the legacy of racial segregation and discrimination, and the “spatially concentrated disproportionate pollution burdens in communities of color” that increase their risk of exposure to environmental harms.¹⁹ More information about this designation, including an analysis of the potential legal implications of including this factor, is included below in the section titled “Use of race in designation of environmental justice area.”

2. Susceptibility metrics

In addition to the single demographic metrics, the bill includes areas that have been designated as highly susceptible to environmental pollution by the United States Environmental Protection Agency’s demographic indices.²⁰ While these indices rely on much of the same demographic data included in the demographic definition, a high overall score on these susceptibility metrics may help to identify additional communities that fall slightly below the demographic thresholds identified but that are nevertheless still at heightened risk of environmental hazards. As discussed in the section below on the use of race in designating environmental justice areas, the United States Environmental Protection Agency EJSCREEN demographic index relies in part on racial demographics.

3. Tribal land

The designation of lands of federally recognized tribes as “environmental justice areas” serves two purposes. First, it recognizes that Indigenous communities bear a disproportionate

¹⁶ EPA, Cumulative Impacts Research, *supra*, at 31 (“Cumulative impact assessments to inform local and site-specific decisions often need environmental and socioeconomic data at high-resolution temporal and spatial scales, such as the census block or finer. The costs of monitoring equipment and the lack of data collection infrastructure make it challenging to collect reliable data at fine spatial and temporal scales.”).

¹⁷ Although the Census and American Community Survey do not currently include Middle Eastern or North African as a racial status option, it is included in the bill due to the U.S. EEOC’s recent listing of this status and in anticipation of its inclusion in future surveys.

¹⁸ Bullard, R. D., Mohai, P., Saha, R., & Wright, B., *Toxic Wastes and Race at Twenty 1987–2007: Grassroots Struggles to Dismantle Environmental rRacism in the United States* (2007); Anderton, D. L., Anderson, A. B., Oakes, J. M., & Fraser, M. R., *Environmental Equity: The Demographics of Dumping*. *Demography*, 31(2), 229–248 (1994).

¹⁹ Equitable & Just National Climate Platform, *Approaches to Defining Environmental Justice Community for Mandatory Emissions Reduction Policy* (Sept. 2021), <https://www.weact.org/wp-content/uploads/2023/05/Defining-EJ-Community-for-Mandatory-Emissions-Reduction-Policy.pdf>.

²⁰ U.S. Environmental Protection Agency, *EJSCREEN Technical Documentation 24-30* (2022), <https://www.epa.gov/system/files/documents/2023-01/EJScreen%20Technical%20Documentation%20October%202022.pdf>.

share of pollution.²¹ Second, it recognizes the unique status and sovereignty of tribal nations by ensuring that they are included and adequately consulted in decisions impacting their land.

4. Agency approval

Lastly, the state environmental protection agency may designate additional areas as “environmental justice areas” if they are particularly vulnerable to environmental or public health hazards, have a history of disproportionate environmental burdens, or have a diminished capacity for public participation. This category gives the agency some discretion to identify additional areas that may benefit from the designation, and encourages flexibility in recognizing the input of community organizations, residents, and advocates who are closely connected to the issue of cumulative impacts.²² By doing so, it gives communities an opportunity to identify themselves for further consideration and ensures that no overburdened community is categorically excluded from being designated an environmental justice area.

Additional Issues to Consider

Use of race in designation of environmental justice area:

This model bill utilizes racial demographics in its definition of “environmental justice area,” a term that is used to identify areas that are more likely to be burdened by environmental hazards or associated health problems. These demographics are a strong predictor of an area’s exposure to environmental hazards,²³ making them a particularly salient metric for this bill.²⁴ However, their inclusion in this definition may increase the risk of litigation under state or federal equal protection law, which could delay or completely prevent implementation of the bill. Federal courts in multiple states have recently halted federal programs that contain racial classifications on the grounds that these classifications violate the Constitution’s Equal Protection Clause.²⁵

While the use of race-conscious metrics carries a risk of litigation, legislators might reduce this risk by ensuring that the use of race in their bill is narrowly tailored to achieve a compelling government interest, such as remedying past discrimination.²⁶ The Supreme Court's

²¹ Maggie Li et al., Air Pollution in American Indian Versus Non-American Indian Communities, 2000-2018, 112 American Journal of Public Health 615 (2022), <https://doi.org/10.2105/AJPH.2021.306650>.

²² Kiana Courtney, Environmental Law & Policy Center, #DenyThePermit? A Call for Cumulative Impacts Legislation by Frontline Communities (Dec. 8, 2021), <https://elpc.org/blog/deny-the-permit-a-call-for-cumulative-impacts-legislation-by-frontline-communities>.

²³ Letter from Sacoby Wilson, Professor, University of Maryland, to White House Council on Environmental Quality (Apr. 8, 2022), available at https://downloads.regulations.gov/CEQ-2022-0002-0012/attachment_1.pdf.

²⁴ Both New Jersey and New York utilize race-based criteria for identifying impacted communities in environmental justice laws. See 13 NJ ST Ch. 1D-158; NY Enviro. Conserv. Law § 75-0111).

²⁵ See, e.g., *Vitolo v. Guzman*, 999 F.3d 353, 360 (6th Cir., 2021) (enjoining a program that prioritized minority-owned businesses, among others, for coronavirus relief grants); *Faust v. Vilsack*, 519 F.Supp.3d 470 (E.D. Wis. 2021) (enjoining a program that provided loan relief to “socially disadvantaged” farmers, a category defined in part based on race).

²⁶ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 227 (1995).

recent decision in *Students for Fair Admissions, Inc. v. President and Fellows of Harvard College*²⁷ affirmed this standard for the consideration of race in government decision-making. Legislators wishing to further minimize the risk of an equal protection challenge can modify the definition of “environmental justice area” to eliminate the use of racial demographics. To do so, provision [2.3(a)(ii)] should be removed, as well as the reference to “United States Environmental Protection Agency EJSCREEN demographic index” in [2.3(b)]. Legislators should also consider the extent to which state constitutional law may limit the use of race.

Conditions on permit approval

[Subsection 4.3] of the model law requires the state environmental protection agency to prescribe reasonable and appropriate conditions and safeguards on the permitted project to minimize negative environmental impacts in the surrounding area. Federal constitutional law places some limits on the ability of permitting bodies to place restrictive conditions on permit approvals.²⁸ While state authorities “may choose whether and how a permit applicant is required to mitigate the impacts of a proposed development,” the Constitution requires that “an essential nexus and rough proportionality” exists between the conditions imposed and the government’s interest in mitigating the effects of the development.²⁹ This enables regulators to impose permit conditions that minimize the impacts of a polluting facility, but prohibits the imposition of conditions that are not closely tied to this purpose, which may be seen by courts as improperly restricting the property rights of the permit applicant. As a result, conditions placed on permit approvals should be reasonably designed to address the nature and extent of the impacts that the indirect source will have on surrounding communities.

This bill is written to comply with these federal constitutional limits, but modifications may be necessary to comply with any more restrictive state constitutional doctrines.

Jurisdictions Implementing Similar Legislation

The San Joaquin Valley Air Pollution Control District, based in Fresno, California, implemented an indirect source review program in 2006. The program applies to a wide range of residential, commercial, industrial, office, and other development projects, and requires specific reductions for emissions associated with different components of proposed projects.³⁰ Since its inception, the program has reviewed more than 3,000 projects³¹ and is estimated to have reduced emissions by more than 5,000 tons over the course of its most recent annual reporting period.³²

²⁷ 600 U.S. ____ (2023).

²⁸ *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825 (1987); *Dolan v. City of Tigard*, 512 U.S. 374 (1994).

²⁹ *Koontz v. St. Johns River Water Mgmt. Dist.*, 570 U.S. 595, 606 (2013).

³⁰ San Joaquin Valley Air Pollution Control District, Rule 9510 (adopted Dec. 15, 2005, amended Dec. 21, 2017), <https://ww2.valleyair.org/media/cjlnn0u1/r9510-a.pdf>.

³¹ State of Oregon Department of Environmental Quality, Oregon Environmental Quality Commission Meeting (Mar. 18, 2020), https://www.oregon.gov/deq/EQCdocs/03182020_Item1_PetitionAction.pdf.

³² San Joaquin Valley Air Pollution Control District, Indirect Source Review Program 2022 Annual Report, <https://ww2.valleyair.org/media/xbtpmlki/2022-isr-annual-report.pdf>.

In 2021, the South Coast Air Quality Management District in Southern California adopted an indirect source rule for warehouses larger than 100,000 square feet.³³ Although this regulation operates largely through a points-based system that incentivizes warehouse operators to take emissions-reducing actions, its roll-out over the next several years may provide insights that are applicable to the design and implementation of other types of indirect source regulation like this model law.

In addition to these existing regulatory programs, this model law draws from the proposed regulations developed by Lewis and Clark Law School's Green Energy Institute.³⁴ While this proposal was designed specifically for the state of Oregon and was developed as a regulatory, rather than legislative, solution, it provides a helpful framework for the creation of an indirect source review program at the state level. The Oregon Department of Environmental Quality's response to the proposal, which declined to move forward with the proposed regulation, also serves as a valuable resource for understanding additional considerations that may arise in indirect source regulation.³⁵ This response also includes useful reporting on the implementation of the San Joaquin Valley Air Pollution Control District's program.

³³ South Coast Air Quality Management District, Rule 2305 (adopted May 7, 2021), <http://www.aqmd.gov/docs/default-source/rule-book/reg-xxiii/r2305.pdf?sfvrsn=9>; South Coast Air Quality Management District, South Coast AQMD Governing Board Adopts Warehouse Indirect Source Rule, <http://www.aqmd.gov/home/research/pubs-docs-reports/newsletters/august-september-2021/indirect-source-rule#:~:text=The%20rule%20requires%20warehouses%20greater,these%20pollutants%20in%20nearby%20communities>.

³⁴ Melissa Powers et al., Petition to Promulgate Indirect Source Rules (Dec. 20, 2019), <https://law.lclark.edu/live/files/29224-indirect-source-rule-petition122019pdf>.

³⁵ State of Oregon Department of Environmental Quality, Oregon Environmental Quality Commission Meeting (Mar. 18, 2020), https://www.oregon.gov/deq/EQCdocs/03182020_Item1_PetitionAction.pdf.