

Cumulative Impacts

Background and Policy
Recommendations

What Are Cumulative Impacts?

Cumulative impacts capture how multiple sources of pollution can be compounded by other stressors, such as a lack of access to healthy foods or socioeconomic stress that lead to adverse health outcomes (1).



Image from [Tishman Environment and Design Center](#)

Cumulative impact bills are one way states can institute and enforce protections for communities that are disproportionately exposed to industrial pollution by considering the combined, incremental impacts of exposures that can accumulate over time (2). These bills can prevent the approval and reissuing of permits for projects that may disproportionately increase pollution in EJ communities.

Cumulative impacts have been studied a lot in the last few years, but more and more states are now taking action through introducing or passing legislation (3).

A 2023 EDF survey identified 8 states with cumulative impact bills currently in place and several more states with proposed cumulative impact bills (2).

Pennsylvania's Cumulative Impacts Bill HB 109

House Bill (HB) 109 defines an **environmental justice area** as an area with increased pollution burden and a population deemed vulnerable based on demographic, economic, health, and environmental data (4). This is an improvement from how EJ areas were previously defined based on income.

Pennsylvania is one of the states with a proposed cumulative impact bill in the legislature. If passed, HB 109 would require permit applicants for a new facility or expansion of an existing facility located in an environmental justice area to submit a cumulative environmental impact report along with all other required documents to the Department of Environmental Protection (DEP).

The report should: assess the environmental impacts of the facility, the cumulative impacts on the environmental justice area, and its negative environmental impacts that cannot be avoided.

Public Participation. HB 109 would also require a public hearing, if not already required, during which the permit applicant must provide the affected community with information on the facility and its potential environmental and health impacts, as well as an opportunity for meaningful community participation.

Meaningful Consideration. DEP must consider the testimony presented in evaluating any revisions that may be made to the permit. Further, affected municipalities would also have the opportunity to provide recommendations and revisions to the permit – DEP has the ability to override these recommendations with proper justification.

Agency Discretion. HB 109 would empower DEP to deny a permit application on the basis of its cumulative environmental impacts, or require additional conditions or mitigation measures be put in place when necessary.





Another Opportunity: DEP Rulemaking

Clean Air Council has previously urged DEP to require, as part of a rulemaking, a cumulative risks assessment which DEP would use to determine whether or not to approve a permit.

Under this potential rulemaking, DEP should require permit applicants for large pollution sources to **conduct health risk assessments** associated with their proposed facility. Specifically, risk assessments should explore potential cancer and non-cancer risks to nearby communities and account for all other existing nearby pollution sources as well as the various pathways of exposure that may occur. In order for DEP to approve a permit, an applicant's risk assessment must demonstrate cancer and non-cancer risks associated with the project and other environmental exposures do not exceed science-based thresholds.

As part of this effort, DEP should also conduct community outreach and provide engagement opportunities for affected communities

Endnotes

- (1) Baptista, A. I., Sachs, A., & Rot, C. (2019). **Local Policies for Environmental Justice: A National Scan**. Tishman Environment and Design Center. Retrieved July 29, 2024, from <https://rucore.libraries.rutgers.edu/rutgers-lib/59871/PDF/1/play/>
- (2) **EDF State Climate Equity Report: Documenting How State Rules Support a Just and Equitable Energy Transition**. (2023). Environmental Defense Fund. https://www.edf.org/sites/default/files/2023-12/EDF%20State%20Climate%20Equity%20Report_0.pdf
- (3) Baptista, A. (2023, October 4). **Environmental Justice and the Cumulative Impacts of Pollution**. Resources. <https://www.resources.org/archives/environmental-justice-and-the-cumulative-impacts-of-pollution/>
- (4) **House Bill 109** (2025). <https://www.palegis.us/legislation/bills/2025/hb109>
- (5) **Environmental Justice Law** (2020). <https://dep.nj.gov/wp-content/uploads/ej/docs/ej-law.pdf>
- (6) **Governor Murphy Announces Nation's First Environmental Justice Rules to Reduce Pollution in Vulnerable Communities**. (2023, April 17). <https://www.nj.gov/governor/news/news/562023/approved/20230417a.shtml>

Other States' Examples

States across the country are introducing or already have cumulative impact laws. The environmental justice law in [New Jersey](#) is a prime example (5).

In 2020, NJ was the first state to pass an environmental justice law that accounted for cumulative impacts in the permitting of polluting industrial sources. In April of 2023, the [NJDEP finalized regulations](#) for how the law would be enforced (6). The law requires permit applicants for a new facility, expansion of an existing facility, or renewal of a major source permit located in an environmental justice area to prepare an environmental justice impact statement. This statement must assess potential environmental and health stressors associated with the permit project, including unavoidable stressors and existing stressors already experienced by the community.

The law also requires the permit applicant to hold a public hearing in the affected community, where information about the proposal and the potential environmental and health impacts is provided. DEP then has the opportunity to review any testimony from the hearing to determine whether additional conditions are needed.

From the cumulative impacts, DEP has the ability to deny a permit or impose restrictions to minimize the potential stressors from a proposed project.

Conclusion

Cumulative impacts legislation is a way for states to leverage permitting to protect communities that have a legacy of facing environmental injustices and experience socioeconomic stressors that may make them more vulnerable to industrial pollution.

Pennsylvania's HB 109 – if passed – would join several other cumulative impact laws across the country and enhance DEP's permitting process by increasing public participation, considering input from the public and municipality, and giving DEP discretion to deny a permit on the grounds of cumulative impacts.

PA DEP can also pursue a rulemaking that would require human health risk assessments as part of the permitting process, ensuring potential projects – on top of existing pollution sources – are not increasing health risks in the community