May 19, 2025

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Subject: Comments on the Guidelines and Standards for Cumulative Impact Analysis (CIA) as part of the 2024 Climate Act requirements

Epsilon Associates, Inc. appreciates the opportunity to review the straw proposal for the development of standards and guidelines for cumulative impact analysis (CIA) that will be required as mandated under the 2024 Climate Act for new energy infrastructure. Broadly we have the following recommendations:

- Align with the MassDEP and MEPA processes;
- Avoid requiring the use of low-quality data;
- Rely on health-based standards; and
- Use the simplest analyses that serve the goals, with the clearest guidance possible.

Detailed comments are provided below.

Alignment with Other Programs or Departments

The Massachusetts Department of Environmental Protection (MassDEP) has already developed mapping and other tools for conducting CIAs as part of air permitting, and the Massachusetts Environmental Policy Act (MEPA) office has been implementing enhanced Environmental Justice (EJ) analyses as part of its review process for several years. We encourage coordination with MassDEP and the MEPA office to allow a streamlined review of existing environmental conditions for projects subject to the various program or department requirements. The creation and use of different methodologies to evaluate cumulative impacts under different jurisdictions will add to confusion and discourage projects from being built in Massachusetts. This will hinder the climate goals for Massachusetts as new clean energy projects will not go forward. Communities that would benefit from these projects will lose these opportunities to other states that don't have onerous, costly or uncertain permitting requirements.

CIA Indicators and Associated Uncertainty

Although few details on the exact methodology for conducting a CIA as part of the 2024 Climate Act requirements are available at this time, we understand that a tool similar to CalEnviroScreen is being considered. CalEnviroScreen has significantly fewer indicators than the proposed indicators that were presented in the straw proposal presentation (May 5th 2025 Stakeholder Session 4). The indicators that are part of CalEnviroScreen are divided into groups describing pollution burden, environmental

sources of pollution, sensitive population groups and socioeconomic factors. These are different from the group of indicators and stressors that were part of the straw proposal, which included build environment, climate change, natural environment and population characteristics. Furthermore, while CalEnviroScreen has a limited number of indicators that were selected based on availability of good data, the list of indicators presented in the straw proposal was much more extensive. We urge that the number of indicators be reduced to a manageable number, focusing on the most critical indicators, and those for which good scientific data are available. Importantly, selection of the indicators should ensure that there is no double counting of potential impacts. Also, measurable indicators are better than proximity indicators as proxies for exposure (such as distance to facilities) as further discussed below.

When considering selection of indicators, we note that there is a large amount of uncertainty in the underlying data for many of the EJ indicators. For example, the indicator for cancer and noncancer risks from air toxics is often based on data from US EPA's AirToxScreen. As noted by US EPA, the AirToxScreen estimates should not be used to compare risks at local levels (*i.e.,* at the Block Group level) because both demographic and environmental estimates underlying these data are associated with a large degree of uncertainty.[1] The uncertainty stems from the lack of information at the Census Tract of Block Group level. Because of little information at that level, available data, for example at the Census Block level, would be assumed to be the same for all the Block Groups in the Census Tract, even if there may be important differences. This approach is used for many environmental indicators. Lastly, many of the indicators are screening-level proxies of potential health impacts, and do not represent actual health impacts. This is especially true for the "proximity" indicators such as the indicator for traffic or proximity to certain permitted facilities. These uncertainties limit the use of these indicators for anything other than a screening level assessment.

Additional things to consider in the selection of indicators include:

- Accuracy of the data (air pollutant concentrations, location data for facilities, emissions information);
- How well the data on facilities/emission represent actual exposures to the census tract; and
- How well the vulnerability characteristics represent actual vulnerabilities for the community.

Furthermore, in developing weighting and scoring of indicators some questions to consider:

- How will indicators be weighed? Is this based on scientific evidence and concrete data?
- Is there a known mechanism of interaction to support scoring or weighing the indicator?

[1] AirToxScreen Frequent Questions | US EPA

- Is their evidence that supports using addition or multiplication for scoring impacts? Scoring based on multiplicative effects may be too conservative.

Health-based Standards

While in general environmental and social indicators can provide some useful context, there are limitations and some indicators may be redundant with air quality or other analyses that would be part of a CIA or other permitting requirements (*e.g.*, evaluation of criteria air pollutant impacts). For evaluating air quality, the standard compliance with National Ambient Air Quality Standards (NAAQS) should take precedence over relying on similar indicators for the criteria air pollutants (e.g., particulate matter, nitrogen dioxide or ozone). Health-based NAAQS are set at levels protective of the most sensitive population groups, including EJ communities. Similarly, if air toxics are at issue, air toxics risk assessments following guidelines already developed by MassDEP could be used instead of relying on indicators.

Streamlined Analyses and Clear Guidance

As noted above, we encourage the use of currently available tools in a qualitative manner and applying quantitative approaches only if appropriate and if good quality data are available. Many of the CIA elements appear to be descriptive in nature, utilizing maps to identify EJ areas and providing data associated with different indicators.

When considering population health burdens, it can be difficult to quantify how or if those health burdens would be exacerbated by any project impacts. Clear guidelines on what would constitute an exacerbation of health impacts or whether project impacts are adverse should be developed. Similarly, if mitigation options are proposed, these should be related back to any potential adverse impacts and should demonstrate how the mitigation could actually help to minimize or mitigate the impacts.

Overall, we encourage flexibility in how a CIA is conducted and a simplified path that includes targeted rather than a comprehensive list of indicators. Importantly, indicators should be selected based on the availability of good quality data. Clear thresholds for what constitutes existing environmental burdens and how to evaluate how the project would or would not contribute to additional burdens or adverse impacts is needed.

Additional Considerations

We also encourage clarity with regards to how other potential sources or facilities in and around the project site are considered within the context of the CIA. We note challenges in identifying model input parameters for sources not controlled by the applicant. It is foreseeable that an applicant could show an artificially high overall impact, because of the lack of good information regarding neighboring facilities' operations. We encourage considering any additional existing facilities or sources within a project area only if they are likely to contribute to a significant cumulative impact based on actual measured data.

The area of analysis should be specified in the guidelines. Current EJ analysis under MEPA and CIA requirements under MassDEP apply a 1- and 5-mile distances from the project for considering impacts to EJ populations. These distances overstate the general ability of pollutants (e.g. air pollutants) from a specific source to travel long distances. For example, peak modeled air impacts usually occur at the facility fence line or within 500 meters of the source. Therefore, the intent of the CIA could be met by evaluating cumulative impacts closer than 1 and 5 miles from sources.

Finally, when considering mapping tools, we note that the EEA EJ Viewer updated EJ areas, but these included several areas where residents live in group housing quarters, such as college and university dorms. As we understand it, the *Act Creating a Next Generation roadmap for MA Climate Policy*, requires the exclusion of university and college student demographic groups from EJ designation.[2] Block Group 4 in Census Tract 4044, which effectively outlines Wellesley College, is one example of a newly declared EJ population which may not represent the populations that the EJ regulations intend to protect. While it is documented in the EJ Maps Update 2022 FAQ that this is an ongoing topic of discussion for the Environmental Justice Council, we encourage any mapping tools to consider removing EJ designations from university and college dorm block groups in order to avoid having to conduct CIAs for projects near those areas. [3] Furthermore, project proponents should be able to defend the exclusion of block groups from EJ designation if other indicators, like household income, nearby new projects, or public health data, show no disproportionate impacts to the population. Reducing the number of CIAs submitted for projects near such areas will allow focus to be placed on time and resources for EJ areas that have a clear history of disproportionate environmental impacts.

Thank you for the opportunity to provide comments.

Sincerely,

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[2] https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8
[3] https://www.mass.gov/doc/environmental-justice-maps-update-2022-frequently-asked-questions/download