

Cumulative impacts

How should the MPCA know when to require a **MANDATORY** cumulative impacts analysis? **(DRAFT)**

A cumulative impacts analysis is **mandatory** when the potential impacts of issuing a permit:

1. Exceed benchmarks that will be established in rule; OR
2. May substantially impact the environment or health of the residents in an environmental justice area.

We want to hear your thoughts about what benchmarks should trigger a mandatory cumulative impacts analysis. Benchmarks need to be related to the environment or health of the residents in an environmental justice area and could include information such as the specific impacts from air, land, or water pollution. Benchmarks do not have to be numbers related to a specific project, they could be other triggers or drivers related to the area the project is in.

Examples of benchmarks that could mandate a cumulative impact analysis



When emissions exceed a certain rate (pounds per hour or tons per year)



When a proposed permit action also needs to go through a program like environmental review



When an area does not meet the National Ambient Air Quality Standards (NAAQS)



When one or more health or environmental stressors are greater than the county or state average

See the other side of this handout for some example benchmarks that other programs use.

Discussion questions

- What benchmarks, triggers, or drivers could determine whether a cumulative impact analysis is required?
 - What benchmarks, triggers, or drivers should not be used or considered?
- For emission-related benchmarks:
 - Should the MPCA require an analysis if there is no increase in air emissions? Why or why not?
 - Should the MPCA require an analysis only if the emissions increase is above a certain rate? Why or why not?
 - Should the removal of emission sources or reduction of emissions from a facility influence whether the MPCA requires an analysis? Why or why not?
- Should the MPCA have different benchmarks for different types of permit actions (new permit vs. reissued permit vs. amended permit)?
 - Should an analysis be required for a reissued permit if nothing has changed at the facility from the last time?
 - Should an analysis be required for an amended permit that does not allow a facility to increase emissions but changes other permit requirements like monitoring, recordkeeping, or reporting items?

Disclaimer: This document is a working document. This document may change over time as a result of new information, further deliberation, or other factors not yet known to the MPCA.

Examples outside of the cumulative impact analysis process – for reference only

Environmental Review comparisons

Certain proposed projects based on their nature, size, location, or other factors must go through environmental review before any required permits or approvals are issued. Environmental reviews can be mandatory or discretionary, and established rule-based thresholds and decision-based determinations govern when environmental review is required. All parts of a project – or multiple projects that are connected – must be considered in total when compared to the thresholds.

Some examples where a mandatory environmental review is required:

- When constructing or expanding certain types of facilities
 - New power plants capable of operating at a capacity of 25 megawatts or more
 - Expanding a petroleum refinery to increase production by 10,000 barrels per day or more
 - Landfills with a certain permitted capacity (100,000 cubic yards) or that expand by 25% or more
 - Paper or pulp processing mills that increase capacity by 50% or more
- When a facility generates pollution above a certain threshold
 - Increases of 250 tons per year or more of any air pollutant (100,000 tons per year of greenhouse gases)

Air permitting emission-based benchmark

The MPCA uses emission calculations, among other criteria, to determine what kind of permit amendment is needed for a proposed change. Facilities are required to calculate emissions – generally the maximum potential to emit – and compare to an emissions threshold (in pounds per hour or in tons per year). We could set similar thresholds for determining when a cumulative impact analysis is required. For example, any proposed change exceeding a threshold below requires a minor amendment. A minor amendment is the lowest level of change that requires a permit application to be submitted – a necessary step for triggering a mandatory cumulative impacts analysis.

Minor Amendment Thresholds	
Pollutant	Greater than:
NOx/SO2/VOC	2.28 lbs/hr
PM10	0.855 lbs/hr
CO	5.70 lbs/hr
Lead	0.025 lbs/hr

New Jersey Rule comparison

New Jersey’s environmental justice rules can serve as a model for what we are tasked with creating for Minnesota. Those rules have similar geographic and permit type applicability comparisons and use comparisons to determine how much information is required. These comparisons look at the health and environmental stressors in the area and the facility’s contribution to those stressors.

- New Jersey uses a data tool to compare these stressors to county and statewide averages to determine how much information the permit applicant must prepare.
- If an area experiences impacts greater than the county or statewide average, then they are required to prepare New Jersey’s version of a cumulative impacts analysis.