Cumulative impacts

Data inclusion criteria - **DRAFT**

How will MPCA narrow down which data indicators to include?

MPCA will need clear reasons for which data indicators must be included in cumulative impacts analysis. Below are some standards that we have already been thinking about and want to get your input on.

- What needs clarification or update?
- Are any standards missing? Any that can be removed?
- Are any of these standards more important than others?

Data characteristics	Possible standard	Reasons
Clear meaning and balancing indicators across multiple impact topics.	Similar number of indicators across the data topics. Each of the indicators represents a unique stressor.	Part of the process (still to be determined) will be adding up indicators to determine substantial adverse impact. Having uneven representation across topics would skew the analysis.
Geographic spread	Indicators are publicly available for all areas covered by the rule, including all MN First Class Cities (cities with population > 100,000).	Making a standardized and transparent process needs to have the same set of data available for all areas covered by the rule.
Geographic scale/size	Indicators are available at census tract or zip code level.	Smaller size is best for showing disparities and stressors that may be locally important.
Timeliness of publicly available data	Indicators should be updated regularly (at least every 1/2/3 years?)	Balance having timely and relevant information while not updating or changing so frequently that regulated parties can't keep up & comply.
Historic pollution burden	Indicators of past pollution burden, going back as far as there are reliable/quality data.	The legislation calls out past and current levels of pollution.

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Data characteristics	Possible standard	Reasons
Current pollution burden timeframe	Indicators will use the most recent data available and consider "current" as encompassing up to the most recent 5 years of data available. Availability and update schedule will be posted on the public data tool.	Some data take longer than others to be made publicly available, but we will still want to use the most recent and work toward most timely years. As an example, data on asthma ER visits can take more than a year to get to the Department of Health and then have to be combined over multiple years to share total numbers by zip code without compromising privacy rules.
Indicator calculations	Indicators should follow established calculations and methods, as possible.	Using established and even nationally consistent measures helps lend credibility and reproducibility to analysis, which are important for comparing data over space and time, with other jurisdictions, and ensuring high quality data inputs for implementing cumulative impacts analysis. For example, the U.S. Environmental Protection Agency tracks particle pollution levels as an annual and daily average so we would use the same calculation for high local air pollution levels.
Relevance to human health	Indicators should have a direct connection with human health.	The legislation specifies that the rule should pertain to cumulative impacts on human health, rather than broader impacts to the environment, even though we know that the two are closely related.