



Minnesota
Pollution
Control
Agency

Environmental
Review Program

Cumulative Potential Effects in Environmental Assessment Worksheets

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The topic of this fact sheet is the cumulative potential effects analysis in an Environmental Assessment Worksheet (EAW).

The purpose of this fact sheet is to provide information on this topic to citizens, project proposers, and consultants. This guidance is not intended to identify or prescribe the Minnesota Pollution Control Agency's (MPCA) approach for assessing the potential for cumulative effects for all possible scenarios.

What is an EAW?

An EAW is a screening document designed to gather and disclose information about potential environmental effects from a proposed project. It is also designed to provide the basic facts necessary to determine whether or not an Environmental Impact Statement (EIS) is required for a proposed action.

What are Cumulative Potential Effects?

Cumulative potential effects are environmental effects that result from the proposed project in conjunction with other projects in a given area. The effects from any one project may be small; however, the aggregated effects from all the projects together may be significant.

What do the EAW rules say about cumulative effects?

According to Minnesota rules, the EAW record must provide information about potential cumulative impacts. In fact, it is

one of four criteria that must be used to determine if a project has the potential for significant adverse environmental impacts. Cumulative effects on specific resources or media should be discussed throughout the EAW in the appropriate question on the EAW form. Question 29 specifically covers "cumulative impacts" and should recap earlier discussions and identify any issues which were not discussed previously.

What was the Supreme Court Decision from May 11, 2006, on Cumulative Effects?

The Minnesota Supreme Court (Court) issued a decision on a case called Citizens Advocating Responsible Development (CARD) vs. Kandiyohi County. In what is commonly referred to as the CARD decision, the Court described how a responsible governmental unit (RGU) should apply the rule criterion on cumulative potential effects for determining whether or not to order an EIS. For the full text of the CARD decision, see the Minnesota State Law Library web site at:

<http://www.lawlibrary.state.mn.us/archive/supct/0605/opa040886-0511.htm>

When guidance on assessing cumulative effects is developed by the Environmental Quality Board (EQB) for EAWs statewide, the guidelines outlined in this fact sheet may need revision to conform to the EQB's standards.

What are the key points in the CARD decision?

Briefly, the court identified the following items that should be included in a cumulative effects analysis in an EAW.

- Consideration of existing projects, as well as anticipated future projects, that have been planned or for which a ‘basis of expectation has been laid’ – in other words, future projects for which permit applications or EAWs have been submitted either at the state or local level, or other planning documents including developer presentations that have been made before a planning commission.
- Consideration of a limited geographic area surrounding the project, in which facilities may reasonably be expected to affect the same natural resource, such as a lake.

The court identified the type of evidence that the RGU should utilize in making a decision on the need for an EIS. The following specific points are of interest.

- Conclusory statements must have a substantive explanation, evidence, or analysis to support them. This could include an expert’s opinion, monitoring data, agency records or databases, published information, etc.
- Mitigation for potential environmental impacts cannot be vague, but rather must be specific, targeted, and certain to be able to address the environmental effects.

What does this mean if you need to submit information to the MPCA for an EAW?

If your project will have an EAW and the MPCA is the RGU, you should include information about cumulative effects.

The determination that a cumulative potential effect is significant is determined on a case-by-case basis, which may include environmental standards or natural resources concerns. However, each project and site-specific characteristics are unique and must be evaluated based on their own circumstances. Some examples to consider in developing a discussion of a project’s potential for cumulative effects include the following.

- The aggregate of incremental noise from a number of separate developments (e.g., noise from heavy equipment or facility operations of a project in relation to other noise sources in the surrounding area).
- The combined effect of individual (and potentially minor) impacts (e.g., noise, dust and visual) from one development or operation on a particular receptor (e.g., nursing home).
- Several developments with insignificant impacts individually but together have a cumulative effect (e.g., the development of a feedlot with individually insignificant effects, when considered with several nearby feedlots, could be a significant cumulative potential effect on local ecology and landscape).
- Secondary impacts from enabled development to be undertaken in the reasonably foreseeable future.

Land use conversion and its associated impacts may be discussed if specific instances related to the proposed project that may occur within the reasonably foreseeable future are known, and if potential impacts and their associated mitigation can be described in a specific, targeted, and focused way.

The CARD decision indicates that an assessment of cumulative effects encompasses a limited geographic area. Therefore, matters of regional or national scale are usually outside the scope of a project-specific EAW. However, this is a case-by-case determination that should be discussed with the MPCA’s project manager.

What are some recommended resources?

Proposers have a variety of resources available to assist them in completing the cumulative effects analysis for their proposed projects. For example, proposers should contact the local units of government in the area of their proposed projects to determine whether or not other facilities with similar potential environmental impacts exist or are being proposed in the area.

Traffic impacts should be discussed with the city/township, county, or the Minnesota Department of Transportation, as appropriate, and any required mitigation documented.

Proposers should contact the MPCA staff on air dispersion modeling, feedlot odor assessment, manure application, setting water quality standards, and permit limits.

Proposers may find the following Web sites helpful in obtaining information to complete the cumulative effects analysis for their proposed projects.

Inventory of contaminated property

<http://www.pca.state.mn.us/backyard/neighborhood.html>

Air and water data from MPCA Environmental Data Access

<http://www.pca.state.mn.us/data/eda/index.cfm>

Air emission permits (excluding registration permits)

<http://www.pca.state.mn.us/air/permits/issued/index.html>

Impaired waters/Total Maximum Daily Loads

<http://www.pca.state.mn.us/water/tmdl/index.html>

Feedlots

<http://www.pca.state.mn.us/hot/feedlots.html>

Wellhead Protection Areas, Drinking Water Supply Management Areas and source water information compiled by the MPCA's Petroleum Remediation Program

<http://pca-gis04.pca.state.mn.us/website/lust/lustfin/entry.htm>

Minnesota Department of Natural Resources wells

http://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/index.html

Historical Society

<http://www.mnhs.org/shpo/>