



Minnesota
Pollution
Control
Agency

Environmental
Review
Program

Calculating Air Emission Increases for EAW Applicability

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Suppose you want to build a new facility or modify your existing plant resulting in increased air emissions. How do you know if you need to complete an Environmental Assessment Worksheet (EAW) before your air emission permit can be issued? The Minnesota Pollution Control Agency (MPCA) has recently revised its guidance on how to calculate air emission increases to decide if an EAW is needed.

What is an EAW?

An EAW is a preliminary look at how a project could potentially affect the environment.

When do air emission increases trigger an EAW?

An EAW is required when potential air emissions increase by 250 tons per year or more of any single air pollutant after installation of air pollution control equipment, according to Minn. R. 4410.4300, subp. 15.A.

What is the new MPCA guidance?

To determine whether an EAW is needed, emission increases should be calculated following a method similar to that of a state air permit or modification. This is defined in Minn. R. 7007.1200, subp. 3 (non-Title I modifications).

The state permit calculation method compares the potential to emit (PTE) before and after a proposed change. The comparison can be thought of as looking at snapshots in time of the emissions before and after a proposed project.

For permits, this calculation method compares hourly emission rates. For EAWs, however, the trigger is in tons per year. Therefore, you would follow the steps described by Minn. R. 7007.1200, subps. 3.A, 3.B, and 3.C to obtain a comparison of the potential emissions before and after the proposed project. After you find the change in the potential hourly emission rates, you would then make a tons-per-year calculation considering emission control equipment, emission decreases, or long term permit limits as appropriate. For example, if your facility has or is proposing an annual cap on emissions, this limit would be taken into account when deciding if there is an emissions increase.

Disclaimers: The purpose of this guidance is only to determine EAW applicability. EAWs are a state requirement. The applicability of other federal or MPCA requirements may be determined using other criteria.

This guidance will also be reviewed if significant changes to Minnesota Rules or federal Title I regulations are made.



Definitions

Construction

Under Minn. R. 4410.0200, subp. 10, "Construction" means any activity that directly alters the environment. It includes preparation of land or fabrication of facilities. It does not include surveying or mapping.

Modifications

The rules governing environmental review (Minn. R. ch. 4410) do not define the term modification. On a case-by-case basis, the MPCA would look at the definition of "modification" in Minn. R. 7007.0100, subp. 14 for guidance. When using Minn. R. ch. 7007, recall that things such as routine maintenance are not considered modifications.

Potential to Emit

"Potential to emit," or PTE, means the maximum emissions that a unit, facility, or stationary source could produce over the maximum hours of operation (see Minn. R. 7005.0100, subp. 35a). Federally enforceable permit conditions that limit emissions can be considered in the PTE calculation. This might include the use of air pollution control equipment or restrictions on the hours of operation or on the type or amount of material combusted, stored, or processed. Fugitive emissions (from storage piles or those that escape through windows and doors, for example) are counted when determining potential to emit unless an applicable state rule or federal regulation states otherwise.

Phased or Connected Actions

"Phased action" under Minn. R. 4410.0200, subp. 60 means two or more projects undertaken by the same proposer that the unit of government responsible for the EAW (in this case, the MPCA) determines will have environmental effects on the same geographic area; and are substantially certain to be undertaken sequentially over a limited period of time.

"Connected actions" per Minn. R. 4410.0200, subp. 9b are actions that are somehow related, for example, one project would directly induce the other; one project is a prerequisite for the other; or neither project is justified by itself.

In addition, under Minn. R. 4410.4300, subp. 1, projects that have occurred over the last three years and that did not undergo environmental review previously are aggregated to determine EAW applicability.

Other Resources

MPCA Resources

Environmental Reviews: Before a Project Starts
<http://www.pca.state.mn.us/publications/p-ear1-01.pdf>

How to Prepare an Environmental Assessment Worksheet for the MPCA
<http://www.pca.state.mn.us/publications/p-ear1-02.pdf>

MPCA Environmental Review Unit,
Barbara Jean Conti, Planner Principal, at
651-296-6703.

Environmental Quality Board Resources

Guide to Minnesota Environmental Review Rules
<http://www.eqb.state.mn.us/pdf/rulguid3.pdf>

MPCA's Web site: <http://www.pca.state.mn.us>