

# Environmental Quality Board Study of Mandatory Threshold Levels for Environmental Review



## AIR POLLUTION CATEGORY

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### Introduction

At its January 2004 meeting, the Environmental Quality Board (EQB) asked its staff to examine the mandatory category threshold levels in the environmental review rules (Mn Rules parts 4410.4300 and 4410.4400). Board members wanted to know if the thresholds are still appropriately placed to balance environmental protection and public benefit with administrative burden.

### Potential Changes in the Air Pollution Category

After reviewing the data and having discussions with key stakeholders, the following changes are being considered for the Air Pollution Category:

- 1) Change the mandatory environmental review threshold from 100 tons per year (tpy) to 250 tpy.

In reviewing MPCA's permitting authorities, it was concluded that state air programs are adequately addressing air quality issues for projects with emissions of 100 tpy or less; therefore, there is no need to change the mandatory threshold number to something lower than 100 tpy.

If the threshold were to be raised, it is rational that the new mandatory threshold level should coincide with a state or federal permitting level. This is how other thresholds in the rules have been set. The next reasonable limit to look at is the federal Prevention of Significant Deterioration (PSD) level, which, for most projects, is 250 tpy.

- 2) Delete subpart 15B, the Parking Facilities Category.

The MPCA's Indirect Source Permitting program was eliminated in 2001. Therefore, the MPCA no longer has a permit to issue for parking facilities.

### Background information

#### Current Thresholds

For the Air Pollution Mandatory Category, the current thresholds are as follows:

#### Mandatory Environmental Assessment Worksheet (4410.4300, subpart 15)

- A. For construction of a stationary source facility that generates 100 tons or more per year or modification of a stationary source facility that increases generation by 100 tons or more per year of any single air pollutant after installation of air pollution control equipment. Responsible government unit: **MPCA**
- B. For construction of a new parking facility for 2,000 or more vehicles, except that this category does not apply to any parking facility which is part of a project reviewed pursuant to part 4410.4300, subpart 14, 19, 32, or 34, or part 4410.4400, subpart 11, 14, 21, or 22. Responsible government unit: **MPCA**

#### Mandatory Environmental Impact Statement

There is no threshold triggering a mandatory Environmental Impact Statement (EIS) in the air pollution category.

#### **Other Air Sources and Environmental Review**

Other potential major sources of air emissions are captured under other mandatory category thresholds, and are not covered in this document. They are in Mn Rules 4410.4300:

- Electric Generating Facilities (25 megawatts and over), subpart 3;
- Petroleum Refineries, subpart 4;

- Fuel Conversion Facilities, subpart 5;
- Metallic Mineral Mining and Processing, subpart 11;
- Paper or Pulp Processing Mills, subpart 13; and
- Solid Waste (Incineration), subpart 17D.

## **Data Collected**

### Environmental Review

Data collection focused on the calendar years 2000 to 2003. During this time period, there were 14 Environmental Assessment Worksheets (EAW) completed under the Air Pollution category. The 14 EAWs were of the following types:

- 7 electric generating facilities under 25 MW;
- 4 manufacturing facilities where volatile organic compounds (VOCs) were the primary pollutant emitted;
- 2 soybean processing plants; and
- 1 steam sale by an electric generating facility.

Two of the electric generating facilities went to the MPCA's Citizens' Board for a decision on the need for an EIS. The steam sale also went to the MPCA's Citizens' Board for a decision. The other 11 were not controversial and the MPCA Commissioner made the decision that no EISs were needed.

### Air Quality Permitting

MPCA records were examined to identify air permits issued in calendar years 2000 to 2003 that were the result of new construction and major and moderate permit modifications. These years were chosen to coincide with the data for environmental review discussed in the previous section.

There were 75 permits issued during that period that had emission increases as part of their permit. Of these 75 permits, 24, or about one-third, went through environmental review:

- 12 in the Air Pollution Category<sup>1</sup>;
- 6 in Fuel Conversion; and
- 6 in Electric Generating Facilities 25 MW and over.

### Avoiding Environmental Review

The 51 remaining permits were examined to see if project proposers were designing projects just under the EAW threshold of 100 tons, thereby avoiding mandatory environmental review. It appeared that four permits had federally enforceable limits just below 100 tons. In addition, it also appeared that six other permits had federally enforceable limits just under 250 tons; the federal threshold for the complex Prevention of Significant Deterioration (PSD) program.

By analyzing these 51 permits, it is concluded that the mandatory Air Pollution category threshold of 100 tons was not a significant factor in the decision-making process for many companies, and most of them did not appear to be adjusting their emissions to avoid environmental review.

### Time it takes to Issue Air Permits

A review of the length of time it took to issue permits for various types of projects was examined in order to determine if environmental review slows down the air permitting process. The data shows that it does not take significantly longer to issue air permits to projects that went through environmental review.

Air permitting staff and environmental review staff at the MPCA work closely together, which may explain why there is not a significant difference between the time it takes to issue air permits to those projects that go through environmental review and those that do not.

### **Current Air Quality Permitting and Review Procedures**

The MPCA issues several types of permits and has reviews for facilities emitting air pollutants.

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<sup>1</sup> Permits were not issued for two of the 14 projects listed on page one, hence the discrepancy between that number and the 12 listed in this section.

These include the federal Part 70 permit, state permit, general permit, registration permit, PSD review and Air Emissions Risk Analysis (AERA). All are briefly described below.

### Part 70 Permits

A Part 70 permit (sometimes referred to as a Title V permit) is issued by the MPCA to implement certain federal requirements. “Part 70” refers to a section in the *Code of Federal Regulations*. A Part 70 permit is valid for five years, at which time it must be renewed.

A facility needs a Part 70 permit if its potential to emit air pollutants meets or exceeds specific thresholds. The thresholds are the potential to emit:

- 100 tpy of any criteria pollutant;
- 10 tpy or more of any single hazardous air pollutant; or
- 25 tpy or more of any combination of hazardous air pollutants.

Public participation is possible through the Part 70 permitting process. Individuals and organizations are notified when a draft permit is available and invited to comment during a 30 day period. Citizens may also request public information meetings during the comment period.

### State Permits

A state permit is issued to facilities that have the potential to emit smaller amounts of air pollutants than Part 70 sources. State permits generally do not expire.

Facilities receive a state permit if they have a potential to emit:

- 25 tpy or more of PM<sub>10</sub>;
- 50 tpy or more of SO<sub>2</sub>;
- more than 0.5 tpy of lead; or
- more than 100 tpy of VOCs.

There are two types of state permits: general and registration permits. General permits cover a group of similar facilities, such as asphalt plants or construction aggregate producers. A general

permit requires less processing by the MPCA and may be quicker to obtain, but still includes a public comment period. A general permit can be written as either a state permit or a Part 70 permit.

Registration permits are simple, one-page permits for some facilities where actual emissions are low and that are not subject to complex federal regulations. Typical facilities qualifying for a registration permit include auto body shops and schools operating boilers for heat. These permits do not typically have a public comment period.

### PSD Review

Federal Prevention of Significant Deterioration rules prescribe modeling requirements for facilities whose emissions and/or ambient impacts of certain pollutants exceed regulatory thresholds. One part of these rules regulates the level of deterioration in air quality allowed for a specified area. A source’s potential emissions may be reduced by accepting federally enforceable permit limits such as limited hours of operation or use of more advanced pollution control equipment.

### AERA Review

The MPCA uses the AERA to review facilities that generate 100 tpy of any single air pollutant after installation of control equipment and are completing an EAW or EIS. The AERA identifies those sources, source groups, chemicals, and associated exposure pathways that may pose unacceptable health risks or hazards to the public as a result of their emissions. It is both a quantitative and a qualitative review of a facility’s emissions.

## **Rationale for Potential Changes**

### **Adequacy of MPCA’s Air Permitting and Review Programs**

MPCA’s permitting authorities provide a reasonable level of review and consideration of air quality issues for projects with emissions of 100 tpy or less; therefore, there is no need to

change the mandatory threshold number to something lower than 100 tpy.

The environmental review process examines issues typically outside of the permitting process, such as odor, traffic, impacts to nearby wetlands and damage to nearby historical/archaeological sites. However, it can be concluded that the most significant effects of air pollution such as human health effects and air quality *are* being addressed by the MPCA permitting and review processes.

The relationship between permitting and environmental review can be summarized in the following way:

- *Permitting* examines and addresses air pollution issues.
- *Environmental review* looks at air quality issues as well as other project-specific issues such as historic sites, traffic patterns, odor, etc. It sometimes uncovers issues that currently cannot be addressed by air quality permitting.

But, when it comes to analyzing the effectiveness of the mandatory threshold for this category, the environmental review threshold provides only a hit-or-miss opportunity to examine issues such as odor and traffic — a 100 tpy air emission threshold probably has a weak relationship to these other “quality of life” issues.

Finally, the AERA policy threshold of 100 tpy will stay at 100 tpy. This will continue to provide a reasonable screening mechanism to alert the agency to projects that need a more careful examination. This means that while projects with emissions greater than 100 tpy (but less than 250 tpy) will not have mandatory environmental review, they will still go through AERA review.

### **Parking Facilities**

The MPCA’s Indirect Source Permitting program was eliminated in 2001. Therefore, the MPCA no longer has a permit to issue for parking facilities.

Typically, large parking facilities are associated with other projects such as office complexes or commercial sites such as the Mall of America. Those projects require environmental review and are already exempt from this threshold because the traffic/parking facility will be covered in a separate environmental review document. The MPCA has not prepared an EAW on a parking facility in at least seven years.