

## *Minnesota Pollution Control Agency*

### **Environmental Analysis and Outcomes Division**

#### **STATEMENT OF NEED AND REASONABLENESS**

**Proposed Amendments to Rules Governing Air Quality Performance Standards, Air Emissions Permits, Emission Inventory Reporting, Miscellaneous Definitions and Incorporations by Reference to be Codified in Minnesota Rules Chapters 7002, 7005, 7007, 7011, 7017 and 7019.**

## **I. INTRODUCTION**

### ABBREVIATIONS USED IN THIS DOCUMENT

BACT – Best Available Control Technology

BART – Best Available Retrofit Technology

CAA – Clean Air Act

CFR – Code of Federal Regulations

CO – Carbon Monoxide

EGU – Electric Generating Unit

EMS – Environmental Management System

EPA – United States Environmental Protection Agency

ESP – Electrostatic Precipitator

MPCA – Minnesota Pollution Control Agency

NESHAP- National Emission Standard for Hazardous Air Pollutants

NSPS – New Source Performance Standards

NSR – New Source Review

PAL – Plantwide Applicability Limit

PM – Particulate Matter

PM-10 – Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers

PSD – Prevention of Significant Deterioration

SIP – State Implementation Plan

SONAR – Statement of Need and Reasonableness

VOC – Volatile Organic Compound

This rulemaking affects several existing air quality rules with the overall purpose of keeping the air quality rules up to date, removing redundant rule language, ensuring consistency with applicable federal regulations, clarifying ambiguous language and correcting gaps or errors identified while administering the rules. In general this involves updating definitions, incorporating new federal performance standards into state rule, and limited scope changes to state performance standards, emission inventory, performance testing and permitting rules.

The proposed changes to the control equipment rule, Minn. R. 7011.0060 to 7011.0080, represent a rule update with a broader scope. Here the MPCA's intent is to update an existing, elective rule so that it reflects modern day control assumptions and can potentially be utilized by more permittees to help them determine permit applicability.

The new rules for regional haze proposed at Minn. R. 7007.5000 represent the initial steps needed for the MPCA to implement the federal regional haze program.

Where applicable, the new and revised rules will be submitted to the EPA for inclusion in the Minnesota SIP. This applies to all rules except for the incorporations by reference of NSPS and NESHAPs in chapter 7011.

## **II. STATEMENT OF THE MPCA'S STATUTORY AUTHORITY**

The MPCA's authority to adopt the rules is set forth in Minn. Stat. § 116.07, subd. 4 (2004), which provides:

“Pursuant and subject to the provisions of chapter 14, and the provisions hereof, the Pollution Control Agency may adopt, amend and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1967, chapter 882, for the prevention, abatement, or control of air pollution. Any such rule or standard may be of general application throughout the state, or may be limited as to times, places, circumstances, or conditions in order to make due allowance for variations therein. Without limitation, rules or standards may relate to sources or emissions of air contamination or air pollution, to the quality or composition of such emissions, or to the quality of or composition of the ambient air or outdoor atmosphere or to any other matter relevant to the prevention, abatement, or control of air pollution.”

Under this statute, the MPCA has the necessary statutory authority to adopt the proposed rules. All statutory authority was granted before January 1, 1996.<sup>1</sup>

**Alternative Format:** Upon request, this Statement of Need and Reasonableness (SONAR) can be made available in a different format, such as large print, Braille, or cassette tape. To make a request, contact Norma Coleman at the Minnesota Pollution Control Agency, 520 Lafayette Road, St. Paul, Minnesota 55155-4194; phone (651) 296-7712; Fax (651) 297-8676; or e-mail [norma.coleman@pca.state.mn.us](mailto:norma.coleman@pca.state.mn.us). TTY users may call the MPCA at (651) 292-5332 or 1 (800) 657-3864.

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<sup>1</sup> (Minn. R. 1400.2070, subp. 1(D) requires that if an agency's statutory authority was granted after January 1, 1996, the agency must include in its SONAR the effective date of the agency's statutory authority to adopt the rule).

### **III. STATEMENT OF NEED FOR THE REVISED RULES**

Minn. Stat. ch. 14 requires the MPCA to make an affirmative presentation of the facts establishing the need for and reasonableness of rules as proposed. In general terms, this means that the MPCA must set forth the reasons for its proposal, and the reasons must not be arbitrary or capricious. However, to the extent that need and reasonableness are separate, need means that a problem exists which requires administrative attention, and reasonableness means that there is a rational basis for the MPCA's proposed action.

The need for each individual rule change is discussed in more detail in conjunction with the rule-by-rule statement of reasonableness in Section IV.

### **IV. STATEMENT OF REASONABLENESS**

Minn. Stat. ch. 14 requires the MPCA to explain the facts establishing the reasonableness of the proposed rules. "Reasonableness" means that there is a rational basis for the MPCA's proposed action. The reasonableness of the proposed rules is explained in this section, together with an explanation of the need for each change. As this rulemaking affects several chapters of existing air quality rules, the rule changes are grouped into four major sections in order to help the reader in reviewing this document.

A. Amendments and additions to chapters 7005 and 7007, which primarily affect application for and issuance of air quality permits, new source review permits and implementation of the federal regional haze rule;

B. Amendments to the Control Equipment Rule in Chapter 7011;

C. Amendments and additions to Chapter 7011, including incorporation by reference of NESHAPs and NSPSs, and minor changes to performance standards, but not including revisions to the Control Equipment Rule; and

D. Amendments to chapters 7002, 7017 and 7019, primarily impacting performance testing and emission inventory requirements.

## **IV(A) Amendments and Additions to Chapters 7005 and 7007**

### **7005.0100 DEFINITIONS.**

#### **Subp. 10a. Emission factor.**

The changes to items A and B reflect the transformation in the types of data contained in the EPA emission databases and a change in the method the reader can use to access the most up-to-date version of these databases. The emissions database referenced under item A (AP-42) now contains emission factors for both criteria pollutants as well as hazardous air pollutants. The emissions database referenced under item B (FIRE, version 6.25) now contains emissions factors for all AP-42 sections posted by September 1, 2004, the Locating and Estimating (L&E) series of documents, and the retired AIRS/Facility Subsystem Emission Factors (AFSEF) and Air Toxic Emission Factor Database Management System (XATEF) documents.

Because AP-42 and FIRE contain emission factors for both criteria and hazardous air pollutants, it is necessary to remove the references to pollutant type under items A and B. Previously, EPA had used the AP-42 database as the primary location for emissions factors and updated that database frequently. EPA now uses FIRE as the location for the most up-to-date emission factors, for both criteria and hazardous air pollutants. EPA updates this database as new emissions factors are developed or new information requires revision of existing factors. Typically revisions to FIRE are made at least once a year. For example, FIRE, version 6.24, was posted March 2004 and just six months later FIRE, version 6.25, was posted in September 2004. It is reasonable to update items A and B to reflect the revision frequency of the referenced documents as well as to remove the reference to pollutant type.

Item C is amended by removing language implying that emission factors from the AP-42 database (item A) or the FIRE database (item B) are preferable to those factors from the sources listed in units (a) through (f). The definition begins as “emission factor means the most accurate and representative emission data available from one of the following sources” and then lists items A, B, and C. The user is to select the most representative and accurate emission factor from the data sources listed under items A, B, and C. Subitem 2 of item C lists the criteria used by the commissioner to approve the use of an emission factor from these sources or to develop an emission factor. There is no change proposed to these criteria. It is reasonable to remove inconsistencies in the definition. This modification is also consistent with the common interpretation of the definition.

Unit (a) of item C is deleted as the AIRS database (AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants) is obsolete. It has not been updated by EPA since 1990. Should AIRS be the only source of an emission factor for a process, the use of that factor would be allowed under other more generic data sources listed under item C provided that it were the most accurate and representative emission factor available. It is reasonable to remove databases that are obsolete as a source of emission factor data.

## **7007.0100 DEFINITIONS.**

### **Subp. 7. Applicable requirement.**

Three changes are proposed in this subpart. The first substitutes the word “commissioner” in place of “agency” as the authority for commencing rulemaking or giving approvals under these rules. Under Minn. Stat., §. 116.02, subd. 3, the MPCA commissioner has the authority to commence rulemaking. The word “agency” is the MPCA Citizen Board under Minn. Stat., § 116.02, subd. 1 and part 7000.0100, subp. 2. The change is reasonable to avoid confusion and because in practice, submittals and requests come in to the commissioner or authorized staff of the commissioner.

The second change adds a new item, V, to the list of “applicable requirements”. Requirements established under section 169A (Visibility Protection for Federal Class I Areas) or 169(B) (Visibility) of the act are “applicable requirements” and, therefore, must be included as Title V permit conditions according to the procedures established in chapter 7007. This change is needed because the MPCA must submit a regional haze SIP to EPA by December 17, 2007, in which the MPCA must demonstrate that it has the proper authorities to implement its regional haze SIP. These authorities must include regional haze requirements to its Title V permits. BART requirements that are established would be an applicable requirement under this definition. This change is reasonable because it is consistent with the other items defined as applicable requirements under this subpart.

The third change adds a new item, W, to the list of “applicable requirements”. Requirements of the federal Clean Air Interstate Rule (CAIR), finalized by EPA on March 10, 2005, are “applicable requirements” and, therefore, must be included as Title V permit conditions according to the procedures established in chapter 7007. CAIR addresses interstate transport of fine particulate matter and ozone in 28 eastern states (including Minnesota) through the regulation of emissions from electric generating units. This subpart contains the list of all applicable requirements. The fact that a particular requirement is listed has no bearing on whether or not it applies to an individual facility. If, for example, EPA were to remove Minnesota as a CAIR state, then CAIR would not be an applicable requirement for any EGU in Minnesota, despite it being defined as an applicable requirement. Currently Minnesota’s participation in CAIR is required by law and, therefore, CAIR is an applicable requirement. It is reasonable to include this definition in section 7007.0100 because it is consistent with the other items defined as applicable requirements under this subpart.

### **Subp. 9b. Environmental management system or EMS.**

### **Subp. 9c. EMS audit.**

### **Subp. 9d. EMS auditor.**

These existing definitions are being updated to reflect a change in the source of certification authority that occurred after the EMS rule was adopted in 2004. Also, the reference in subpart 9b to the certification standard, ISO 14001, is being updated to incorporate the most recent version (2004) of the standard. These changes are needed and reasonable as they reflect actual changes in the way that a regulated party would need to seek certification from an independent body.

**Subp. 25. Title I condition.**

Item D of this subpart is appended, identifying Section 129 of the CAA as a source of conditions that become federally enforceable, and are therefore designated as Title I conditions, upon submittal and approval of a state plan by EPA. Section 129 is specific to new solid waste combustion facilities and is analogous to the more general new source provisions stemming from Section 111(d), which is already referenced in this subpart. The existing definition references Section 111(d) of the CAA which contains the statutory authority requirements pertaining to new sources. Section 129 is the authority for the same type of new source requirement as it pertains to waste combustor facilities. This change is needed and reasonable as it adds a source of federally enforceable conditions that by nature of the approval process become Title I conditions in any event.

**Subp. 26. Title I modification.**

Item C of this subpart is added to resolve a gap in the existing definition of Title I permit modification. The definition of a Title I modification is specific to Minnesota and was created for certain types of changes that require specific treatment by the agency. For example, all Title I modifications require major permit amendments under part 7007.1500. The gap exists between the current CAA rules governing the PSD program rules and the existing definition of a Title I modification. The PSD program requires that an existing source newly subject to these rules undergo a BACT review. The text of 40 CFR 52.21(b)(1)(i)(c) is as follows:

“Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source, if the changes would constitute a major stationary source by itself.”

When a BACT limit is established by the MPCA, the limit must be established in an amendment process with public comment. The major permit amendment process under part 7007.1500 is the only amendment process that has a mandatory public comment period (part 7007.0850, subpart 2). This addition to the Title I modification definition is reasonable because the existing definition only addresses PSD Major Modifications, whereas PSD applies to both major modifications and existing sources that undergo changes that are themselves major changes which are defined in 52.21(b)(1)(i)(c) to include changes that are major by themselves at non-major sources.

Subp. 26 is amended by adding item F, the establishment, renewal or increase of an actuals PAL, to the definition of a Title I modification. PALs are similar to the other items currently listed as Title I modifications. EPA’s amended NSR Reform rules require public notice of changes to a PAL as well as the establishment and renewal of a PAL. By specifically listing these PAL-related actions as Title I modifications, part 7007.1500, subpart 1, item D requires them to be processed as major permit amendments with a public notice period. Specifically listing PAL-related permit actions as Title I modifications helps to avoid these changes being incorrectly processed as a moderate amendment. It is reasonable to add PAL-related changes to the definition of Title I modification because these changes are similar to the other items currently listed as Title I modifications and require a similar amendment process.

## **7007.0300 SOURCES NOT REQUIRED TO OBTAIN A PERMIT**

### **Subpart 1. No permit required.**

Item B of this existing subpart lists specific New Source Performance Standards for which a stationary source does not need to obtain a permit as otherwise required under part 7007.0250, subpart 2, item A, provided the sole reason a permit is needed is because it is subject to one of the listed NSPS. The MPCA proposes to add 40 CFR 60, subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) as one of the NSPS listed in this item. The MPCA proposes to exempt owners and operators of most compression ignition internal combustion engines with a displacement less than 30 liters per cylinder from the requirement to obtain a state permit if there is no other condition that triggers the need for an air emissions permit other than their NSPS status. The only exception would be those engines for which the owner or operator conducted a performance test to demonstrate compliance with the applicable standard. Performance testing to demonstrate compliance is required for all engines greater than or equal to 30 liters per cylinder but is only one of the compliance options for some engines less than 30 liters per cylinder and is a more complex compliance requirement than the other NSPS listed in this item. If an owner or operator purchases an engine certified by the manufacturer as meeting the standard or has certain data that indicates compliance with the standard, then performance testing is not required for compliance demonstration. The MPCA expects that relatively few owners and operators would use performance testing as a compliance option for engines of this size.

In determining whether or not to exempt certain NSPS categories from the requirement to obtain a permit, the MPCA has used the following criteria:

- 1) Straightforward compliance requirements
- 2) Potential emissions under permitting thresholds

The compliance requirements for the Subpart IIII engines are uncomplicated (e.g., maintaining records of notifications, engine maintenance, compliance with standards, hours of operation) unless performance testing is chosen as a compliance option. The MPCA believes the majority of units subject to this standard will have potential emissions below the permitting thresholds when the stricter emission limits of the standard are accounted for. It is possible that potential emissions of some engines closer to 30 liters per cylinder could exceed the permitting threshold, however, in this case, the exemption would not apply and the owner or operator of the engine would need to apply for a permit.

Applications for compression ignition internal combustion engines include fire pump engines, emergency generators, and other similar widespread uses. This change is needed because, otherwise, simply by purchasing an engine an owner or operator of a facility that previously did not need an air emissions permit would be required to apply for an air emissions permit from the state. To begin requiring permitting of potentially dozens of additional facilities simply because they purchase a new engine (and cleaner engine if it is replacing an existing engine) would result in added administrative burden for both the stationary source owner or operator and MPCA staff, with no discernable environmental benefit. This change is reasonable because owners and operators of any of these engines must comply with the applicable standard regardless of permit status. It is reasonable to exempt owners and operators that purchase an engine with a displacement less than

30 liters per cylinder from obtaining an air emission permit to streamline the permitting process and because its compliance requirements are similar to the other NSPS listed in this item.

#### **7007.1100 GENERAL PERMITS.**

##### **Subp. 2. Public participation.**

This existing subpart sets out public participation procedures for general permits that are based on requirements applying to permits issued under Title V of the CAA. This relates to the proposed change in part 7007.1110, subpart 2, that requires registration permit holders to obtain a general permit if an applicable sector-based general permit is made available and the facility qualifies for that general permit unless specifically allowed under the general permit. The MPCA proposes to require in the public notice a statement of whether applicants in the affected industry sector that currently hold a registration permit will have to apply for the new general permit. The change in this subpart is needed and reasonable in order to ensure that affected parties and the public are given advance notice that some registration permit holders will have to apply for a different kind of permit and to provide the opportunity to comment on this issue.

#### **7007.1102 INCORPORATIONS BY REFERENCE.**

This proposed change is related to the need to update the rules to reflect restructuring of EMS certification authority as described above for part 7007.0100, subps. 9b-9d and is needed and reasonable on the same basis as those revisions.

#### **7007.1110 REGISTRATION PERMIT GENERAL REQUIREMENTS**

##### **Subp. 2. Stationary sources that may not obtain a registration permit**

Subp. 2 of this rule identifies air emission sources that are not eligible to obtain a registration permit. In item B (3), the MPCA proposes to add an additional factor in the determination of sources not eligible for a registration permit. The new factor restricts eligibility for any source that is subject to a facility-specific operating condition, emission limitation or other requirement imposed to ensure compliance with a Minnesota or national ambient air quality standard. For example, if a facility has accepted an emission limit based on air emissions modeling in order to avoid violating an ambient standard, it will not be able to obtain a registration permit. Another example would be a facility that assumed limits on hours of operation in the ambient air quality modeling. When no federally enforceable limit on operating hours exists such a facility would not be eligible for a registration permit. By contrast, however, if a facility determines through the use of modeling that the height of a stack needs to be increased and makes that physical change to the stack, raising the stack height would be a permanent, physical change and the facility would qualify for a registration permit. The limitations are currently not explicit in this portion of the registration permit rule. The change is needed and reasonable because it clarifies existing limitations on the eligibility for a registration permit.



The proposed change to Item C (9) contains a specific limitation on the eligibility of facilities subject to the federal NSPS for nonmetallic mineral processing. This limitation applies to any facility that is subject to proposed subpart 2b. The MPCA has established a sector-specific general permit for this category of facilities that was designed to present the compliance requirements of the federal standard in an easy-to-use manner that would help facility owners and operators to stay in compliance with the standard. The general permit also contains specific provisions related to moisture levels that, when met, help to minimize fugitive dust from the processing of otherwise dry material. Facilities in this category tend to conduct performance tests on a frequent basis because a test is required whenever a new piece of equipment is added at a site. The MPCA has also determined that the general permit serves a useful purpose in ensuring that facilities conduct these tests on time and according to the state notice and reporting requirements for performance tests in chapter 7017. The MPCA believes that the general permit, while requiring a more detailed initial application, is beneficial for facilities in that it provides clear instructions on how to comply with state and federal requirements. The general permit is also beneficial for owners or operators that have more than one facility located in the state because all such facilities can be included in a single general permit whereas in the registration permit system, each facility would need its own registration permit. This change is needed in order to address known compliance difficulties with this sector as a whole and is reasonable as it does not significantly increase the overall burden on facilities. Under subpart 2b, facilities will be given approximately two years to transition to the general permit.

The proposed addition at Item C (12) brings facilities in the stationary gas turbine NSPS category into the group of NSPS standards that do not preclude application for a registration permit on the basis that they are NSPS-subject facilities. However, only those facilities with annual emissions below the registration permit thresholds will be able to apply. The majority of sources in this sector are individual facilities linked to other, substantially similar, facilities by means of natural gas pipelines within and beyond Minnesota. This change is reasonable as it extends the registration permit option to otherwise qualifying sources that were previously barred by an NSPS that contains reasonably clear compliance requirements. The change is needed as part of a general MPCA practice to offer more streamlined permit options where this can with confidence ensure that the rate of compliance will not be impacted.

Similarly, the proposed addition at Item C (13) brings stationary compression ignition internal combustion engines with a displacement of less than 30 liters per cylinder into the group of NSPS standards that do not preclude application for a registration permit on the basis that they are NSPS-subject facilities. However, this status is only extended to a subset of affected facilities subject to 40 CFR 60 subpart IIII, those with straightforward compliance requirements (e.g., maintaining records of notifications, engine maintenance, compliance with standards, hours of operation). Other affected facilities under subpart IIII such as manufacturers of compression ignition internal combustion engines are not included nor are engines with a displacement of 30 liters or greater per cylinder as the compliance requirements for these affected facilities are more complex and require tracking by the MPCA in order to verify compliance. For example, non-emergency engines with a displacement greater than or equal to 30 liters per cylinder are subject to annual performance testing which would be difficult to track without a state or part 70 permit. It is reasonable to extend the registration permit option to qualifying sources with simple, straightforward compliance requirements that would otherwise be barred by an NSPS. If this change were not made,

registration permit holders that purchased a new engine would no longer qualify for their registration permit and would need to apply for an individual permit. The change is needed as part of a general MPCA practice to offer more streamlined permit options where the rate of compliance will not be adversely affected.

#### **Subp. 2b. Additional limitations on stationary source eligibility for a registration permit.**

This proposed new subpart restricts eligibility for a registration permit when the MPCA has made available a sector-specific state general permit or on a case by case basis where the commissioner determines that site-specific permit requirements are necessary to protect human health or the environment. In the event that the MPCA makes available a sector-specific general permit it would be written to take into account any special compliance issues associated with that sector. The rationale is similar to that explained in subp. 2, above. This rule is needed in order to restrict the eligibility for a registration permit by industry sector when it is determined that the registration permit format does not provide a sufficient guarantee of compliance with the applicable rules. It is reasonable because all general permits are subject to public notice and comment before any general permit can be issued and also because it promotes fairness by ensuring to the maximum extent possible that all facilities in a given sector will be applying for the same kind of permit.

The case-by-case determination in Item B is consistent with subp. 2, Item B, which restricts eligibility when certain assumptions were made in the permit application. Subp. 2b, Item B, provides the MPCA with a means to apply similar considerations in a wider context, looking at possible future compliance issues as well as what was assumed in the application for a permit. It is needed in order to avoid issuing registration permits that will not provide a sufficient guarantee of compliance or that may provide insufficient protection of human health. It is reasonable because it is consistent with the factors used to evaluate permit applications.

The rule provides existing registration permit holders an estimated two years from adoption of this rule either to apply for a general permit in cases where a sector-based general permit is already available or to apply for an individual state permit, if desired. This is a reasonable transition time. The MPCA, primarily through its Small Business Assistance program, has already begun working with impacted sand and gravel facilities as well as the asphalt paving trade association to help with this transition.

At the time of adoption, the only source type that will be impacted by this rule change is sand and gravel operations because the sand and gravel general permit is the only sector-based general permit currently available. Based on 2004 MPCA emissions inventory data, approximately 20 sand and gravel operations companies (holding registration permits for 32 facilities) hold an option D registration permit. Of these 32 facilities, the MPCA knows of two facilities that have equipment or processes which would make them ineligible for the non-metallic general permit. Under the proposed changes, these two facilities would retain their registration permits and would not be required to apply for the general permit.

#### **Subp. 5. Registration permit issuance, denial and revocation.**

The MPCA proposes a technical amendment to this subpart which sets forth the grounds for the issuance, denial, or revocation of a registration permit. This amendment is needed because item H of part 7007.1000 applies to registration permits as a precondition for issuance. Minn. Stat. chapter 116D (environmental impact statement and environmental worksheets) requires that the provisions of that chapter and rules adopted under the statute must be met before any air emissions permit can be issued by the MPCA. It is reasonable to correct a technical error in the registration permit rule that previously omitted an applicable provision.

**Subp. 15a. Relocation of stationary source issued a registration permit.**

This subpart was adopted in 2003 in order to streamline the process for a facility to get a new registration permit when it was relocating to a new, fixed location and remained eligible for the same kind of permit. Rather than applying for a whole new permit, a notification would suffice and the existing permit would be reissued for the new location. Subsequent experience with this rule showed that it was unclear as to situations where the facility moved in a phased or transitional manner, with a period where it operated in the old and new locations at the same time. In this rulemaking, the MPCA proposes that an additional condition (Item D) be added to restrict use of the streamlined procedure when the facility will operate in more than one location for any transition period, no matter how short. The owner or operator will have to obtain a permit for each of the locations that will be in operation at the same time. This is needed because this subpart was never intended to overcome the general principle that a registration permit covers operations only at a single location at any given time. It is reasonable as it clarifies an existing prohibition rather than imposing new restrictions. In addition, the proposed rule adds a requirement that the change in location notice be submitted to the MPCA at least 45 days in advance of the location. The latter requirement is needed in order to provide MPCA staff sufficient time to evaluate the planned move against the criteria in the rule and is reasonable because it is consistent with the time frames typically needed for evaluating changes to registration permit facilities.

**Subp. 16. Agency request for different type of permit application.**

The MPCA proposes to change the title of this subpart to better reflect the content. This subpart allows the commissioner to make a determination that the owner or operator of a stationary source with a registration permit must submit an application for a different type of permit; the current title suggests that the subpart contents pertain to voluntary application for a different type of permit.

The MPCA also proposes to add three additional conditions under which the commissioner is allowed to make a determination that the owner or operator of a stationary source with a registration permit must submit an application for either a part 70, state, capped or general permit, or for a different registration permit option. The current provision allows this determination to be made under these four conditions: A) if the source has a history of noncompliance; B) if the source does not qualify for a registration permit; C) if the source qualifies for a different registration permit option; or D) the applicable requirements that apply to the source are about to or have changed substantially. The agency proposes these three additional conditions under which the commissioner is allowed to make this determination: E) the application contained a material mistake or inaccurate statements were made in establishing eligibility; F) alterations or

modifications to the facility may result in a significant change in the nature or amount of regulated air pollutants emitted; or G) new information becomes available to the commissioner that shows that the terms and conditions of the permit do not accurately represent the facility.

Item E is reasonable because if a source has obtained a registration permit based on mistakes or inaccuracies made in the application, those mistakes or inaccuracies may affect the status of a source's eligibility for a registration permit. Therefore, it is reasonable to provide the commissioner with the authority to request an owner or operator to obtain the appropriate permit type should the eligibility status be impacted as a result of those errors. This item parallels the condition in part 7007.1600, subp.1, item C for mandatory reopening of part 70 and state permits. Similarly, items F and G proposed under subpart 16 are also necessary because they also parallel the bases for mandatory reopening of part 70 and state permits found in part 7007.1600, subp. 2, items B and C, respectively. Item F is reasonable because if a source is altering the facility in a way that changes the nature or amount of regulated pollutant such that the change affects eligibility for its registration permit and does not voluntarily submit an application for the appropriate type, the commissioner must have a way to require the source to obtain the appropriate permit. Item G is reasonable because if new information becomes available that affects the eligibility of a source with a registration permit, the commissioner must be able to require the stationary source to obtain the appropriate permit based on the new information. An example of new information is the development of improved emission factors. If application of a new emission factor would significantly increase emissions over a previous calculation, it could affect the eligibility of a source for this permit.

The addition of these bases for commissioner action are reasonable because they clarify the commissioner's authority to require a source to apply for the appropriate permit when grounds exist that show that the facility is more appropriately regulated under another type of permit.

## **7007.1120 REGISTRATION PERMIT OPTION B**

### **Subpart 1. Eligibility.**

### **Subp. 2. Application content.**

### **Subp. 3. Compliance requirements.**

The MPCA is proposing to amend these three subparts to address conditionally insignificant activities in the same manner that insignificant activities are addressed in this registration permit option. It was the intent of the MPCA when the conditionally insignificant activities rule in chapter 7008 was adopted, that insignificant and conditionally insignificant activities would be treated the same way under registration permitting rules, provided that the conditions for eligibility set out in chapter 7008 were met for the activity in question. The changes proposed here should have been included in the rulemaking that established part 7008.4000. These changes are reasonable as they clarify the intended relationship between chapters 7007 and 7008 and are needed in order to avoid confusion or inconsistency in this area.

## **7007.1125 REGISTRATION PERMIT OPTION C**

### **Subpart 1. Eligibility.**

### **Subp. 3. Compliance requirements for Option C sources.**

### **Subp. 3c. Compliance requirements for low-emitting Option C sources.**

The MPCA is proposing to amend these three subparts in order to address EPA concerns with the Option C registration permit option that led to EPA not approving this option when it approved Options A, B and D, and the remainder of the state permitting program in general, in a federal rule published in the Federal Register on May 18, 1999 and codified at 40 CFR Part 52, Subpart Y, 52.1220. EPA's principal concern was that Option C "fails to provide specific limitations on fuel combustion and uses a test method that lacks reliability for these purposes." Thus, because option C did not adequately restrict emissions, EPA disapproved this option.

Option C will be amended by reducing the eligibility number to 50% of its current value. This will significantly increase the margin of safety between actual emissions and the major source permitting threshold and should make this option acceptable to EPA. Using an eligibility number of '50', the maximum allowable emissions are 50 tons per year of a single criteria pollutant. 50 tons per year is consistent with the maximum allowable emissions under the Option D, which EPA did approve. The MPCA used 2003 emission inventory data to help predict how many sources may lose eligibility for the Option C permit as a result of this change, finding that seven sources out of 295 Option C permit holders would be impacted. These sources would still have the option of applying for an Option D permit and would be provided with a reasonable transition time to do this under proposed subpart 5 below. The same data shows that the majority of Option C sources are significantly below the 100 tons per year annual emissions threshold and most meet the criteria for being a 'low-emitting' source under subpart 3a. (273 Option C sources qualify for the reduced record keeping.) Since this option should be available as an exception, and as an incentive for sources to reduce emissions, it is reasonable to reduce this number in conjunction with the overall reduction of the eligibility number. These changes are needed in order to gain federal approval of this permitting option so that the permit can be considered federally enforceable for purposes of avoiding the requirement to obtain an individual, federal (Title V) permit. The changes are reasonable because very few sources will lose eligibility, and those sources will be able to transition to an Option D permit. Other alternatives considered, including more stringent monitoring and recordkeeping requirements or phasing out this option altogether, would have been more burdensome.

### **Subp. 5. Transition period.**

The rule provides existing registration permit Option C holders an estimated one year from adoption of this rule to apply for another permit type if they are ineligible due to the reduction of the eligibility number. In the cases the MPCA is familiar with, the facility will qualify for an Option D registration permit. A less streamlined individual state permit is also available, if desired. It is a shorter timeframe than proposed under part 7007.1110, subpart 2b because these Option C facilities are currently operating under a permit that has not been federally approved. This is a reasonable transition time in which to prepare and submit a new or updated permit application. The MPCA, primarily through its Small Business Assistance program and the Customer Assistance Center, has already begun working with facilities that will no longer be eligible for an Option C registration permit to help with this transition.

## **7007.1130 REGISTRATION PERMIT OPTION D**

### **Subp. 3. Compliance requirements for Option D sources.**

Items A (4), K and L are proposed for the purpose of matching the compliance requirements of this subpart with the means used to calculate emissions pursuant to subpart 4 when applying for the Option D permit. In principle, for every calculation procedure in subpart 4 there should be a corresponding compliance requirement in subpart 3 to ensure that the facility remains eligible for the permit as claimed at the time of applying for the permit. Without such compliance measures, there is no automatic check on the impact on qualification for the Option D permit when a facility changes or expands its operations. Currently, the rule provides compliance requirements in Items A–J that correspond to many, but not all, of the calculation options in subpart 4. The proposed changes will fill gaps in the link between the two subparts. Item A (4) requires the owner or operator to keep records and related calculations of material shipped off site for recycling when this practice was used to determine permit applicability under subp. 4 (D). This is needed and reasonable because recycling practices can change significantly over time and could result in a change in the subtraction calculation that would lead to loss of eligibility for an Option D permit. Item K addresses cases where permit eligibility was based on the sulfur content of fuels used at the facility, as allowed by subpart 4 (E). Because fuel usage can vary significantly by season and from year to year, and some facilities may be able to switch between different types of fuel, it is necessary and reasonable to require that a facility maintain a record of the quantity of fuel used the sulfur content of that fuel and a calculation of emissions based on that data. The maintenance of such records and calculations on a monthly basis is not unduly burdensome in relation to the need to conduct a regular compliance check. Similarly, Item L requires that the owner or operator record actual total hours of operation and recalculate a 12-month rolling sum of actual emissions based on that data when hours of operation was used as a basis to qualify for the permit. Both subpart 4 (A) and (C) allow operating hours to be factored into the emission factor calculation. The requirement to conduct this calculation monthly represents a reasonable compromise between the need to determine compliance on a regular basis and administrative burden on the facility.

### **Subp. 4. Calculation of actual emissions.**

The proposed amendment to Item C clarifies the situations that an owner or operator can use emission factors from a performance test to establish an emission factor. The performance test must not only meet the requirements of parts 7017.2001 to 7017.2060, but the emission unit must be either: 1) uncontrolled, 2) fitted with air pollution control equipment that is subject to the monitoring and record keeping requirements of part 7011.0070, or 3) fitted with air pollution control equipment that has met the requirements of subp. 6 of this part. Subp. 6 sets forth the monitoring and record keeping requirements for equipment that is not listed in parts 7011.0060 to 7011.0080. This clarification is reasonable because it helps affected parties understand the ongoing monitoring and record keeping requirements under parts 7011.0060 to 7011.0080 and part 7007.1130, subp. 6 when calculating actual emissions using performance tests that included air pollution control equipment.

## **7007.1140 CAPPED PERMIT ELIGIBILITY REQUIREMENTS**

## **Subp. 2. Sources that may not obtain a capped permit.**

The proposed addition at Item E, subitem 13, brings owners and operators of stationary compression ignition internal combustion engines with a displacement of less than 30 liters per cylinder and emergency engines with a displacement greater than or equal to 30 liters per cylinder into the group of NSPS standards that do not preclude application for a capped permit on the basis that they are NSPS-subject facilities. However, this status is extended only to a subset of affected facilities with non-complex compliance requirements that are subject to 40 CFR 60, subpart III (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). Like the proposed change at part 7007.1110, subpart 2, item C for registration permit holders, this proposal includes engines less than 30 liters per cylinder displacement due to the straightforward compliance requirements for affected facilities. However, unlike the proposed change at part 7007.1110, subpart 2, item C, this proposal includes larger (greater than 30 liters per cylinder displacement) emergency engines that must conduct an initial performance test and establish monitoring parameters as part of their compliance requirements. Since the capped permit requires the owner or operator to maintain an updated compliance plan, the MPCA is confident that the compliance status of these emergency engines will not be jeopardized. It is reasonable to extend the capped permit option to qualifying sources that would otherwise be barred by an NSPS with relatively simple, straightforward compliance requirements. If this change were not made, capped permit holders that purchased a new engine subject to this standard would no longer qualify for their capped permit and would need to apply for an individual permit. The change is needed as part of a general MPCA practice to offer more streamlined permit options where the rate of compliance will not be impacted.

## **7007.1200 CALCULATING EMISSION CHANGES FOR PERMIT AMENDMENT DETERMINATIONS.**

The MPCA proposes to change the title of this part to better reflect the content. This part describes the calculation method to be used to determine whether a permit amendment is needed and, if so, the type of permit amendment needed. A different method of calculation is used to determine whether a modification is a Title I modification or is not a Title I modification. It is reasonable to change the title to reflect that the emission calculations methods described are for specific types of permit amendment determinations.

The MPCA proposes to add recordkeeping requirements if this part is used and no amendment or notification to the permit is required. This change is necessary to fix a gap in the existing rules. The existing rules do not require facilities to keep records of their emission change calculations performed to determine whether an amendment is needed for a change. It is both prudent and reasonable for individual permit holders to keep records of their calculations when they plan to make a change and find that no amendment or notification is required. Examples of changes that a facility may make that may not require a permit amendment or notification are: some modifications to existing units, replacement units that do not require notification under part 7007.1150, item C, and addition of units not covered under the permit. In addition, should a

question arise about a change, the records provide a means for the MPCA to check that the appropriate calculations have been performed and for the facility to demonstrate that those calculations showed that no amendment or notification was needed. If a facility calculates a decrease in emissions as a result of a physical or operational change, that change, by definition, is not a modification. The owner or operator should be able to demonstrate that the correct emission factors were used in calculating the emissions decrease. The MPCA intends that these records be provided only on an “as-needed” basis. The proposed changes to this part would not apply to the majority of permit holders as part 7007.1200 does not apply to registration, capped, or general permit holders.

In addition, this rule revision addresses a gap in the federal NSR rules. The federal NSR reform rule has a gap because it only requires record keeping if the project has a “*reasonable probability*” of being part of a “major modification” that “*may result in a significant emissions increase*” (emphasis added). If the permittee does not believe this to be true, they do not have to keep records under federal NSR rules and therefore no reporting would apply. However, the MPCA needs a way to check and the permit holder needs to be able to demonstrate compliance. A five year time period to maintain these records is reasonable for facilities with non-expiring permits because it is consistent with the required record keeping period in other parts of the permit chapter such as part 7007.0800, subp. 5. For facilities with expiring permits, it is reasonable for the permittee to retain these records for five years or until reissuance of the total facility operating permit, whichever is longer. The permittee could use the records in preparing its application for reissuance of the total facility operating permit or the MPCA may need these records to review the permit application, update MPCA records, and reissue the permit. Only the records for the current calendar year need to be kept at the stationary source for potential inspection purposes. For all other years, it is reasonable that the records be kept at an office of the stationary source, if it is more cost effective or efficient for the facility.

It is reasonable to require permittees to retain emission calculation records for a period of time as a way to verify compliance with the amendment procedures and for permittees to be able to demonstrate their compliance with amendment procedures.

## **7007.1250 INSIGNIFICANT MODIFICATIONS.**

### **Supart 1. When an insignificant modification can be made.**

The MPCA is proposing to amend item A to address conditionally insignificant activities in the same manner that insignificant activities are addressed in this item. It was the intent of the MPCA when the conditionally insignificant activities rule in chapter 7008 was adopted, that insignificant and conditionally insignificant activities would be treated in the same manner in qualifying for an insignificant modification, provided that the conditions for eligibility set out in chapter 7008 were met for the activity in question. The change proposed here should have been included in the rulemaking that established part 7008.4000. This change is reasonable as it clarifies the intended relationship between chapters 7007 and 7008 and is needed in order to avoid confusion or inconsistency in this area.

### **Subp. 3. Record keeping requirements.**



The MPCA proposes to strike the term “contemporaneous” as the meaning of “contemporaneous” records is unclear in the current rule and is not necessary. Subp. 4 of this part sets forth the requirements for notification to the agency should the cumulative emissions from insignificant modifications exceed a certain threshold. Therefore, the permittee should simply keep records of the insignificant modifications. The phrase “contemporaneous” is not needed. In addition, the current rule requires the permittee to keep records of increases made under subpart 1, item B, and part 7007.1300, subp. 3, item I, according to part 7007.1200. Yet the current part 7007.1200 is silent on the required duration of record keeping. Therefore, it is necessary and reasonable to specify that these calculations be kept according to the proposed subp. 4 of part 7007.1200.

### **7007.1300 INSIGNIFICANT ACTIVITIES LIST.**

#### **Subp. 2. Insignificant activities not required to be listed.**

Item C (4) of the current rule is missing the word “form” and as a result lacks clear meaning. The list in this subpart was taken from a document labeled as “Exhibit 7” in the SONAR for the rule as proposed in 1993. In Exhibit 7, the sentence in Item C (4) does contain the word “form.” This correction is needed and reasonable for the purpose of correcting an error from the original rulemaking that resulted in unclear rule language.

### **7007.3000 PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY.**

The MPCA proposes a technical amendment to this part. Rather than incorporating by reference specific subsections of 40 CFR 52.21, the MPCA proposes to simply incorporate by reference section 52.21. There is no change in application of this part as a result of this proposed change as the existing language already incorporates 52.21, as amended. For example, when EPA finalized its changes to 52.21 and added subsections under an effort called “New Source Review Reform” these changes took effect in Minnesota without rulemaking efforts by the MPCA. It does not require a rule change by the MPCA or changes EPA makes to 52.21 apply in Minnesota. This proposed rule change will eliminate the need for the MPCA to update the list of subsections to match EPA’s list of subsections each time EPA makes a change to 52.21. This change is needed and reasonable because a more general reference to 52.21 eliminates the need for future updates without changing the effect of this provision. In addition, the most recent delegation agreement for MPCA dated November 3, 1988, does not limit the delegation to parts 52.21(b)-(f) and (h)-(w). It simply delegates 40 CFR 52.21 as amended. Thus, it also is reasonable to change the rule language to reflect the most recent delegation agreement between EPA and the MPCA.

### **7007.5000 BEST AVAILABLE RETROFIT TECHNOLOGY.**

#### **Subpart 1. Incorporation by reference.**

Under EPA’s Regional Haze rules (40 CFR, part 51.308), the MPCA is required to determine BART for certain emission sources “that may reasonably be anticipated to cause or contribute” to visibility impairment in Class I areas. EPA has designated 156 national parks and wilderness areas as Class I areas, including Voyageur’s National Park and the Boundary Waters Canoe Area in Minnesota. The MPCA needs to establish its authority to implement the BART provisions and

proposes to do so through the proposed rule language in this part. This part establishes the MPCA as the entity to fulfill the requirement to implement BART as part of a regional haze implementation plan as required by section 308. 40 CFR 51, Appendix Y contains the BART implementation guidelines for states. The MPCA will rely on Appendix Y in its implementation of BART, thus, it is necessary to incorporate this appendix by reference. 40 CFR 51.301 contains the definitions for the terms that are used in Appendix Y. Therefore it is necessary to incorporate part 51.301 by reference as well.

### **Subp 2. BART determination.**

The BART emission limits for sources must be included in the state's regional haze SIP which is due to EPA by December 17, 2007. It is reasonable for the facility to prepare the BART analysis according to guidelines in Appendix Y because only the facility owner or operator has most of the information required for a BART analysis. A BART analysis identifies the best system of continuous emission reduction taking into account: 1) available retrofit control options, 2) any pollution control equipment in use at the source, 3) the costs of compliance with control options, 4) the remaining useful life of the facility, 5) the energy and non-air quality environmental impacts of control options, and 6) the visibility impacts analysis. While the facility is the most appropriate entity to prepare a BART analysis and is encouraged to propose BART, the MPCA is the entity that makes the BART determination. The MPCA's BART determination does not become final until EPA approves the regional haze SIP.

To meet the 2007 SIP submittal deadline, BART analyses were needed from facilities by fall 2006 to allow the MPCA sufficient time to make the BART determination and use the BART limits in the other SIP-required processes. In March, 2006, the MPCA notified facilities that were found to be subject to BART because they caused or contributed to Class I visibility impairment based on MPCA modeling. All BART analyses requested by the MPCA were received from facilities found to be subject to BART by September, 2006. It is reasonable to establish a deadline for BART analyses that allows a facility sufficient time to complete the analysis and yet still provides the MPCA the information it needs in time to complete the regional haze SIP.

Minnesota has 11 facilities with electric generating units that are BART-eligible. The EPA has determined that, as a whole, the Clean Air Interstate Rule achieves greater emission reductions than BART for EGUs and, as a result, each State participating in CAIR can allow CAIR to substitute for BART. Thus, if a State allowed CAIR to substitute for BART, an EGU's participation in CAIR would satisfy the requirements for BART for the pollutants controlled by CAIR (SO<sub>2</sub> and NO<sub>x</sub>). Minnesota is a participant in CAIR, but has postponed the decision as to whether CAIR substitutes for BART. The MPCA expects to determine whether CAIR substitutes for BART in early 2007 when expected-to-be-complete modeling will help inform progress needed towards the 2018 visibility goal and more information is available about planned controls on BART-eligible units to comply with CAIR. The MPCA did request and receive BART analyses from 3 facilities with BART-eligible EGUs that did not have plans for control upgrades in the next several years and that contributed to Class I visibility impairment. The MPCA deemed the EGUs at these three facilities as "potentially" subject-to-BART. If the MPCA determines that CAIR does not substitute for BART, then the MPCA will include a separate

rulemaking schedule in its SIP to establish the need and reasonableness for requiring BART EGUs in CAIR to implement BART.

### **Subp. 3. BART implementation.**

Federal rules require a source with emission units that are subject to BART to install and operate BART as soon as practicable, but no later than five years after EPA approves the BART determination by the agency. For example, where BART is determined to be a work practice, the MPCA would require that the facility implement the work practice in a shorter period of time than a facility where BART was determined to be new control equipment. It is necessary to include this provision because, for EPA to approve Minnesota's regional haze SIP, EPA requires that the responsible agency have the appropriate authorities to implement BART. In addition, for SIP approval, EPA will need to ensure that the control equipment or work practices that constitute BART are properly operated and maintained. It is reasonable to establish the MPCA's authority to incorporate these requirements in the source's Title V permit or other enforceable mechanism such as an administrative order to help ensure EPA's approval of Minnesota's regional haze SIP submittal.

### **IV(B) Amendments to Parts 7011.0060 – 7011.0080 (Control Equipment Rule)**

In practice, the control equipment rule has two basic functions, first to provide default control equipment efficiencies that can be used to establish a source's eligibility for a registration or capped permit and second to provide default control equipment efficiencies that can be used to determine what level of permit amendment is needed for an individual state or federal operating permit. In both cases use of the rule is elective. The owner or operator of the emission facility may use any other source of data available to support an application. Since this rule incorporates default factors that are in turn composites of other available information, it has also been used to inform permit application review, to guide construction of monitoring and recordkeeping requirements in permits, and to support emission inventory submittals.

The MPCA proposes to amend the rule by updating the emission factors to reflect more current knowledge, to extend the list of control equipment covered by the rule, and to extend the list of pollutants for which default control efficiencies are available. These changes are focused on the primary use of the rule (to support registration and capped permit application) and to a lesser extent on the use of the rule to determine the level of permit amendment needed. Accordingly, the choices of additional controls and pollutants reflect what the MPCA believes to be most relevant to smaller facilities that are most likely to benefit by using the rule to obtain a registration or capped permit.

As a whole the changes are reasonable because they are consistent with the primary purpose of the current rule. The rule remains elective and the changes attempt to clarify the requirements that apply to hoods, which have caused confusion in the past. The changes are needed because the current control efficiencies are based on research conducted more than ten years ago and need to be updated. For this rulemaking the MPCA hired a contractor to update and expand on this research using up to date information. The individual changes are discussed in more detail below.

## **7011.0060 DEFINITIONS**

The MPCA proposes to amend this definition to clarify that a hood must actually be used and maintained in order to fall within the scope of this rule. The rule already states that the hood's design must conform to design and operating practices in the Industrial Ventilation manual but does not explicitly require operation of the hood at all times. It is reasonable to state more explicitly that a hood must actually be properly used and maintained because the control equipment rule gives automatic credit for emission units fitted with a hood that meet the design criteria. Failure to ensure constant operation or failure to conduct adequate maintenance on the hood could result in significantly lower control of emissions. The change is needed to clarify what is already implied by the rule and to help ensure that owners and operators of hoods use and maintain them in a manner consistent with the assumptions made at the time of permit application. It is also consistent with the provision in part 7007.0070 that the owner or operator must maintain the listed control efficiency.

## **7011.0061 INCORPORATION BY REFERENCE**

This proposed rule change corrects the address for the American Conference of Governmental Industrial Hygienists, which has changed since the rule was originally adopted. This change is needed and reasonable to reflect the correct address for this organization. The rule already indicates that the manual is subject to frequent change, putting affected parties on notice that updates will occur periodically.

## **7011.0065 APPLICABILITY.**

The existing subpart 1 states the provisions of parts 7011.0060 through 7011.0080 apply to an owner or operator of a stationary source when the owner or operator used the control equipment efficiencies in part 7011.0070 for any of the reasons listed, such as to qualify for an option D registration permit. The MPCA proposes to replace the word "used" with the phrase "elected to use". This change is needed because some readers are confused about the applicability of the control equipment rule and do not understand that it is an elective rule. This rule was proposed by the MPCA in 1994 as a streamlining measure to focus limited agency resources on major sources and to reduce permit issuance backlogs by allowing sources to qualify for 1) more streamlined permits (such as the registration permit) and 2) easier-to-obtain amendment types by providing an enforceable means to receive credit for a source's control equipment. It is reasonable to clarify that this rule applies at the choice of an owner or operator.

The MPCA proposes to delete subpart 2 which describes two exceptions to applicability as these exceptions are not necessary given that use of the rule is elective by the owner or operator. In addition, elimination of this subpart will also remove the confusion of reader that was caused by this subpart. It is redundant and confusing to have items A and B listed as an exception to a rule that is elective. In the more than ten years this rule has been in existence, MPCA staff are not aware of any instance in which these exceptions to applicability were used by or applied to any given

facility. It is reasonable to delete exceptions to applicability when they are unnecessary and confusing.

## **7011.0070 LISTED CONTROL EQUIPMENT AND CONTROL EQUIPMENT EFFICIENCIES**

### **Subpart 1. Listed control equipment efficiencies.**

The existing subpart contains a requirement that the owner or operator maintain the listed control efficiency unless some other efficiency has been established in a site-specific permit. It also states that the control efficiency is determined by whether the emissions are directed to a hood (in which case a default capture efficiency is used and the overall control efficiency is reduced) or through a total enclosure (enabling 100% capture of emissions). The MPCA proposes to amend this subpart by stating that the determination is further influenced by whether the hood is certified or non-certified. This reflects the change to the table in subpart 1a, which now has a column for each hood category. The need for and reasonableness of this change is discussed under the Table A discussion, below.

The MPCA also proposes to move most of the detailed language affecting hoods and incorporate it into a new subpart in part 7011.0072. The need for and reasonableness of this change is discussed in part 7011.0072, located on page 25 of this SONAR.

New language is proposed at Item B to restrict the use of the control efficiencies associated with non-certified hoods to registration permits. Since the changes in Table A now incorporate a 60% capture assumption for non-certified hoods, where previously no credit could be given, the MPCA is proposing that this allowance be restricted to permit types that incorporate otherwise conservative assumptions. Since there is a significant difference between total emissions when assuming 60% rather than 80% capture, there remains a significant incentive for these smaller sources to certify their hoods, particularly in cases where the eligibility for a registration permit is borderline. For site-specific individual permits to determine the level of amendment and for capped permits to determine eligibility, the owner or operator may not use the 60% default. However, by certifying the hood according to the criteria of this rule, the owner or operator can qualify to use the number based on 80% capture efficiency.

This limitation is needed due to the significant variation in hood design. The default efficiency generally should not be allowed for determining what type of permit amendment a larger facility needs since such determinations tend to lie close to a particular threshold and a case by case analysis or an otherwise greater level of assurance is needed than when determining if the facility is eligible for a registration permit. It is reasonable to allow a default number for registration permit eligibility without a certification requirement since the question here is whether the facility falls within an already conservative eligibility threshold. Additionally, the cost of certification may be a significant barrier to small facilities using this rule and one of the purposes of this rulemaking is to make the rule more accessible to small businesses that clearly do not need an individual state or federal permit.

### **Subpart 1a. Exceptions where control efficiency disallowed.**

The MPCA is proposing this new subpart because the expansion of this rule to additional equipment and pollutants have compounded some technical issues that would not have been clear at the time the control equipment rule was originally adopted. Specifically, this subpart provides criteria for the commissioner to consider and determine whether the default capture and control efficiencies are representative in a particular situation. While the MPCA does not envision doing an in-depth technical review of every case, the MPCA does need to be able to disallow use of the rule when MPCA experience or other data suggests that the application of the default efficiencies is inappropriate. This will help to screen against erroneously issuing registration permit status or lower level permit amendments that could lead to enforcement action by the MPCA or the EPA when the error is discovered later.

The factors listed in Item A identify several possibilities the MPCA has encountered that would make application of a default control efficiency inappropriate. Item A allows the MPCA to reject use of the rule in a permit application if the listed efficiency is inapplicable or non-representative. The first factor listed is complexity of the process or source of emissions. Since the data that was used to determine the default efficiencies in the rule generally represents a mid-point of a range of units in different industries, complexity in any part of a process or equipment can cause the actual overall control efficiency to deviate from the assumed norm. The second factor is lack of reliable data. This circumstance may arise, for example, if it is not possible to match the facility's controls with listed equipment to a sufficient degree.

The third factor involves presence of a pollutant or constituent in the gas stream that makes the default number non-representative because it is more difficult to control. An example of this occurs when the condensible fraction of the PM10 emissions from an emissions unit form a significant portion of the total mass emissions. The MPCA does not have sufficient data to determine to what extent the efficiencies compiled by the contractor account for condensible particulate matter so the MPCA needs to be able to disallow use of the rule when the condensible fraction is high and there is a lack of supporting data to justify use of the control equipment rule. Similarly, for VOC controls, the default number can be non-representative when certain organic compounds that require high combustion temperatures and long residence times to combust are present.

A fourth, catch-all factor is included such that other site-specific conditions can be considered. The MPCA has broad experience in making permitting determinations and reviewing emissions test data and on a case by case basis such experience may lead to a conclusion that the control equipment rule's default numbers should not be applied. This factor is broad but is consistent with the existing authority of the MPCA, in part 7017.2020, to require performance tests to verify permitting assumptions. Such authority can be applied either before or after a permit is issued. The effect of Item A of this subpart is to condition use of the rule on the owner or operator conducting a performance test to demonstrate that the rule can be applied.

Item B is proposed in order to disallow use of this rule when site-specific requirements are needed in order to ensure compliance with an applicable requirement or to protect human health or the environment. This provision would apply only to those facilities using the rule to determine what kind of permit amendment is needed, since imposition of a site-specific requirement would make

the facility ineligible for a registration permit or capped permit. This provision is consistent with part 7007.1110, subp. 2 (B)(3), as proposed in this rulemaking in order to explicitly state that certain site-specific assumptions will render a facility ineligible for a registration permit. (See discussion under part 7007.1110, subp. 2, above). The same rationale applies to individual permits. For example, if a higher control efficiency is assumed in order to show no significant impact on ambient air quality standards, the facility could not use the lower default number to demonstrate that a different kind of permit amendment was needed. It is reasonable to disallow use of this rule when necessary to ensure compliance with an applicable requirement or to protect human health or the environment.

### **Subp. 1b. Transition Period.**

The proposed rule provides existing permit holders an estimated one year from the adoption of this rule to apply for another permit type if they are ineligible due to the use of the revised control efficiencies in part 7011.0070. The MPCA expects nearly all facilities that relied on the listed control efficiencies to qualify for their permit will continue to qualify for their permit even with the change in the listed control efficiencies. However, a transition period to apply for another permit type is needed for those few facilities that may lose eligibility. If a facility relied on listed control equipment where the allowable control efficiency has been reduced (e.g. wall filters) and actual emissions are already close to the eligibility threshold for that pollutant, then that facility may need a new type of permit. In those instances where the facility no longer qualifies for its registration permit option D, a capped permit (another type of streamlined permit) is likely to be an option for the facility. Capped permit holders that lose eligibility can apply for a less streamlined individual state permit. One year is a reasonable transition time in which to prepare and submit a new or updated permit application. The MPCA, primarily through its Small Business Assistance program and the Customer Assistance Center, will work with facilities, if any, that will no longer be eligible for a registration permit to help with this transition.

### **Control Equipment Efficiencies – Table A**

Several changes are proposed to this table, including addition of a column to provide a default efficiency for emissions units with non-certified hoods, separation of the PM and PM10 efficiencies, addition of pollutants to existing listed equipment, addition of equipment to the list and removal of equipment from the list.

The MPCA is proposing that the table provide default efficiencies based on whether there is a total enclosure, certified hood or non-certified hood. In addition, the MPCA proposed that for both gaseous and particulate pollutants the capture efficiency for a certified hood can be assumed as 80%. In the current rule the efficiencies available are 80% for particulate matter and 60% for VOC. The MPCA asked its contractor to research whether there was a valid technical basis for the existing distinction. The contractor provided capture efficiencies at the same level for both categories of pollutant and the MPCA agrees that this is appropriate. Since capture efficiency for VOC can be more readily tested, using EPA reference methods, and as the MPCA will make its testing authority more explicit in this proposed rule, and as the MPCA is unaware of a technical basis for assuming that VOC capture is less efficient, it is reasonable to raise the VOC capture

efficiency to the same level as that for particulate matter. This change is needed in order to provide a meaningful benefit to owners or operators that make an investment in proper hood design and certification.

A default capture efficiency of 60% is assumed for devices fitted with a hood that has not been certified. This is needed and reasonable as in some cases a facility can still qualify for a registration permit assuming 60 % capture of emissions and would be unreasonably burdened by the cost of obtaining a professional certification to qualify for a higher efficiency that it does not need. In addition, in many cases a facility may have listed control equipment and can qualify for a registration permit without use of the control equipment rule. If a facility qualifies for the registration permit without use of the control equipment rule, then the facility is not required to do the monitoring, recordkeeping and maintenance of the control equipment as specified in part 7011.0060 through 7011.0080. The burden of obtaining a hood certification is greater than the benefit the facility receives through reduced emission inventory fees due to credit for the control equipment. The MPCA wishes to remove this unintended barrier to use of the control equipment rule for registration permittees. The MPCA expects that by removing this barrier more registration permit holders with control equipment will elect to take credit for it and follow the control equipment operation, monitoring and maintenance requirements, resulting in reduced emissions. The MPCA recognizes that there is a wide variation in hood design and so has limited the use of the 60% default to registration permit applications (see proposed revision to part 7011.0070). In order to get credit for a hood capturing emissions in the context of a capped or individual facility permit, the owner or operator must obtain a certification for the hood. Also, it should be noted that the default is intended for hoods that have not gone through a certification.

The table as proposed now has separate rows for PM and PM10. This reflects the fact that control equipment efficiency varies with the particle size in the gas stream. Usually smaller particles are more difficult to remove, but the increase in difficulty varies between types of equipment. Since PM10 testing methods did not come into common use until the early 1990s, there was relatively little test data available when the original rule was developed in that period so it was reasonable at that time to assume that PM and PM10 efficiencies were the same. The proposed changes are needed and reasonable because they reflect actual variations in practice and are consistent with the MPCA's experience in reviewing test data for both pollutants.

The value in the column headed 'total enclosure' represents the assumed overall efficiency when all the emissions are directed through the control device. This occurs either when the emissions unit, control device and exit stack are part of an enclosed system (e.g. in the case of a boiler) or when the unit is contained in an enclosure or room designed so that no emissions can vent outside. From this value the 'hood-certified' and 'hood not certified' numbers are derived, at 80% and 60% respectively. This retains the existing structure of the rule, except that there are now two columns for hoods as explained above.

The MPCA evaluated each existing control device, using the new data provided by the consultant and MPCA experience in permitting the various devices. Except where noted below, the consultant's recommended values have been inserted into the proposed rule to replace the older data. This includes inserting values for pollutants or control devices not already included in the rule.



The MPCA proposes to delete the multiple cyclone with ID # 077 from this rule as the consultant was unable to provide updated values and the MPCA determined that this device is not commonly used by the owners or operators most likely to be using this rule. It is reasonable to delete equipment that is not commonly used, particularly when the MPCA does not have sufficient confidence in the existing efficiency value. This also falls within the general need to keep the rules accurate and up to date.

In addition to updating actual efficiency values and deleting no longer needed control devices, the MPCA is proposing to add control equipment in two ways. The first is to append the ID numbers in cases where the contractor grouped together similar equipment and assigned the same efficiency values. For example, 057 is added to 085 in the particulate matter section. More detailed descriptions can be found in the contractor report, appended to this document, but both are grouped as wet cyclone separators and are assigned the same efficiency values. The rule is easier to use when grouping of similar devices can be done as it avoids the need to search through detailed descriptions and it reduces the risk of error.

The contractor-recommended efficiency values for electrostatic precipitators (ESPs - wet and dry) were judged to be too high, based on MPCA experience in permitting and testing these devices. Therefore, the MPCA is proposing to use the low end of the range provided for wet ESPs as the basis for PM and PM10 control efficiency (98% and 94% respectively). Similarly, MPCA staff commented that the contractor's value for PM control by fabric filters was lower than experience would suggest. For this reason the MPCA proposes to retain the original value of 99% as in the current rule for PM control. The contractor's value for PM10 is being used since condensible particulate matter is a greater factor in overall PM10 control, and fabric filters do not control condensible particulate matter. In addition, for Wall or Panel Filters (control code 058) the contractor value for PM control that was lower than what MPCA experience would suggest. These filters are most commonly used in spray paint booth applications and this application was not among the PM control applications listed by the contractor for this control type. It is reasonable to deviate from the contractor's value when staff experience with Minnesota sources suggests that a higher or lower value is more representative.

Consistent with the contractor's recommendations, the MPCA proposes to separate catalytic and thermal afterburners into two distinct control types. It is reasonable to separate these control types into two categories because the VOC control values suggested by the contractor differ as do the monitoring parameters for these control types. The MPCA proposes to add control values for secondary pollutants (PM, PM10, and CO) in addition to VOCs for both afterburner control types and flaring as well. The values recommended by the contractor are consistent with those control efficiencies ranges observed in practice by MPCA staff for these control types.

### **Subp. 2. Alternative control equipment and capture efficiencies; control efficiencies for hazardous air pollutants.**

Under this existing subpart, an owner or operator can propose an alternative control efficiency for listed control equipment by conducting a performance test. The MPCA proposes to clarify that an owner or operator can also establish an alternative capture efficiency for listed control equipment by conducting a performance test under parts 7017.2001 to 7017.2060. The assumed capture

efficiencies in the control equipment rule are conservative. Hoods are typically designed to achieve substantially higher capture efficiencies than the 80% allowed for certified hoods. However, it is a costly process to determine the capture efficiency of a hood. For some owners and operators, it may be important to receive greater credit for reduction in emissions achieved with the listed control equipment and they may be willing to do testing to establish an alternative capture efficiency. It is reasonable to allow testing to determine an alternative capture efficiency as it will provide a better and more accurate emissions information.

## **7011.0072 REQUIREMENTS FOR CERTIFIED HOODS.**

The MPCA proposes to create a new part and merge the requirements related to hood certification, contents of hood evaluation, monitoring and recordkeeping all in this new part. In the existing rule, these requirements are located in parts 7011.0070, subps. 1, 3, 4 and 7011.0080, subp. 1. It is needed and reasonable to group the requirements related to hoods under one part to assist MPCA staff, affected parties and the public in understanding the requirements related to hoods.

### **Subpart 1. Applicability**

In this new subpart the MPCA proposed to clarify applicability of the hood requirements. This clarification is needed to minimize potential confusion by stating that the requirements in this part apply only to those hoods for which the facility elects to use the certified hood control efficiency (and not to those hoods for which the facility elects to use the lower default uncertified hood efficiency). It is reasonable to specifically state the affected party must not interpret this rule in a way that would violate an applicable requirement or compliance document.

### **Subp. 2. Certification required.**

In this new subpart the MPCA proposes to clarify what the affected party must do for hood certification. The MPCA moved the current rule language (part 7011.0070, subp. 3) pertaining to hood certifications to this new subpart. The rule language in this new subpart is not new language. It has been reformatted to clearly describe each step an affected party must complete for hood certification. This proposed change is needed and reasonable because it provides clear direction to individuals preparing for hood certification. Additionally, items B and C of this new subpart requires the affected party to document and certify that the hood conforms with the practices set forth in “Industrial Ventilation – A Manual of Recommended Practices, American Conference of Governmental Industrial Hygienists”. It is needed and reasonable for hoods to be evaluated using the recommended practices in this manual as it is the industry standard for designing and operating hoods.

### **Subp. 3. Contents of hood evaluation form.**

The MPCA moved current rule language (part 7011.0070, subp. 4) pertaining to form contents for hood evaluation to this new subpart. The rule language in this new subpart is not new. It has not been reformatted and no modifications have been made to items A thru F. The MPCA made a

minor technical modification by changing a reference from “subpart 1” to “subpart 2” as a result of the newly created rule part. This new subpart is needed and reasonable because it pertains specifically to hoods and belongs in this newly created rule part for hoods.

#### **Subp. 4. Monitoring and recordkeeping.**

The MPCA moved current language (part 7011.0080) governing hood monitoring and recordkeeping to this new subpart. While the rule language in this new subpart is not new, the MPCA proposes to reformat and clarify the requirements an affected party must fulfill. This new subpart is needed to complete the MPCA’s grouping of hood requirements. It is reasonable to clarify confusing or vague rule language so MPCA staff, affected parties and the public clearly understand what is required.

### **7011.0075 LISTED CONTROL EQUIPMENT GENERAL REQUIREMENTS**

#### **Subpart 1. Operation of control equipment.**

Item A of this subpart contains a minor technical modification. The word “commissioner” is substituted in place of “agency”. This is reasonable as the word “agency” may be thought of as meaning the MPCA Board under the definition in part 7000.0100, subp. 2. The change is needed to avoid confusion and is reasonable because in practice, submittals and requests come in to the commissioner or authorized staff of the commissioner. This rulemaking does not correct all such occurrences but does make the change in rules that are already being amended for other reasons.

#### **Subp. 3. Installation of monitoring equipment.**

Subp. 3 contains a minor technical modification, the addition of the reference to part 7011.0072 (Requirement for certified hoods). As discussed above, the MPCA is proposing to consolidate all hood requirements in one part. The change is needed and reasonable because the hood monitoring requirements formerly in 7011.0080 are now located in part 7011.0072.

#### **Subp. 6. Demonstration of capture and control equipment efficiency.**

In this subpart, the MPCA proposes to explicitly include capture efficiency of hoods in the scope of a performance test that can be required to demonstrate efficiency. This change is necessary to clarify that determination of capture efficiency (including hood certification) is a performance test as defined in Minnesota rules and that such a test can be requested under performance test rule. It is reasonable to make this clarification because the agency needs to be able to request an owner or operator to demonstrate that the hood is achieving the capture efficiency that they are assuming for demonstrating permit eligibility or for emissions inventory calculation purposes. A minor correction is proposed to the last sentence of this part, as efficiencies in part 7011.0070 are assumed by the owner or operator, not determined in part 7011.0070. This proposed change is reasonable because application of the control equipment rule by an owner or operator is voluntary and the efficiencies in 7011.0070 are not determined but assumed by the owner or operator.

## **7011.0080 MONITORING AND RECORD KEEPING FOR LISTED CONTROL EQUIPMENT**

### **Subpart 1. Monitoring and record keeping requirements.**

The language proposed for deletion in this subpart related to monitoring and record keeping for hoods has been moved to new part 7011.0072. The need and reasonableness of this proposed change is described above under part 7011.0072, above.

The MPCA evaluated the monitoring and record keeping requirements for each existing control device, using the new data provided by the consultant and MPCA experience in permitting the various devices. The consultant's recommended monitoring parameters and record keeping of those parameters have been inserted into the proposed rule to replace the existing parameters for ESPs. This includes inserting parameters for control devices not already included in the rule. The new control devices for which parameters are based on the contractor report referred to earlier. These new devices include: mechanically aided separator, charged scrubber, condensation scrubber, activated carbon or clay adsorption, packed column absorption, biofiltration, non-selective catalytic reduction, and selective catalytic reduction.

The MPCA proposes to allow the owner or operator the option to maintain the records required by this part in paper or electronic format unless a specific format is required. It is necessary to allow electronic records for compliance demonstration because it simplifies and reduces the time necessary for collecting and recording the information demonstrating compliance and in many cases can be more accurate and reliable than the same information collected by human observation and recording. It is reasonable to allow either electronic or paper records, since electronic recording has become commonplace in the years since this rule was originally drafted. In some instances, the existing rule specifies a hard copy for certain monitoring parameter records. The MPCA proposes to delete the specific requirement for a hard copy readout of the continuous temperature measurements for thermal incinerators, catalytic incinerators, and flaring. Either an electronic or paper record of the continuous temperature measurements would be acceptable for the reasons previously mentioned.

## **IV(C) Amendments and Additions to Chapter 7011 (excluding control equipment rule)**

### **7011.0730 TABLE 1.**

The process weight table is part of the industrial process equipment rule that establishes default particulate matter emission limits for equipment not regulated by a more specific rule. This particular table establishes a mass emission rate proportional to the process weight rate of the emission unit. For example, if the unit operates at 1000 pounds per hour during a performance test, the mass emission limit for compliance determination purposes would be 2.25 pounds per hour. The rule provides an equation for calculating the emission limit at points between the tabulated numbers. The MPCA is proposing to delete the 50 pound per hour process weight rate from the table because the emission limit associated with it is significantly lower than would be obtained by using the equation. The MPCA has not been able to determine why the number was established at such a low level but believes this may have been an error. MPCA staff has noted that the process weight tables of some other states that have similar rules (e.g. Illinois and Indiana) have 100 pounds per hour as the lowest value in the table. It is necessary and reasonable to delete an apparently over-restrictive limit that has no apparent basis and that appears to be an outlier when compared to the generally lenient limitations of this rule and when compared to similar rules in other states. The existing rule imposes a disproportionately stringent limit on emission units with very small throughput rates.

### **7011.1005 STANDARDS OF PERFORMANCE FOR DRY BULK AGRICULTURAL COMMODITY FACILITIES.**

#### **Subp. 3. Prohibited discharges.**

A clarification is proposed in this subpart. The phrase “this section” in the existing rule is confusing as Minnesota rules do not contain section numbers. The term refers to part 7011.1015, which is mentioned in the previous sentence in this subpart, and which is the subpart that determines if control is required. This change is needed and reasonable in order to prevent ongoing confusion.

### **7011.1299 STANDARDS OF PERFORMANCE FOR INCINERATORS and; 7011.3430 STANDARDS OF PERFORMANCE FOR VOC EMISSIONS FROM SOCM REACTOR PROCESSES 7011.3520 STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES**

The MPCA has made a practice of incorporating the federal NSPS standards by reference into state rule. Upon reviewing the list of federal standards against state rules, MPCA staff found that subpart E, the NSPS for incinerators, and subpart RRR, a volatile organic compound standard applying to certain organic chemical manufacturers, had not been incorporated by reference in the past. Subpart IIII, applying to both manufacturers and owners and operators of compression ignition engines, was recently finalized by EPA in fall 2006. These incorporations are needed and reasonable in order to keep the rules up to date. A number of waste combustor standards are also

currently not incorporated by reference into state rule. These are being addressed in a separate rulemaking.

**7011.8010 SITE REMEDIATION.**

**7011.8020 PRIMARY MAGNESIUM REFINING.**

**7011.8030 TACONITE IRON ORE PROCESSING.**

**7011.8040 IRON AND STEEL FOUNDRIES.**

**7011.8050 MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING.**

**7011.8060 SURFACE COATING OF METAL CANS.**

**7011.8070 MISCELLANEOUS COATING MANUFACTURING.**

**7011.8080 MERCURY EMISSIONS FROM MERCURY CELL CHLOR-ALKALI PLANTS.**

**7011.8090 SURFACE COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS.**

**7011.8100 LIME MANUFACTURING PLANTS.**

**7011.8110 ORGANIC LIQUIDS DISTRIBUTION (NON-GASOLINE).**

**7011.8120 STATIONARY COMBUSTION TURBINES.**

**7011.8130 SURFACE COATING OF PLASTIC PARTS AND PRODUCTS.**

**7011.8140 SURFACE COATING OF AUTOMOBILES AND LIGHT-DUTY TRUCKS.**

**7011.8150 STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

**7011.8160 PLYWOOD AND COMPOSITE WOOD PRODUCTS.**

**7011.8170 INDUSTRIAL PROCESS COOLING TOWERS.**

The MPCA is proposing to incorporate by reference into state rule these federal NESHAP standards. The EPA delegated the NESHAP program to MPCA in a *Federal Register* notice dated July 23, 2002 (67 FR 48036). This notice spelled out the procedure for delegation of already promulgated standards and yet to be promulgated standards within that program. This process was incorporated into a memorandum of agreement between EPA and MPCA and includes a commitment by MPCA to incorporate the standards by reference into state rules. This step completes the delegation by giving MPCA enforcement authority for the affected standards.

Although the MPCA's NESHAP delegation covers only those sources considered to be "major sources" under Part 70, the MPCA has decided to incorporate by reference all of the NESHAP standards, including standards for "area sources" which are not automatically subject to Part 70, into state rule. This will be beneficial if the MPCA requests further delegation of the area source standards in the future or if EPA changes the exemption from Part 70 status of any of the area source categories. These rules are needed in order to fulfill the MPCA's delegation commitment and to avoid confusion regarding whether EPA or MPCA will be enforcing standards for these sources. Once MPCA has established primacy in enforcement of a standard, facilities that are subject to the standard need only communicate and report to the MPCA when operating under

the standard (with a few exceptions, e.g., key decision making authority that is retained by EPA and Title V compliance certifications that go to both MPCA and EPA). If the MPCA did not complete the delegation process, affected facilities would encounter much more duplication of submittals to EPA and MPCA, leading to uncertainty regarding who makes compliance decisions. The rules will apply to facilities whether or not the MPCA incorporates them into state rule. It is reasonable to adopt them in order to avoid duplicative reporting requirements and confusion regarding enforcement of the rules.

This action does not include incorporation by reference of the two NESHAP standards for which the MPCA has declined to accept delegation: the hazardous waste combustor NESHAP, 40 CFR 63.1200 – 63.1213, and the industrial boiler NESHAP, 40 CFR 63.7480 – 63.7575.

#### **IV(D) Amendments and Additions to Chapters 7002, 7017 and 7019**

##### **7002.0025 ANNUAL EMISSION FEE RATES.**

###### **Subp. 3 Facilities failing to submit emissions inventories**

The MPCA proposes a clarification to the procedures under which a facility failing to submit an emissions inventory is assessed an annual emission fee. This clarification is necessary because the current rule relies on estimated actual emissions from a permit application which are typically not representative of a facility's emissions as time passes and the agency has more readily accessible information on past actual emissions in the form of past inventories. Under the current rule, facilities failing to submit an emissions inventory as required by part 7019.3000 will be assessed with an annual emission fee of \$X times 1-1/2 times the estimated actual emissions as stated in the facility's permit application. However, assessing the facility with an annual fee based on the estimated actual emissions from the permit application is problematic. After the first year or so, permit applications are not representative of the current processes and actual emissions of the facilities. The MPCA proposes that the most recent emissions inventory data be used to assess fees rather than the permit application, which typically is much less representative of a facility's actual emissions. This proposed clarification is reasonable as it is consistent with the intent of the current rule which relies on estimated actual emissions in a permit application.

For example, a facility has submitted a permit application, but after processes changes, changes to emission factors, changes to methods for emission calculation or changes in production rates, the estimated actual emissions in the permit application are no longer representative of the actual emissions for the facility. Using permit application emissions to calculate an annual fee would be less preferable to both the agency and the facility because the facility may be assessed an annual fee not based on representative emissions.

Therefore the MPCA is proposing to assess an annual fee of \$X times 1-1/2 times the most recent actual emissions assessed to a facility for facilities failing to submit an emission inventory as required by part 7019.3000. This will allow the MPCA to account for process, calculation and rate changes for each facility rather than relying on often outdated permit application estimated actual emissions. Assessing an annual fee based on most recent actual emissions would base the annual fee on the most representative emissions.

This rule change is needed in order for the MPCA to have the most up-to-date emission representation and to account for changes to process to assess an annual fee to a facility subject to part 7002.0025.

## **7017.2005 DEFINITIONS.**

### **Subp. 4. Performance test.**

The MPCA proposes to update this subpart to explicitly include the determination of capture, control, collection and destruction efficiency of air pollution control equipment within the definition of a performance test. These determinations are implicitly included because emissions are dependant on such properties and because some of the test methods incorporated by reference into the performance test rule specifically address such determinations. Several air emissions permits have required the determination of these parameters. Generally the determinations are needed when they are relied upon to support a permit application or to verify the efficiency of equipment that satisfies BACT., MPCA staff have routinely approved test plans containing proposals to conduct such tests. Some state and federal rules allow compliance to be demonstrated through an efficiency determination – e.g. part 7011.0710, subpart 2, for pre-1969 industrial process equipment (99% collection efficiency) and 40 CFR 63, subpart FFFF (Miscellaneous Chemical Manufacturing NESHAPs). The MPCA needs to update this definition to better reflect the breadth of testing actually conducted for compliance and permitting purposes. This change is reasonable because it reflects the current general understanding of what constitutes a performance test and does not expand or limit the existing scope of the rule.

### **Subp. 6. Test run.**

A minor clarifying addition is proposed to specify that a test run occurs in conjunction with a performance test. Since the definition of performance test in subpart 4 is worded in terms of “one or more test runs” this is a reasonable clarification.

## **7017.2020 PERFORMANCE TESTS GENERAL REQUIREMENTS**

### **Subpart 1. Testing required.**

This proposed change removes language that duplicates what is in the definition of performance test and is not needed in a statement of when a test is required. The change is part of the general need to periodically clarify rules and is reasonable as it removes redundant language without changing the meaning of the rule.

## **7019.3000 EMISSION INVENTORY.**

### **Subpart 1. Emission inventory required.**



The MPCA proposes to update the pollutant list in item A to reflect that ammonia is a pollutant included in the agency's emission inventory. Like carbon monoxide and particulate matter, ammonia is not a chargeable pollutant. However, this amendment is needed because under 40 CFR 51.15 (a), EPA requires states to report ammonia emissions. The MPCA has been requesting ammonia information from facilities through the annual Emission Inventory for the past few years. It is reasonable to require a facility to report emissions of ammonia to satisfy EPA's requirement for inclusion of ammonia in a state's inventory.

#### **7019.3020 CALCULATION OF ACTUAL EMISSIONS FOR EMISSION INVENTORY.**

The MPCA is proposing to amend item A to address conditionally insignificant activities in the same manner that insignificant activities are addressed in this item. It was the intent of the MPCA when the conditionally insignificant activities rule in chapter 7008 was adopted, that insignificant and conditionally insignificant activities would be treated the same manner under emissions inventory rules, provided that the conditions for eligibility set out in chapter 7008 were met for the activity in question. The change proposed here should have been included in the rulemaking that established part 7008.4000. This change is reasonable as it clarifies the intended relationship between chapters 7007 and 7008 and is needed in order to avoid confusion or inconsistency in this area.

Under item D, the agency proposes to clarify that for emissions inventory purposes, the commissioner can specify the format of the emissions inventory information reported by registration permit option D holders. This language is similar to existing language in part 7019.3020, items A (applies to all permit holders except registration permit options and capped permits) and E (capped permits). The proposed clarification will allow the MPCA to request data that registration permit option D holders are already gathering for compliance purposes in a format that will allow MPCA to fulfill its requirement to report emissions from specific permitted sources to EPA, e.g. fuel combustion. This proposed change is necessary only for registration permit option D because the MPCA is able to fulfill its requirement to EPA with emissions inventory information reported by registration permit B and C holders. The types of sources that qualify for options B and C are more limited than those that can qualify for option D and the information reported by these options already contains the data needed by the MPCA for its inventory report to EPA. This clarification is also needed in order to facilitate efficient and complete data entry. This change provides a reasonable means for the MPCA to keep its records complete, which facilitates future permitting work and inspections, and allows the MPCA to fulfill its reporting requirements to EPA.

#### **7019.3030 METHOD OF CALCULATION.**

The MPCA proposes to add the title of each part number found in the subitems listed under item A. This proposed change does not alter the meaning of item A, but is needed to improve readability for the user. It is reasonable to provide the title of each part for quicker understanding by the reader.

Under item B, the MPCA proposes to delete language that allows a registration permit option B holder to use alternative methods for emissions calculations. These alternative methods proposed for deletion include continuous emissions monitors, performance test data, emission factors, and

enforceable limitations. To the MPCA's knowledge, registration permit option B holders have only used the VOC material balance method under part 7019.2060 for emissions inventory purposes. In addition, part 7007.1120 (Registration Permit Option B) only allows the use of a VOC material balance in determining compliance with that option. These alternative calculation methods are not needed by option B holders for emission inventory purposes and therefore it is reasonable to delete these methods from this item.

### **7019.3050 PERFORMANCE TEST DATA.**

The MPCA is proposing to delete that portion of item A which allows a registration permit option B holder to use performance test data in assessing its emissions for inventory purposes. The MPCA is not aware of any facility with an option B permit that has conducted performance testing in the more than ten years that it has been issuing registration permits. Registration permit option B sources are small emissions sources that purchase or use less than 2000 gallons of VOC-containing materials in a year and have no other emission sources other than insignificant activities. Many registration permit option B holders are auto body shops or car dealerships. Since option B holders do not need the ability to use performance testing for emission inventory purposes, it is reasonable to delete this item.

Items B and C each contain the same minor technical modification. The word "commissioner" is substituted in place of "agency". This is reasonable as the word "agency" may be thought of as meaning the MPCA Board under the definition in part 7000.0100, subpart 2. The change is needed to avoid confusion and is reasonable as in practice submittals and requests come in to the commissioner or authorized staff of the commissioner. This rulemaking does not correct all such occurrences but does make the change in rules that are already being amended for other reasons.

Under item C, the MPCA proposes to increase the time period that performance test data may be used for emissions inventory purposes from five years to ten years. Item D is proposed as a result of the proposed change to item C and to eliminate the disincentive for testing that now exists for certain facilities. Under the current rule, performance test data that is five years older than the date of the last inventory period may not be used and the facility must use another factor from under part 7019.3030 (A)(3) or (4). Typically, an emission factor allowed under 7019.3080 such as that from EPA's AP-42 database is used by the facility once performance test data is more than five years old. Site-specific testing data is typically more accurate than the other methods listed in part 7019.3030 (A)(3), such as AP-42 factors. As long as the performance test data remains representative of the emissions process, the MPCA typically prefers performance test data over AP-42 factors which represent an average of many tests by an assortment of facilities. Ten years is deemed a reasonable period over which the test data would be preferred over an emissions factor from AP-42. Under item D, after 10 years has passed, a facility must use the higher calculated emissions of either the AP-42 factor (or other method allowed under part 7019.3030 (A)(3) or (4)) or the performance test. This proposed change is reasonable as it eliminates a disincentive for testing that now exists for certain facilities. For some facilities their emissions calculated from a performance test are higher than the appropriate AP-42 factor. These proposed changes are for emissions inventory purposes only and are not intended to impact the MPCA's stack testing policy.

## **7019.3080 EMISSION FACTORS.**

The MPCA proposes that calculations of actual emissions from an emission unit through a pollution control system that uses a hood be based on a capture efficiency of 80 percent, regardless of pollutant type. In the current rule the allowable capture efficiency is 80% for pollutants such as particulate matter and 60% for VOCs. In its evaluation of control equipment described under part 7011.0070 above, the MPCA asked its contractor to consider whether there was a valid technical basis for the existing distinction between capture efficiencies for VOCs and PM. The contractor provided capture efficiencies at the same level for both categories of pollutant and the MPCA agrees that this is appropriate. Since capture efficiency for VOC can be more readily tested, using EPA reference methods, and the MPCA is unaware of a technical basis for assuming a VOC capture efficiency of 60%, it is reasonable to raise the VOC capture efficiency to the same level as that for particulate matter. This change is needed and reasonable because it reflects the most up-to-date information for VOC capture efficiencies and provides consistency with the proposed changes to part 7011.0070.

## **V. CONSIDERATION OF ECONOMIC FACTORS**

Minn. Stat., § 116.07, subd. 6, states:

*“In exercising all its powers the pollution control agency shall give due consideration to the establishment, maintenance, operation and expansion of business, commerce, trade, industry, traffic, and other economic factors and other material matters affecting the feasibility and practicability of any proposed action, including, but not limited to, the burden on a municipality of any tax which may result therefore, and shall take or provide for such action as may be reasonable, feasible, and practical under the circumstances.”*

In the context of determining whether to adopt proposed rules or amendments, the MPCA must consider the impact that economic factors have on the feasibility and practicability of the proposed rules or amendments. The MPCA must take into account different, sometimes competing goals when engaged in rulemaking proceedings. The MPCA must address budget constraints in all economic sectors and choose among programs and projects that compete for scarce budget resources. Thus, the MPCA must balance the economic or financial limits of persons subject to environmental regulation with the application and enforcement of environmental laws devoted to environmental protection. The MPCA, mindful of this balance, seeks to implement the least-cost regulatory solutions if it does not compromise environmental goals or regulatory responsibilities.

In proposing these rules, the MPCA has given due consideration to economic impacts of implementing the proposed rule amendments. The MPCA has determined that the proposed rules either do not impose a significant cost burden on the regulated community or where a cost is imposed it is a cost that is required to comply with a federal regulation that would apply regardless of these rules.

Neither do they result in significant cost savings. However, indirect cost savings may be realized by facilities that can benefit from the clarifications and streamlining in the MPCA's programs such as adding default efficiencies for new equipment and extending the time period to use performance test results for inventory purposes.

## **VI. OTHER STATUTORY REQUIREMENTS.**

Under Minn. Stat. §§ 14.131 and 14.23 the SONAR must contain a regulatory analysis that includes the following information, to the extent the agency can obtain this information through reasonable effort. Items 1 through 8, below, identify these factors and provide the MPCA's response.

***1. A description of the classes of persons who will probably be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule.***

This MPCA rulemaking potentially affects any person or facility that applies to the MPCA for an air permit, submits an air emission inventory or is required to demonstrate compliance with air quality requirements. However, because each change is minor, and the changes are primarily clarifications, the impact will be minimal. This includes the incorporation and implementation of federal rules such as the regional haze rule and NSPS, since the affected parties are required to comply with the federal rule whether or not it is incorporated into state rule. In addition, many facilities will benefit from the clarifications that the rule provides. Small facilities that hold registration permits may benefit from the additional types of control equipment added to the control equipment rule if they elect to receive credit for using the control equipment in their permit eligibility calculations.

***2. The probable costs to the Agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.***

The scope of this rulemaking is to clarify and improve existing air quality rules and regulatory practices and to incorporate new federal rules into the MPCA's regulatory structure. The MPCA is not creating a new rule and therefore does not expect any additional costs beyond the cost of the rulemaking itself and the cost of communicating the changes. The rule changes may allow for some streamlining of the air permitting process, with a slight decrease in costs to the MPCA, but these cost reductions are not expected to be significant.

***3. A determination of whether there are less costly methods or less intrusive methods of achieving the purpose of the proposed rule.***

The MPCA believes that clarification and routine upkeep of its air quality rules through a general, broad rulemaking is a cost-effective means of keeping its rules up to date. This rule, due to its limited scope, is neither costly nor intrusive. To the extent this rule makes it easier to understand and comply with air quality regulations, and to more speedily obtain necessary

permits, this rule may reduce costs. The MPCA's alternatives are limited. The proposed changes could not be addressed through agency policy or internal rule interpretation. In order for regulated parties to actually take advantage of streamlined options, they must be available in a rule. Consequently, there are no less costly methods for achieving the purpose of the proposed rule changes.

***4. A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the Agency and the reasons why they were rejected in favor of the proposed rule.***

Again, the MPCA's alternatives are limited. The proposed changes could not be addressed through agency policy or internal rule interpretation. In order for regulated parties to actually take advantage of streamlined options, they must be available in a rule. The MPCA is required to adopt many of the changes in this rule related to NESHAPS in order to retain delegation of regulatory authority from the U.S. EPA under Section 112 (l) of the federal CAA. The MPCA is also required by EPA to establish its authority to implement BART at qualifying sources for its regional haze SIP. The MPCA finds it necessary to proceed through the rulemaking process because many of the proposed changes were made with the intent to help clarify the existing rules. Additionally, rulemaking is the most open, consistent process that also assures that the requirements are legally enforceable, as required by EPA.

There were no other alternative methods for achieving the purpose of the proposed rules seriously considered by the MPCA.

***5. The probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals.***

For probable costs to comply with this rule, see section V of this SONAR, "Consideration of Economic Factors."

***6. The probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals.***

The intent of this rulemaking is to keep the air quality rules up to date, reduce uncertainty in the rules and where possible increase efficiency by streamlining the regulatory process. The consequences of not adopting this rule would be a somewhat less efficient and more cumbersome regulatory process that does not reflect recent federal rule changes affecting air quality regulation. The consequences of not incorporating by reference the additional NESHAP standards would be more severe. If the MPCA did not adopt the standards, EPA would not be able to complete its delegation process and many facilities would have to demonstrate compliance to both the MPCA and the EPA, resulting in confusion for all parties and duplicated regulatory burden on individual facilities. Similarly, if the MPCA did not adopt rules to implement the BART requirements of the federal regional haze rule, the MPCA's regional haze SIP would not be approvable by the EPA as the MPCA must demonstrate an enforceable mechanism, such as a state rule, for the BART requirements in its SIP.

**7. An assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference.**

There are no federal regulations that govern rulemaking procedures for Minnesota state agencies that are adopting, amending, or repealing its rules through Minnesota Statutes, Chapter 14. The purpose of this rulemaking is to complete minor clarifications, revisions and updates to existing air quality rules. This rulemaking includes a number of changes that will bring some parts of the MPCA's air quality rules closer to the federal rules. These are listed below and discussed in more detail in the rule-by-rule analysis in Section IV, above.

**8. Describe how the Agency, in developing the rules, considered and implemented the legislative policy supporting performance-based regulatory systems set forth in Minn. Stat. § 14.002, which requires state agencies, whenever feasible, to develop rules and regulatory programs that emphasize superior achievement in meeting the Agency's regulatory objectives and maximum flexibility for the regulated party and the Agency in meeting those goals.**

**Minn. Stat., § 14.002, states the following:**

*“that the legislature finds that some regulatory rules and programs have become overly prescriptive and inflexible, thereby increasing costs to the state, local governments, and the regulated community and decreasing the effectiveness of the regulatory program. Therefore, whenever feasible, state agencies must develop rules and regulatory programs that emphasize superior achievement in meeting the agency's regulatory objectives and maximum flexibility for the regulatory party and the agency in meeting those goals.”*

Although the MPCA proposes to add a few new rule parts, most of the proposed changes are amendments to existing rules. Many changes are made in order to update the rules to conform to federal requirements as well as clarifying confusing rule language. Updating the rules for this reason achieves the policy outlined in Minnesota Statutes, section 14.002 because it attempts to clarify the purpose of the rules and any applicable procedure outlined in the rules. Updating the rules should help remove conflicts and discrepancies between the existing rules.

In developing the proposed rule amendments, the MPCA tried to be very conscientious about including in the revised rules only that information needed in order to enable the MPCA to carry out its responsibilities in an effective and efficient manner. By making the rules clearer and in some cases deleting outdated rule text, the proposed rules tends to increase regulatory flexibility within the limited scope of the rule. In general, however, the MPCA is constrained by the need to retain delegation of certain programs from EPA and to enforce specific rules which are protective of the NAAQS.

The MPCA will also seriously consider all comments received as a result of publication of the Dual Notice of Intent to Adopt Rules. The steps in the rulemaking process will be done in an

effort to achieve the policy outlined in section 14.002, namely that the proposed rules maximize flexibility for regulated parties while also meeting the MPCA's objectives.

## **VII. ADDITIONAL NOTICE**

**Minn. Stat. §§ 14.131 and 14.23 require that agencies describe in the SONAR its efforts to provide additional notice to persons who may be affected by the proposed rules or explain why such efforts were not made.**

On February 22, 2005, the MPCA published in the *State Register* (29 SR 999) a notice requesting comments on this planned rulemaking. The same notice was placed on the MPCA's Public Notice Web site and the notice was mailed out to persons on the MPCA's rulemaking mailing list established by Minn. Stat., § 14.14, subd. 1a. In addition, the MPCA direct mailed a postcard containing a summary of the notice to all permittees in order to ensure that all permittees had the opportunity to be added to the MPCA's mailing list for future rulemaking updates. Those that indicated an interest in providing input on the draft rulemaking were sent drafts of a concept proposal for the rulemaking and draft rule language electronically. In addition, meetings were held to gather additional input on the rule proposal on May 10 and 17, 2005 and November 10 and 14, 2005 with representatives from environmental consulting firms, businesses, environmental groups, neighborhood organizations, and local governmental units. Comments received from the various stakeholder parties have been considered by MPCA in development of this rule proposal.

The MPCA intends to send a copy of the Dual Notice of Intent to Adopt Rules and the proposed rules to the following people and organizations:

- A. All parties who have registered with the MPCA for the purpose of receiving notice of rule proceedings as required by Minn. Stat. § 14.14, subd. 1a;
- B. Other interested parties that have contacted the MPCA with an interest in this rule proceeding;
- C. A copy of the notice, proposed rules and SONAR will be posted on the MPCA's Public Notice Web site at ([www.pca.state.mn.us](http://www.pca.state.mn.us)).
- D. Permitting section staff at the EPA Region 5 office in Chicago.

The MPCA believes its regular means of notice as required by Minn. Stat., § 14.22, including publication in the *State Register* and on the MPCA's Public Notice Web page will have adequately placed other persons regulated by these rules on notice of this rulemaking.

## **VIII. NOTICE TO LEGISLATURE**

Minn. Stat., § 14.116 requires an agency to send a copy of the Notice of Intent to Adopt Rules and SONAR to the chairs and ranking minority party members of the legislative policy and budget

committees with jurisdiction over the subject matter of the proposed rules. In addition, if the mailing of the notice is within two years of the effective date of the law granting the agency the authority to adopt the proposed rules, the agency shall make reasonable efforts to send a copy of the notice and the SONAR to all sitting legislators who were chief house and senate authors of the bill granting the rulemaking authority. If the bill was amended to include this rulemaking authority, the agency shall make reasonable efforts to send the notice and the SONAR to the chief house and senate authors of the amendment granting rulemaking authority, rather than to the chief authors of the bill.

To comply with the requirements of the Minn. Stat., § 14.116 the MPCA plans to send a copy of the notice, proposed rules and SONAR to the chairs and ranking minority party members of the House Environment and Natural Resources Committee, House Agriculture, Environment and Natural Resources Finance Committee, Senate Environment and Natural Resources Committee and Senate Environment, Agriculture and Economic Development Budget Division.

## **IX. NOTIFICATION TO THE COMMISSIONER OF AGRICULTURE**

Minn. Stat., § 14.111 requires that the MPCA supply a copy of the proposed rule to the commissioner of Agriculture 30 days prior to publishing the rule in the *State Register*, if the rule affects farming operations. The proposed rules regulate air quality permitting, monitoring, recordkeeping and reporting requirements. The rules will have no effect on agricultural lands or farming operations, except to the extent that better emission control protects farmland from contamination, therefore the MPCA did not send a copy of these proposed rule amendments to the Commissioner of Agriculture.

## **X. REVIEW BY COMMISSIONER OF TRANSPORTATION**

Minn. Stat. § 174.05 requires that the MPCA to inform the Commissioner of Transportation of all rulemakings that concern transportation, and requires the Commissioner of Transportation to prepare a written review of the rules. The MPCA has reviewed these statutes carefully and concluded that these proposed rule amendments do not relate to or concern transportation. Based on this conclusion, the MPCA will not send a special notification to the Commissioner of Transportation regarding these proposed rule amendments.

## **XI. CONSULT WITH COMMISSIONER OF FINANCE ON LOCAL GOVERNMENT IMPACT**

Minn. Stat. § 14.131 requires the MPCA to consult with the Department of Finance to help evaluate the fiscal impact and fiscal benefits of the proposed rule on units of local government. The MPCA will consult with the Commissioner of Finance on these proposed rules, and will include any response received from the Commissioner of Finance in the rulemaking record.



## **XII. COST OF COMPLYING FOR SMALL BUSINESS OR CITY**

### **Agency Determination of Cost**

As required by Minn. Stat. § 14.127, the MPCA has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed \$25,000 for any small business or small city. The MPCA has determined that the cost of complying with the proposed rules in the first year after the rules take effect will not exceed \$25,000 for any small business or small city.

The MPCA has made this determination based on the probable costs of complying with the proposed rule, as described in the Regulatory Analysis sections V and VI of this SONAR. The MPCA has determined that the proposed rules either do not impose a significant cost burden on the regulated community or where a cost is imposed it is a cost that is required to comply with a federal regulation that would apply regardless of these rules.

## **XII. LIST OF WITNESSES , REFERENCES, AND EXHIBITS**

### **A. *List of Witnesses***

In support of the need and reasonableness of the proposed rule amendments, the following witnesses will testify at any hearing that may take place in regard to these proposed rules:

1. Mary Jean Fenske, PE, of the Minnesota Pollution Control Agency's Environmental Analysis and Outcomes Division, will testify on the general need for and reasonableness of the proposed rules.

### **B. *Exhibits***

1. Report - Update of Control Equipment Data to Support MPCA's Control Equipment Rule, E. H. Pechan and Associates, Inc. June, 2005.

## **XIII. CONCLUSION**

Based on the foregoing, the proposed rules amendments are both needed and reasonable.

Dated: \_\_\_\_\_

Signed: \_\_\_\_\_

Brad Moore  
Commissioner