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Minnesota Pollution Control Agency

June 8, 1994

Ms. Maryanne Hruby
Executive Director
Legislative Commission to Review
Administrative Rules
State Office Building, Room 55
100 Constitution Avenue
St. Paul, Minnesota 55155

RE: Statement of Need and Reasonableness and Supplement to the Statement of Need and Reasonableness to Amend the Air Quality Permit Rule and Standards for Stationary Sources, Minn. Rules chs. 7007 and 7011.

Dear Ms. Hruby:

Enclosed for your review is a copy of the Statement of Need and Reasonableness and Supplement to the Statement of Need and Reasonableness for proposed rule amendments as required by Minn. Stat. § 14.115, subd. 8 (1992). If you have any questions, please call me at 296-7712.

Sincerely,

Norma L. Coleman

Norma L. Coleman
Planning and Rule Coordinator
Program Development Section
Air Quality Division

NLC:lmg

Enclosure

520 Lafayette Rd. N.; St. Paul, MN 55155-4194; (612) 296-6300 (voice); (612) 282-5332 (TTY)
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Supplement to the Statement of Need and Reasonableness

In the Matter of Proposed Permit Related Rules Governing: (1) Registration Permits; (2) Exemption of Certain NSPS Sources (3) Installation and Operation Permits During Transition; (4) Hazardous Air Pollutant Actual Emissions Information; (5) Calculating Emissions to Determine if a Change is a Modification; (6) Changes to Insignificant Activities, Insignificant Modifications and Minor Modification; and (7) Control Equipment Performance Standard, Amending Minn. Rules Chapters 7007 and 7011.

Section IV, Part B, 4a.
Statement of Reasonableness, Reasonableness of the Rule by Section.

7007.0350 EXISTING SOURCE APPLICATION DEADLINES AND SOURCE OPERATION DURING TRANSITION.

This subpart establishes the date by which an owner or operator of a facility that is required to obtain a permit must submit an application. The proposed amendments to this subpart delay the application deadline for the owners or operators of facilities in five SIC codes from October 15, 1994, to November 15, 1995. These SIC codes are assigned as follows:

1422	Crushed and Broken Limestone;
1423	Crushed and Broken Granite;
1429	Crushed and Broken Stone;
1442	Sand and Gravel/Construction; and
1446	Industrial Sand.

Many of these operations will be required to obtain an operating permit under the Minnesota Rules and the general permit that is being prepared to handle this work will not be available in time for the owners and operators of these facilities to take advantage of it when applying for the required permit.

The Minnesota Pollution Control Agency is currently preparing general permits for the sand and gravel and like industries. It is estimated that 200 to 300 facilities in these SIC codes will be required to obtain an operating permit. This represents a very significant commitment of staff resources if each of these sources is required to obtain an individual state permit as opposed

to qualifying for a general permit. The use of streamlined permitting processes (general permits and registration permits) is necessary to address all sources that require permitting under the new permit rule.

Sand and gravel and like industries all have similar operations and emissions therefore, from the point of view of the MPCA, it is reasonable to issue general permits to these facilities. Since the general permit application should be easier to complete and general permits are not required to be public noticed for each individual source that qualifies for them, it makes sense for the owners and operators of facilities in these SIC codes to apply for and obtain a general permit instead of 200 to 300 individual state permits.

There are three main reasons that a general permit will not be available for the owners and operators of these facilities to use when applying for the required operating permit. First, the U.S. Environmental Protection Agency (EPA) is in the process of revising the emission factors for facilities in these SIC codes. Revised emission factors have been proposed. The proposed emission factors significantly affect the estimate of PM_{10} emissions from these facilities. Secondly, there still remains some unresolved technical issues that staff is discussing with EPA. And thirdly, the owners and operators of these facilities need sufficient time before the application deadline to evaluate and choose among the permitting options available to them including a part 70 permit, state permit and the, as yet uncompleted, general permit.

It is anticipated that an early version of the general permit for these stationary facilities will be public noticed in the near future and implemented for a few sources that make frequent modifications and will be able to take advantage of the simpler modification procedures in the general permit. This early version will undergo a revision for further simplification and will again be public noticed to reflect resolution of the issues listed above.

Work has just begun on a general permit for portable facilities. It is anticipated that the work on this general permit will not be completed until well after the October 15, 1994, permit application deadline in the current rule.

Many of the sand and gravel operations also operate hot mix asphalt facilities for which the operating permit application deadline is November 15, 1995. Since these facilities often function as a group, it is reasonable to group them together regarding the requirement to submit a permit application.

For these reasons, it is reasonable to move the application submittal deadline date for SIC codes 1422, 1423, 1429, 1442, and 1446 from October 15, 1994, to November 15, 1995.

Dated: 6/8/94, 1994

Charles W. Williams
Commissioner

ATTACHMENT 2

SONAR FOR

AIR QUALITY RULES

AMENDING

CHAPTERS 7007 AND 7011

APRIL 21, 1994

For information concerning this proposed rulemaking contact :

Andy Ronchak
Minnesota Pollution Control Agency
Division of Air Quality
(612) 296-3107

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STATE OF MINNESOTA

POLLUTION CONTROL AGENCY

In the Matter of Proposed Permit Related Rules Governing: (1) Registration Permits; (2) Exemption of Certain NSPS Sources (3) Installation and Operating Permits During Transition; (4) Hazardous Air Pollutant Actual Emissions Information; (5) Calculating Emissions to Determine if a Change is a Modification; (6) Changes to Insignificant Activities, Insignificant Modifications and Minor Modification; and (7) Control Equipment Performance Standard, amending Minn. Rules Chapters 7007 and 7011.

STATEMENT OF NEED

AND REASONABLENESS

I. INTRODUCTION

On November 15, 1990, President Bush signed into law the Clean Air Act Amendments of 1990, amending 42 U.S.C. §§ 7401- 7671q (Supp. II 1991). Title V of the 1990 Amendments required each state to develop an operating permit program to implement the requirements of the Clean Air Act (the Act). The regulations adopted by the U.S. Environmental Protection Agency (EPA) implementing Title V, at 40 CFR Part 70, required the establishment of comprehensive state air quality permitting systems consistent with the requirements of Title V of the Act. These regulations set forth the minimum elements required by the Act for State operating permit programs. The Minnesota Pollution Control Agency (agency or MPCA) complied with Title V of the Act and the Part 70 regulations through the promulgation of operating permit rules, Minn. Rules parts 7007.0050 to 7007.1850, and the submittal of an operating permit program to EPA on November 15, 1993.

In Minnesota, the result of implementing the new operating permit program under Title V of the Act will be the addition of many air emission sources previously not required to obtain permits. In addition, many new requirements and procedures have been added to comply with the directives of the Act. MPCA staff anticipate a large additional burden to be placed on sources required to obtain permits and a large increase in the workload placed on permitting staff. As a result, the MPCA has initiated changes in the permitting process in an effort to streamline the program and reduce workload. Minnesota's new operating permit rule, Minn. Rules pts 7007.0050 to 7007.1850 (hereafter referred to as operating permit rule), thresholds were increased and flexible modification procedures were added. After promulgation of the new operating permit rule MPCA staff continued to evaluate other approaches to further streamline the

permitting process. This rulemaking is designed to further streamline permitting activities for smaller source and reduce the anticipated resource burden of the new operating permit program. Under the operating permit rule now in effect in Minnesota, MPCA staff estimate 2600 to 4500 sources will be required to obtain a part 70 or a state air emission permit. Historically Minnesota has issued air emission permits to approximately 800 sources. MPCA staff estimate under the proposed rulemaking approximately 1000 to 1500 smaller sources, which would have been required to obtain a state permit, would be eligible to receive the simplified registration permit created by this proposed rule. The net impact of this part of the proposed rulemaking is that MPCA staff will be able to reduce resources needed to regulate minor sources of air emissions (sources with small actual emissions), and thus shift that resource savings onto regulation of the large, more complex sources of air emissions in the State of Minnesota.

The draft rule contains four major parts:

(1) Registration Permits;
(2) Control Equipment Performance Standard;
(3) Hazardous Air Pollutant Actual Emissions Information in the Application Content;
(4) Other Changes:

a. New Source Performance Standard (NSPS) Exemption;
b. Insignificant Activities;
c. Insignificant Modifications and Minor Modification;
d. Installation and Operation Permits;
e. Miscellaneous Clarification Changes.

Part A. Registration Permit.

The draft rule proposes to move smaller sources into a simplified permit process. The result will be that a very high percentage (est. 75-80%) of sources which would have been required to obtain a state permit under the new air emission permit rule, would under the proposed rule, be eligible to receive a registration permit. The following two distinct categories of sources would be impacted:

1) State Permit Sources - sources with potential emissions above the state permit thresholds of 25 tpy of PM10 and 50 tpy of SO_2 but below the 100 tpy federal threshold, or that need a permit solely because they are subject to certain NSPS.

2) Part 70 Synthetic Minor Sources - sources with potential emissions above 100 tpy for criteria pollutants, 25 tpy for a combination of hazardous air pollutants or 10 tpy for any single hazardous air pollutant, but due to operating limits, fuel use, control equipment or certain other reasons the sources actual emissions are below the thresholds. (Note: A synthetic minor source has to agree to taking a "federally enforceable" emission limit to ensure emissions remain below the federal permit

thresholds. Under the current rule, the only option available to sources to obtain a federally enforceable emissions limit was through a state permit. This rule, if adopted and incorporated into Minnesota's State Implementation Plan (SIP), would make available the additional registration permit alternative in obtaining a federally enforceable emission limit.)

Part B. Control Equipment Performance Standard.

The proposed rule would give sources credit for the use of common types of pollution control equipment in reducing potential emissions of criteria air pollutants to determine what type of permit is needed. This part of the rule would require sources to properly operate and maintain the pollution control equipment. This part of the rule will also allow the owner or operator of a stationary source which has conducted a performance test in compliance with Minnesota Rules the ability to request an alternative control efficiency.

In order to make registration permits available to a large number of small sources, MPCA needed to undertake a major overhaul of this rule so that EPA agrees that this rule ensures federal enforceability of registration permits that take credit for emission reductions from control equipment. The following is a summary of main impacts of the proposed control equipment performance standard:

1. It provides control efficiency factors for common types of control equipment. Sources can use these factors in calculating potential emissions if they qualify for registration permits, or obtain a state permit rather than a part 70 permit.

2. It does not allow sources to use the listed efficiencies for calculating HAP emissions.

3. However, it does allow owners and operators to propose alternate control efficiencies (including for HAP emissions) if they have MPCA approved stack test data to demonstrate control efficiency for the specific control equipment.

4. The revisions require operation of the control equipment whenever the processes it controls are operated.

5. The revisions specify control equipment maintenance requirements.

6. It requires that manufacturer specifications for control equipment be available if the control equipment is being used to obtain a registration permit or to do an insignificant modification.

7. The revisions also specify compliance demonstration requirements, as well as monitoring and record keeping requirements for control equipment.

8. The revisions allow the MPCA to request stack tests in order to verify that the control equipment is attaining the listed efficiencies.

9. Finally, the revisions require the owner or operator to recalculate PTE if control efficiencies are reduced and to submit the appropriate permit application if necessary.

Part C. Hazardous Air Pollutant Actual Emissions Information.

A critical component in any effective regulatory program is information. Minnesota's strategy for regulating toxic air pollutants (Exhibit 1) includes an information collection component. Title V of the Act allows states to collect information about emissions of hazardous air pollutants from sources submitting permit applications. Consistent with the MPCA's strategy for regulating toxic air pollutants and the provisions in Title V of the Act, the MPCA's draft rule language requires that emission sources submitting permit applications for part 70 and state permits will need to provide estimates of potential emissions, and for part 70 sources actual emissions of hazardous air pollutants.

Part D. Other Changes.

1. New Source Performance Standard (NSPS) Exemption.

Part 7007.0300 currently exempts from the requirement to obtain a permit sources that are required to obtain a permit solely because they are subject to one NSPS category and one National Emission Standard for Hazardous Air Pollutants (NESHAP) category. Additional language proposed in this rule exempts sources that need a permit solely because they are subject to the following three additional categories. The three additional categories are:

Subpart Kb, specifically 40 CFR Part 60.116b affecting those tanks whose volume is between 40 <= V < 75 cubic meters for which construction, reconstruction or modification is commenced after July 23, 1984.

Subpart Dc - Only those steam generating units capable of combusting only natural gas.

Subpart JJJ - Standards of Performance for Petroleum Dry Cleaners.

2. Insignificant Activities.

Part 70 allows states to adopt a list of insignificant activities which need not be described in detail on permit applications. 40 CFR § 70.5(c). The MPCA adopted such a list, under the current rule, at part 7007.1300. Under this part of the proposed rule the

MPCA is proposing to add to the list of insignificant activities. The MPCA stated in the SONAR for the current permit rule that the intent was to add insignificant activities in future rule makings (SONAR pgs 56 and 57). The list of insignificant activities serves the dual purpose of identifying the sorts of activities and emissions units that need not be described in the permit application, and of identifying the sorts of modifications that do not warrant a permit amendment. In both cases the goal is the same: to minimize the time spent by the MPCA (and sources) on insignificant emissions sources, so that more attention may be directed to the important ones.

3. Insignificant Modifications and Minor Modification.

The MPCA is proposing to adopt hazardous air pollutant permit thresholds currently proposed under 40 CFR Part 63.44. The proposed thresholds will be applied in the same way the thresholds are applied for criteria pollutants under the current rule. Areas of the rule affected by the proposed hazardous air pollutant threshold are minor permit modification thresholds and insignificant permit modification thresholds. Furthermore, in the SONAR for the current permit rule the MPCA stated it would adopt these thresholds as soon as EPA developed them (SONAR p 55).

4. Installation and Operation Permits.

MPCA staff have drafted language to allow additional flexibility for the issuance of installation and operating permits. If a stationary source plans a modification or change which will subject the source to a state or part 70 permit for the first time, language in this section would give MPCA staff the option to issue an authorization to construct and operate the modification or change. As the rule currently reads, MPCA staff would be required to issue a total facility permit (in many cases a much more complex permit), which could delay construction of even a minor change or modification at the source. The proposed rule would give MPCA staff the option to issue an installation/operation permit and follow later with the total facility permit.

5. Miscellaneous Clarification Changes to Parts 7007.1150 and 7007.1200.

This section proposes language to clarify parts 7007.1150 and 7007.1200. The intent of the language is to insure that permittees are aware of different requirements for modifications subject to a Title I modification procedure or that makes the stationary source subject to a state or part 70 permit for the first time. Although these concepts are in the current rule, staff's experience has already shown that they cannot emphasize this provision enough.

II. STATEMENT OF THE MPCA'S STATUTORY AUTHORITY

The MPCA's authority to adopt these rules is found in Minn. Stat. { 116.07, subd. 4 (1992) 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 1969, chapter 1046, 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.

Minn. Stat. § 116.07, subd. 4a (1992) provides the MPCA's authority to issue permits:

> The pollution control agency may issue, continue in effect or deny permits, under such conditions as it may prescribe for the prevention of pollution, for the emission of air contaminants, or for the installation or operation of any emission facility, air contaminant treatment facility, treatment facility, potential air contaminant storage facility, or storage facility, or any part thereof, or for the sources or emissions of noise pollution.
>
> . . .
>
> The pollution control agency may revoke or modify any permit issued under this subdivision and section 116.081 whenever it is necessary, in the opinion of the agency, to prevent or abate pollution. State law prohibits construction, operation and modification of air emission facilities without a permit from the agency at Minn. Stat. § 116.081. The agency has authority to obtain information and inspect air emission facilities under Minn. Stat. § 116.091.

The MPCA's authority to obtain information concerning emissions of toxic air pollutants is found in Minn. Stat. §§ 116.091 and 116.454 (1992).

Minn. Stat. § 116.091, subd. 1 (1992) provides:

> Any person operating an emission system or facility [for which a permit is required], when requested by the pollution control agency, shall furnish to it any information which that person may have which is relevant to pollution or the rules or provisions of this chapter.

Minn. Stat. § 116.091, subd. 3 (1992) provides:

> Whenever the agency deems it necessary for the purpose of this chapter, the agency or any member, employee, or agent thereof, when authorized by it, may enter upon any property, public or private, for the purpose of obtaining information or conducting surveys or investigations.

Minn. Stat. § 116.454 (1992) provides:

> By July 1, 1993, the agency shall establish a statewide monitoring program for, and inventory of probable sources of, releases into the air, ambient concentrations in the air, and deposition from the air of toxic substances.

The MPCA's authority to adopt information reporting rules to implement these authorities is found in Minn. Stat. § 116.07, subd. 4 (1992). This broad rulemaking authority is "without limitation" and includes authority to adopt rules "on any . . . matter relevant to the prevention, abatement, or control of air pollution."

III. STATEMENT OF NEED

Minnesota Statutes §§ 14.131, 14.14, subd. 2, 14.23 and 14.26 require the MPCA to make an affirmative presentation of facts establishing the need for and reasonableness of the proposed rule. "Need" means that a problem exists which requires administrative attention, and "reasonableness" means that the solution proposed by the MPCA is appropriate. The need for the proposed rule is discussed below, and the reasonableness of the proposed rule is discussed in the following section.

A. Focus of Resources on Major Sources and a Need to Reduce Permit Backlog.

The 1990 Amendments to the Clean Air Act (1990 Amendments) will greatly increase the regulation of air toxics, calling for the regulation of 189 toxic air pollutants for the first time. The 1990 Amendments to the Act will generally increase permit reporting, recordkeeping, and other compliance related requirements. MPCA staff believe implementation of the 1990 Amendments through the new operating permit program will result in strain on the limited resources available. Therefore, through this rulemaking the MPCA has made a concerted effort to focus resources away from small sources of emissions based on actual emissions. As a result, the MPCA will redirect the resource savings onto the regulating of the major sources of air emissions.

The changes included in rulemaking establishing the current operating permit program began to address a chronic backlog of permit applications. This rulemaking proposes to further reduce the permit backlog through the implementation of simplified permit process for small sources.

In 1992, Project Environment Foundation published a report summarizing its study of the air quality division, and stated the following about the permitting backlog:

> Although the number of permits issued by the MPCA has grown steadily for the last three fiscal years, the demand for permits has grown even faster. Between 1988 and 1991, the MPCA received 1,124 permit applications, but issued only 849 permit actions. As a result, there is a growing backlog of permit applications.

"Clearing the Air, An Evaluation of Minnesota's Programs to Protect the Air We Breathe." Project Environment Foundation (1992), p. 96. The Office of the Legislative Auditor, which reported on the operations of the entire MPCA in 1991, also discussed the permit backlog problem and some of the negative the consequences of it. It described some of the problems such delays cause:

> First, businesses want permits in a timely manner so they can start their operations or change production methods on schedule. Unnecessary delays in permit issuance can result in financial loss (23 percent of the permittees surveyed said that permit delays have caused them financial hardships). Second, efficient permitting enhances environmental protection. New permits sometimes contain stricter standards than earlier permits, and many businesses are required to conduct demonstrations of compliance with emission regulations at the time of permit issuance. Permit delays can postpone those standards and compliance demonstrations. Third, some business representatives [say] that for liability purposes, they prefer to operate under the terms of a current permit, rather than an expired permit that has been extended. Finally, an efficient, understandable permitting process makes the agency a more credible regulator.

"Pollution Control Agency." Program Evaluation Division, Office of the Legislative Auditor, State of Minnesota (Jan. 1991), p. 33.

Since the time of these reports, the agency has expanded its permitting staff and instituted certain changes through the recently implemented operating permit rule to reduce its backlog. However, the effectiveness of the changes in solving the backlog problem are not yet known. Furthermore, staff view the changes under the current rule only as a partial solution to the problem. The proposed rulemaking is intended to further assist in solving past backlog problems.

Under the operating rule now in effect in Minnesota, MPCA staff estimate 2600 to 4500 sources will be required to obtain a part 70 or a state air emission permit.

Historically Minnesota has issued air emission permits to approximately 800 sources. MPCA staff estimate under the proposed rulemaking approximately 1000 to 1500 smaller sources, which would have been required to obtain a state permit, would be eligible to receive the simplified registration permit. The net impact of this part of the proposed rulemaking is that MPCA staff will be able to reduce resources needed to regulate minor sources of air emissions (sources with small actual emissions), and thus shift that resource savings onto the large sources of air emissions in the State of Minnesota.

Streamlining the permit process is important not only to reduce the current backlog but also to avoid a future one. The 1990 Amendments to the Act will greatly increase the regulation of air toxics, calling for the regulation of 189 air toxics for the first time. This will mean permitting hundreds of new Minnesota sources, which will worsen the backlog problem unless other measures, like this proposed rulemaking, are taken to offset this increase.

This rule also includes provisions to increase the list of insignificant activities under Minn. Rules 7007.1300. The MPCA staff believes this provision further streamlines the processing of all types of permits by not requiring the calculation of the small level of emissions from the additional insignificant activities.

In summary, the MPCA is proposing to amend its permitting rules and establish a control equipment performance standard through this rulemaking to: (1) focus limited resources on major sources of air emissions; and (2) remedy past backlog problems and avoid future ones.

B. Emission Estimates For Hazardous Air Pollutants.

1. Legislative Mandate for an Inventory of Toxic Air Pollutants.

The need for an air toxics inventory has already been determined by the Minnesota legislature through the passage of Minn. Stat. § 116.454 (1992). This statute directs the MPCA to develop an inventory and statewide monitoring program for sources of toxic air pollutants. The proposed rule requirement for part 70 permit applications to contain estimates of actual and potential emissions of regulated pollutants and hazardous air pollutants and for state applications to estimate potential emissions, address the "inventory" part of this legislation.

In addition, legislation passed in 1993 requires the MPCA to report to the Environment and Natural Resource committees of the legislature every two years, beginning in January 1997. This reporting requires an analysis of data collected from the statewide monitoring and inventory programs established according to Minn. Stat. § 116.454 (1992).

Part 70 and state permit applications submitted to the MPCA under the operating permit rule will be required to contain estimates of emissions for all regulated pollutants

and hazardous air pollutants. These hazardous air pollutants are listed in section 112(b) of the Act. At the same time the MPCA is being consistent with the federal operating permit program, the emissions information in the permit application will also form the basis of the MPCA's "emission inventory" for toxic air pollutants and allow the MPCA to fulfill a state legislative mandate.

2. Emissions Information Needed for the MPCA's Strategy to Regulate Toxic Air Pollutants.

The MPCA's strategy for regulating toxic air pollutants has three fundamental objectives. First is the implementation of the Act. Second is the overall protection of public health and the environment, and third is the collection of more information so that better decisions for the air toxics program can be made.

To formulate and maintain an effective air pollution program for toxic air pollutants, the MPCA needs data that identifies problem pollutants, determines the amounts released to the environment and the resulting levels in the environment, evaluates their potential hazard to humans and the environment, and suggests solutions. So that limited resources are most effectively focused on the pollutants of concern in Minnesota, the MPCA also needs data on the nature and extent of the air toxics problem in Minnesota. For these reasons, the MPCA needs data about the amount of pollutants emitted by Minnesota sources and the resulting concentrations found in the environment. Unfortunately, to date, the information on emissions of toxic air pollutants has been limited. Additionally, emissions data for specific toxic air pollutants will be needed to conduct these health risk assessments of MACT standards. Consistent with the MPCA's strategy to regulate toxic air pollutants, the proposed changes to the operating permit rule will begin to provide MPCA staff with the data needed to assess and evaluate the sources of toxic air pollutants in Minnesota and allow for the residual risk analysis of MACT standards to be conducted. With the proposed changes in the Operating Permit Rule, the MPCA anticipates that a sufficient amount of information will be provided in the permit applications to begin identifying and assessing the large sources of toxic air pollutants in the state.

3. Need to Supplement Current Inventory Data.

Currently there exists a significant lack of reliable and comprehensive data on the quantities of toxic air pollutants released to the environment in Minnesota and the subsequent impacts on human and ecological health. This lack of information is troublesome to MPCA staff because research from other states and from around the world indicates that many of the substances which are emitted to the air every day in Minnesota and nationwide are either known to cause, or likely to cause, cancer in humans. Research has also found that exposure to some toxic air pollutants can result in many non-cancer health effects and these effects can be serious and irreversible, just as the effects of cancer are. Other areas of research have found that substances such as mercury and dioxins are

accumulating in human and animal food chains throughout the world and particularly in areas of extensive aquatic resources such as the Great Lakes region.

In summary, toxic air pollutants have the potential to adversely impact human health and the environment and further efforts to evaluate and effectively control toxic air pollutants are warranted. To better evaluate and design effective control measures for toxic air pollutants, the MPCA is proposing to modify the operating permit rule to require large emission sources that submit a part 70 permit application to provide emission estimates for the hazardous air pollutants that a particular source emits. The MPCA intends to use this information to establish an inventory of toxic air emissions in the state, to assess the nature and extent of the air toxics problem in Minnesota and to determine how to best direct resources to resolve any problems that are found. In effect, the proposed changes to the operating permit rule allows MPCA staff to begin collecting information that will provide the basis for formulating the MPCA's strategy to regulate toxic air pollutants.

People familiar with environmental programs may wonder why the data to be gathered by the proposed changes in the operating permit rule cannot be obtained from existing emission inventories. There are two air pollution inventories available to the MPCA: the criteria pollutant inventory and the Toxic Release Inventory. The reasons each of these current inventories is insufficient for the MPCA's strategy to regulate toxic air pollutants are explained below.

4. Criteria Pollutant Inventory.

As required by EPA, the MPCA keeps an annual emission inventory for the six criteria pollutants (sulfur dioxide, carbon monoxide, lead, ozone, nitrogen dioxide and particulates). This database is generally referred to as the Emissions Inventory System. Stationary sources (not mobile sources) must report data on an emissions unit basis if they emit greater than 25 tons per year of sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, or particulates. In addition, a stationary source must report data on an emissions unit basis if it emits more than 0.5 tons per year of lead.

Criteria pollutant emission inventory data is available on a national as well as state level. Data from the criteria pollutant emission inventory have served as the basis for many of EPA's regulatory decisions and activities concerning criteria pollutants over the past decade. However, because it is limited to criteria pollutants, the criteria pollutant emission inventory does not provide much data concerning emissions of specific toxic air pollutants. Some manipulating of this data base can be done by speciating the VOC and PM_{10} emissions into specific toxic air pollutants using approved EPA computer programs. However due to the uncertainties associated with partitioning VOC and PM_{10} emissions into specific toxic pollutants, the speciated criteria pollutant data are only used for speculative purposes and are not used for regulatory purposes. Rather, additional data needs to be collected specifically for toxic air pollutants for use in regulatory programs.

5. Toxics Release Inventory (TRI).

The Toxics Release Inventory (TRI) is kept by the Emergency Response Commission and consists of an annual inventory of toxic chemicals that are released to air, water, public sewer, disposed of on-site, or transferred off-site. Approximately 300 chemicals are on the list, many of which are considered to be toxic air pollutants when they are released to the atmosphere. Facilities must submit "facility-wide" estimates of releases of the listed substances if they meet all three of the following reporting requirements:

a) conduct manufacturing operations (Standard Industrial Classification Codes 20 to 39);

b) have 10 or more full-time equivalent employees; and

c) manufacture, import, process, or in any other way use any of the listed toxic chemicals in amounts greater than:

1) manufactures or processes 25,000 pounds of a listed toxic chemical; or

2) uses 10,000 pounds or more of any listed chemical in any other way (without incorporating it into any product or producing it at the facility).

This data is reported to the Emergency Response Commission under the Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §§ 11001 et seq. The latest TRI data from Minnesota sources shows that in calendar year 1992, 438 facilities emitted 29.7 millions pounds of 90 different substances to the air (fugitive + stack emissions).

Unlike the criteria pollutant emission inventory, the TRI does provide information directly relevant to the MPCA's air toxics program. For two principle reasons, however, the TRI information is not sufficient for the MPCA's strategy for regulating toxic air pollutants.

First, the TRI does not include some important sources of toxic air pollutant emissions. This is because the requirement to report TRI data is limited to manufacturing facilities with Standard Industrial Classification (SIC) Codes of 20-39. Due to this TRI reporting requirement, emissions from facilities other than "manufacturing" do not appear in the TRI even if those facilities emit toxic air pollutants. For example, emissions from mining operations, hospital incinerators, utilities, paint shops and printing operations are not included in the TRI.

Second, the TRI does not report all data important to an effective regulatory program. The criteria pollutant emission inventory requires that data be reported on an emissions unit basis and this emission unit specific information has proven very useful, and is essential, for regulatory purposes. In contrast, TRI data is reported on a facility-wide basis. In fact, on a per chemical basis, the amount of information available through the TRI is far less than that available through the criteria pollutant emission inventory. Thus, while both the TRI and the criteria pollutant emission inventory include basic facility data (name, location, address, SIC Code, contact names) and an estimate of the amount of listed substances released, only the criteria pollutant emission inventory includes process data and stack information. This latter information is important because it defines what systems tend to cause pollution problems and how they can best be controlled. It is this information which allows the MPCA to evaluate and impose needed controls on emissions from both existing and future sources.

Even the Emergency Response Commission, the Minnesota agency responsible for implementing the TRI, has acknowledged the limitations of the TRI (Exhibit 2). These limitations, however, do not make the TRI unusable to the MPCA in its efforts to regulate toxic air pollutants. Rather, the TRI is a good first step to gathering information on a number of toxic air pollutants. It simply is not the last step in the information chain needed for the MPCA to establish an effective regulatory system for toxic air pollutants.

6. Need to Fulfill the Requirements of the Great Lakes Agreement.

Atmospheric transport and deposition of toxic air pollutants to the Great Lakes are documented phenomena. More and more evidence indicates that a significant amount of toxic chemicals enter the Great Lakes basin via atmospheric deposition (Exhibit 3).

For several years, the International Joint Commission has been examining the effects of toxic air pollutants in the Great Lakes basin. In its Sixth Biennial Report (Exhibit 4), the Commission reported:

> "... In our Fifth Biennial Report, we expressed concern for the injury that has occurred: persistent toxic substances have adversely affected human, environmental and economic health, and continue to do so. The evidence, which has been presented in numerous scientific and technical publications, continues to mount. Additional studies over the past two years reinforce the Commission's earlier convictions that persistent toxic substances exert far-reaching, adverse impacts throughout the ecosystem. ..."

(Exhibit 4, at Page 27).

In 1986, Governors from the eight states bordering the Great Lakes and their connecting waters, including the State of Minnesota, signed the "Great Lakes Toxic

Substances Control Agreement" (Exhibit 5). One provision in the 1986 agreement directly addresses the need to obtain data on toxic emissions:

> "... The signatory states must cooperate in quantifying loadings of toxic substances originating from all sources, with the purpose of developing the most environmentally and economically sound control programs. ..."
>
> (Exhibit 5, at Page 13)

Developing and maintaining a comprehensive emissions database for toxic air pollutants will enable the MPCA, and the EPA, to better quantify the amounts of these substances that may enter Lake Superior and the Great Lakes system. This emissions database will assist the State of Minnesota in satisfying its obligation to cooperate with other states in quantifying loadings of toxic substances to the Great Lakes.

IV. STATEMENT OF REASONABLENESS

The MPCA is required by Minn. Stat. chapter 14 to make an affirmative presentation of 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 rule is discussed below.

A. Reasonableness of the Rules as a Whole. The focus of this rulemaking is concerned with the parts of this rule relating to the registration permit qualifications and requirements and the control equipment performance standard. An additional goal of the rule is to gather more information on emissions of hazardous air pollutants (HAP) from major sources in Minnesota. Therefore, a general overview of the main concepts of the registration permit and control equipment performance standards and the HAP informational requirements are described below, along with a section by section description of the reasonableness each provision. For other sections of the rule, only a section by section description of the reasonableness is included.

1. Simplified and less cumbersome permit application.

Under the operating permit rule a state and part 70 (federal) permit application have very few differences. The current application process is long and detailed (refer Minn. Rules part 7007.0500). In contrast, under the proposed rule, small stationary source with boilers, internal combustion engines, and VOC sources in qualifying for registration permit Option C will use a calculation method whereby the owner or operator of a qualified stationary sources will only need to know what the fuel usage, hours of operation, or VOC usage at the facility is to determine qualification and apply for a registration permit.

EXAMPLE : a facility has a boiler and 2 emergency generators and in the previous 12 months used:

Boiler fuel use:
120 ton of sub bituminous coal
183 million cubic feet of natural gas

Internal Combustion Engine fuel use

Engine 1 : 23 million cubic feet of natural gas
Engine 2 : 500 gallons of No 1 diesel

Calculations :

UNIT (FUEL)	CALCULATION (from rule)	EMISSIONS
Boiler(coal)	120 x 2.91E-02	3.49
Boiler (NG)	183E 06 x 7.00E-08	12.81
Engine 1	23E 06 x 1.70E-06	3.91
Engine 2	500 x 2.35E-04	58.75
TOTAL		**78.96**

Example 1 total of 78.96 is less than 100. Therefore based on emissions this example facility would qualify for a simplified registration permit. (NOTE: the threshold number of 100 relates to 100 tons per year. However, the threshold is unitless due to the calculation method described under 7007.1125, Option C calculation method). For purposes of this example the facility, has no other emission units, does not plan modifications in the next 12 months which would cause a emission increase, and the facility does not burn any fuels which exceed the sulfur limits in the proposed rule.

As another example, stationary source not qualifying under Option C can still qualify under Option D. Option D allows the owner or operator of a stationary source to calculate the actual emissions for each pollutant. The actual emissions would then be compared to federal thresholds. If the actual emissions were less than 50 % of the federal threshold (50 tpy for each criteria pollutant, 5 tpy for a single HAP, or 12.5 tpy for a combination of HAPs) the source would qualify for a registration permit. The rule has one exception to the above thresholds in that for sources emitting PM10 in a PM10 non-attainment area the qualifying threshold is 25 tpy.

The following table represents a comparison between the requirements of a registration permit and the requirements of a state permit for this source:

REQUIREMENT	STATE PERMIT	REGISTRATION PERMIT
Application	Same as Part 70	Greatly simplified
Compliance Requirements: including, monitoring, reporting, and recordkeeping	Detailed source-specific permit conditions	The source will follow a short set of compliance requirements stated in the rule
Annual Submittals	Emission Inventory	Emission Inventory
Modifications	Follow parts 7007.1150 - 1500	No modification procedures unless a change no longer qualifies the source for the registration permit
Permit Duration	Non-expiring	Non-expiring

2. Credit for the implementation of pollution prevention practices or the use of pollution control equipment.

The proposed rule was written in such a way so that implementation of pollution prevention practices or installation of pollution control equipment is encouraged. This is encouraged by using actual emissions from a stationary source to be qualified under Option D. Pollution prevention practices or pollution control equipment will result in lower actual emissions. Therefore, a stationary source could lower their actual emissions and thus qualify for a registration permit.

Example 1. Assume that a stationary source only has PM10 emissions. Actual emissions at the source are 120 tons per year. The source installs a baghouse (99% control efficiency) which reduce the PM10 emissions to 1.2 tons per year. In this case the source would have been required to obtain a part 70 permit before installation of the baghouse. However, after the installation of the control equipment the source would be eligible for the simplified registration permit.

Example 2. Assume that a stationary source only has VOC emissions from the use of a VOC containing material. The actual VOC emissions at the source are 150 tpy. The source implements a pollution prevention practice by switching from material containing a high percentage of VOCs to a material containing a low percentage of VOCs. As a result of the pollution prevention practice the total VOC emissions are reduced to 7 tons per year. In this case the source would have been required to obtain a part 70 permit before switching raw materials. But, after implementation of the pollution prevention practice the source would be eligible for a simplified registration permit.

3. Further streamlining the permit amendment process.

The credit for control equipment and pollution prevention practices can impact a stationary source with a part 70 or state permit which makes a modification requiring a permit amendment. Through pollution prevention practices or by installing pollution control equipment, a part 70 or state source could potentially move into a more streamlined permit modification procedure by reducing the emission increase from the modification. The following are examples of how the pollution prevention practices or installation of pollution control equipment are encouraged through this proposed rulemaking.

Example 1. A stationary source with a part 70 or state permit is making a modification which will increase PM10 emissions 30 lbs per hour, which currently requires a moderate permit amendment. At the same time the source installs a baghouse to control the increase in PM10 emissions making the net emission increase .3 lbs/hour. Assume the modification is not a Title I modification as defined under 7007.0100, subp. 26. The above scenario would change the required permit modification procedure from the requirement to submit an application for a moderate permit amendment, to the source being required to keep a record of the modification as a insignificant modification and submit a written notice to the MPCA for the installation of the pollution control equipment.

Example 2. A stationary source with a registration permit is making a modification which will increase VOC emissions 20 lbs per hour, which would end eligibility for a registration permit. The source decides to implement a pollution prevention practice switching from a high VOC solvent to a low VOC solvent. The result is a net emission increase from the modification of .5 lbs/hour. This would keep the source within the qualification for a registration permit and the source would submit submit a description of a pollution prevention practice to the MPCA for approval.

4. Federal enforceability issues.

Another issue that the proposed rule attempts to deal with is that of federal enforceability, or the extent to which requirements of a permit issued by the state may be enforced by the federal government and citizens under the Act. Historically, permit requirements mandated by the new source review programs, or requirements allowing a source to avoid being subject to the new source review programs, have been considered federally enforceable if the program under which the permit is issued has been approved by EPA and if the permits have been issued with the appropriate public and EPA review. See 54 Fed. Reg. pp. 27274, 27282 (June 28, 1989). Part 70 provides that permits issued by states with approved operating permit programs are federally enforceable, except for conditions in them which are not required by the Act (and are not designed to limit a source's potential to emit). 40 CFR § 70.6(b). In addition, certain state laws, and permit requirements based on them, become federally enforceable when they are approved by

the EPA as part of a state implementation plan (SIP) to achieve attainment with federal ambient air quality standards. 42 U.S.C. §§ 7410, 7413(a).

In the past, the only method available to the state to make a limitation federally enforceable was through the issuance of a federally enforceable state permit. Under this rule the MPCA will attempt to make all registration permits federally enforceable through explicit rule requirements of what a registration permit content and compliance requirements will be. This would be accomplished through public noticing of the rule itself in place of public noticing each individual permit. In addition, this proposed rule will be submitted to EPA as a SIP revision to meet the requirements in making limitations federally enforceable.

5. Obtaining emission estimates for hazardous air pollutants through the MPCA's operating permit rule rather than a specific "toxics inventory rule".

Originally MPCA staff had intended to include an inventory for toxic air pollutants in a rule totally separate from the Operating Permit Rule. However, upon further review it has become evident that some information on emissions of toxic air pollutants can be obtained through the Operating Permit Rule. To avoid duplication of effort in reporting emissions data and to provide a first step in collecting information about emissions of toxic air pollutants, MPCA staff has decided to pursue language changes in the Operating Permit Rule that will require emission sources to provide estimates of their emissions of hazardous air pollutants in their part 70 permit applications. The MPCA considers this to be a reasonable approach to begin identifying the major sources of toxic air pollutants in Minnesota while at the same time minimizing the information reporting burden for these emission sources. These requirements will not apply to the smaller sources subject to registration permits. Additionally, the information will be required of part 70 permittees every five years as part of a permit application. The less detailed information required of state permittees will be provided once, since state permits are not generally expiring. This approach allows the MPCA to get significant information on air toxics with far less burden on sources than the annual emission inventory that had previously been planned.

Air emission sources required to obtain a state, general, or part 70 permit, will be required to provide estimates of potential emissions of the regulated pollutants they emit in their permit applications. All 189 "hazardous air pollutants" listed in section 112(b) of the Act will become "regulated" air pollutants at some time in the future. Rather than wait for these hazardous air pollutants to officially become "regulated" pollutants, the MPCA believes it is reasonable to expand the "potential to emit" estimation procedure to include all the hazardous air pollutants now to provide more comprehensive information on emissions of toxic air pollutants in Minnesota. This additional emissions data will be used by MPCA staff in conducting the health-based review of MACT standards which is a primary element in the MPCA's strategy for regulating toxic air pollutants. In sum, this more comprehensive emissions information is considered to be essential for implementing the MPCA's strategy for regulating toxic air pollutants. For this reason, the

MPCA considers the requirement for part 70 and state emission sources to provide estimates of potential emissions for all hazardous air pollutants to be reasonable.

The proposed changes in the operating permit rule allows the MPCA to obtain data that can be used to assemble an inventory of actual emissions for toxic air pollutants and fulfill the 1992 legislative mandate that requires identification of the sources of toxic air pollutants. This data will allow the MPCA to begin to determine the magnitude of air toxics emissions in the state, prioritize those emissions as to their relative potential to be a threat to the health of humans or the environment, and design an air toxics program to specifically address the problems or potential problems in regards to those emissions.

To facilitate the use of the toxics inventory data in such a manner, actual emissions of the specific hazardous air pollutants are needed. Using "potential to emit" data only may grossly over-estimate the emissions of toxic air pollutants and in turn likely over-estimate any potential problems due to those emissions. To provide a more representative picture of emissions of toxic air pollutants in the state and to begin answering questions about how much toxic pollution is actually emitted to the air, the MPCA believes it is reasonable to use estimates of "actual emissions" rather than "potential emissions". Based on this conclusion, the MPCA will require major emission sources that must obtain a part 70 operating permit to include estimates of their actual emissions of hazardous air pollutants in the permit application.

B. Reasonableness of the Rule by Section.

The following discussion addresses the reasonableness of specific provisions of the proposed rule. The discussion of changes will go through changes to chapters 7007 and 7011 in numerical order.

1. 7007.0100 DEFINITIONS.

a. Emission point (Subpart 9a).

The MPCA proposes to adopt into its rules the definition of "emission point" that it has used for years in its air emission permits. It is reasonable to define this term because it is used in this proposed rule to describe some of the information required in a permit application under part 7007.0500, subpart 2 (C)(3). It is reasonable to define the term to refer to the stack, vent or other opening through which emissions occur, because information on gas flow rate, temperature and stack height and diameter is determined at the place emissions are discharged to the atmosphere, not at the location of individual emissions units, several of which might exhaust together through one opening to the atmosphere.

b. Hazardous air pollutant (Subpart 12a).

The MPCA proposes to adopt a definition of "hazardous air pollutant" that consists of the list of hazardous air pollutants established by the Act. It is reasonable to define this term because it is used in several parts of this proposed rule to: 1) describe the pollutants for which certain permit applicants must provide information in their permit applications (proposed part 7007.0500, subpart 2 (C) (4)-(5)); 2) establish thresholds that determine what type of permit amendment is required (proposed parts 7007.1250, 7007.1300 and 7007.1450); 3) determine eligibility for registration permit option D (proposed part 7007.1130, subpart 5); and 4) to describe the pollutants for which a control efficiency may be established (proposed part 7011.0070, subpart 2). It is reasonable to define the term as it is defined in the Act, because the Act established thresholds for emissions of these pollutants that require part 70 permits, as well as de minimis thresholds for these pollutants to define what changes at a stationary source require certain types of permit amendments or can be done without a permit amendment. This proposed rule is designed, as will be explained later, to create opportunities for stationary sources to qualify for more streamlined permits or for a more streamlined permit amendment procedure, if the source stays below the federal thresholds. It was therefore important to define this term as it is defined in the Act.

c. Listed control equipment (Subpart 12b).

This definition adopts for chapter 7007 the term "listed control equipment" as defined in part 7011.0060, subpart 3. It is reasonable to put this cross-reference in chapter 7007 because the term is used in part 7007.1130, which allows a stationary source to consider emission reductions from certain control equipment, pursuant to parts 7011.0060 to 7011.0080, in determining qualification for registration permit option D.

d. Permit (Subpart 17).

This proposed change to the definition of "permit" adds registration permits to the list of permits issued under parts 7007.0100 to 7007.1850. This change is reasonable because this proposed rule will add a new type of permit, the registration permit, to those issued under parts 7007.0100 to 7007.1850. This change also continues the current use of the term "permit" to refer to all types of air emission permits that are issued by the MPCA.

e. Registration permit. (Subpart 18a).

This proposed definition provides the name for the simplified type of permit that is established under this proposed rule in parts 7007.1110 to 7007.1130. It is reasonable to define a new term for this new type of permit so that it is clear in the rule when parts of the rule apply only to registration permits. The definition also reasonably parallels how the other types of permits are currently defined in part 7007.0100, subparts 12 (general permit), 16 (part 70 permit) and 22 (state permit).

2. 7007.0150 PERMIT REQUIRED.

Two changes are proposed for this subpart. The change in subpart 2 adds a sentence to the end of the subpart to state that the registration permit is an option available to qualified stationary sources to fulfill the requirement in current rules to obtain a permit. This change is reasonable because it reflects the addition in this proposed rule of the registration permit options. Also, because existing subpart 2 contains a reference to all types of permits available under the current rule, it is reasonable to continue that practice by adding a reference to the new type of permit (registration permit) that will be established by this proposed rule.

The second change in part 7007.0150 occurs in subpart 4. The proposed amendment to subpart 4 separates into item A, but does not change, the way potential to emit is calculated to determine whether a permit is required. The proposed amendment also separates into item C, but does not change, the existing cross-reference to part 7007.1200 as the part that governs calculation of emissions to determine whether a permit amendment is required. The amendment adds, as item B, that a stationary source in compliance with the control equipment performance standard in parts 7011.0060 to 7011.0080 can use the control efficiency determined by part 7011.0070 when determining the type of permit the stationary source requires. This amendment is reasonable because it reflects that stationary sources may elect to be governed by the control equipment performance standard to limit their emissions and thereby obtain a more streamlined type of permit. For example, a stationary source may be able to obtain a state permit rather than a part 70 permit, or may qualify for registration permit option D instead of a state or part 70 permit. This amendment assures that the control equipment performance standard can become an important factor in limiting the stationary source's potential emissions during the permit application process to qualify it for a more streamlined permit.

3. 7007.0200 SOURCES REQUIRED OR ALLOWED TO OBTAIN A PART 70 PERMIT AND 7007.0250 SOURCES REQUIRED TO OBTAIN A STATE PERMIT.

These two parts both contain the same technical amendment in subpart 1. The amendments clarify that parts of chapter 7007 that refer only to registration permits do not apply to part 70 permits or to state permits. This is reasonable, because the MPCA intends in this proposed rule to add a new, different permit type to the rule, but does not intend the new registration permit parts to affect the current rules that apply to part 70 or state permits. These technical amendments also continue the current practice in chapter 7007 that when a provision explicitly applies only to stated types of permits, the provision does not apply to the other types of permits.

A second proposed amendment adds a new subpart 7 to part 7007.0250 that states that stationary sources may obtain a registration permit instead of a state permit if the stationary source qualifies for one of the registration permit options. This amendment is reasonable because part 7007.0250 establishes what stationary sources are required to obtain a state permit, and the intention of new subpart 7 is to specify that a registration permit may be available to

satisfy this requirement. The proposed language also appropriately reflects the current language in subpart 5 that allows a stationary source that chooses to limit its emissions below the thresholds for a part 70 permit to obtain a state permit; under the proposed rule, if such a source can also qualify for a registration permit, it may choose to obtain a registration permit instead of a state permit. This amendment effectuates the MPCA's intent that the registration permit be an alternative, more streamlined permit that many stationary sources can obtain to satisfy the current rule's requirement to obtain a state permit and to keep the stationary source's emissions below the part 70 thresholds.

4. 7007.0300 SOURCES NOT REQUIRED TO OBTAIN A PERMIT.

a. Subpart 1. No permit required.

This section lists three additional New Source Performance Standards (NSPS) categories the MPCA proposes to exempt from the requirement to obtain a permit in the situation where the source is required to obtain a permit solely because it is subject to these NSPS. These categories include:

> 40 CFR Part 60, Subpart Kb, specifically 40 CFR Part 110b, affecting those storage vessels whose volume is less than 75 cubic meters for which construction, reconstruction or modification is commenced after July 23, 1984.
>
> 40 CFR Part 60, Subpart Dc, specifically those natural gas fired steam generating units that have a maximum heat input capacity of 100 million Btu per hour or less but greater than 10 million Btu per hour for which construction, reconstruction or modification was commenced after June 9th, 1989.
>
> 40 CFR Part 60, Subpart JJJ, affecting petroleum dry cleaning plants with a rated dryer capacity greater than 84 pounds for which construction, reconstruction or modification was commenced after December 14, 1982.

Under part 7007.0250, subpart 2, a stationary source subject to any New Source Performance Standard (NSPS) must obtain a permit regardless of its air emissions. This provision proposes to allow a stationary source, subject to one of the three additional NSPS, but not required to obtain a permit for any other reason, to be exempt from permitting. In determining whether or not to exempt certain NSPS categories from the requirement to obtain a permit, the MPCA used the following criteria:

> 1) Potential Emissions Under Permitting Thresholds. First the MPCA researched whether there could be stationary sources subject to any of these three NSPS whose potential emissions would not be greater than the thresholds listed in part 7007.0250. The MPCA believes that there could be stationary sources subject to these three NSPS whose potential emissions are less than the thresholds listed in part 7007.0250. In fact, most stationary sources whose emissions result solely

from emission units addressed in the applicable NSPS would otherwise be exempt from permitting. Examples of such cases are listed below:

a. A fuel oil tank subject to 40 CFR Part 60, Subpart Kb, specifically 40 CFR Part 60.116b could have potential VOC emissions of less than 0.02 tpy. (VOCs is the limited pollutant for fuel oil tanks) The permitting threshold for VOCs is 100 tons per year.

b. A natural gas fired boiler subject to 40 CFR Part 60, Subpart Dc with a rated capacity of 100 MMBtu per hour would have potential NOx emissions of less than 60 tpy. (NOx is the limiting pollutant for natural gas-fired combustion units.) This is less than the permitting threshold of 100 tons per year for NOx.

c. A petroleum dry cleaning plant equipped with a solvent recovery dryer as required in 40 CFR subpart 60.620 could have potential VOC emissions of less than three tons per year. (VOCs is the limiting pollutant for petroleum dry cleaning plants.)

2) Straightforward Compliance Requirements. The MPCA also evaluated the compliance requirements of a stationary source subject to one of these three NSPS categories. If the specific compliance requirements of the NSPS categories were straightforward, the NSPS was considered for exemption. NSPS which contained complex monitoring requirements such as continuous emission monitors, or contained any case by case choice of compliance requirements were not considered. The specific requirements of the NSPS for those stationary sources that are exempted from permitting are listed below:

a. 40 CFR Part 60, Subpart Kb, specifically 40 CFR Part 60.116b. Compliance with this NSPS for storage vessels under 75 cubic meters requires the owner or operator to report once that is has a storage tank of a certain size subject to the NSPS.

b. Natural Gas Fired Boilers Subject to 40 CFR Subpart Dc. Natural gas fired boilers subject to this NSPS are required to record and maintain records of the amount of natural gas combusted each day.

c. 40 CFR Part 60 Subpart JJJ. The petroleum dry cleaning NSPS contains basic equipment standards, requires a one time test of the recovered solvent flow rate using a graduated cylinder and requires that the stationary source maintain records of the test.

The specific compliance requirements of these NSPS are minimal. It is reasonable to expect the stationary source to comply with the requirements contained in these NSPS

without needing a permit to repeat these requirements. In addition the subject source would have potential emissions under all permit thresholds. The MPCA will provide written guidance to those stationary sources affected by these three NSPS regarding compliance requirements. Therefore, the MPCA believes the addition of the three NSPS categories to the exemption list is reasonable.

5. 7007.0400 PERMIT REISSUANCE APPLICATIONS AFTER TRANSITION; NEW SOURCE AND PERMIT AMENDMENT APPLICATIONS; APPLICATIONS FOR SOURCES NEWLY SUBJECT TO A PART 70 OR STATE PERMIT REQUIREMENT, AND 7007.0750 APPLICATION PRIORITY AND ISSUANCE TIMELINES

The current rule, in part 7007.0750, subpart 5, allows the MPCA to issue installation and operation permits for modifications at stationary sources when the MPCA finds that three listed criteria are met. The first criterion, in part 7007.0750, subpart 5 (A), requires the applicant to have applied for a total facility permit by the application deadline stated in part 7007.0350, subpart 1. While this criterion will continue to apply to most stationary sources, it does not cover the situation where a stationary source, because of a planned change or modification, would become subject to the requirement to obtain a part 70 or state permit for the first time after the applicable deadline in part 7007.0350, subpart 1.

In this situation, the stationary source would have not been required to submit an application under part 7007.0350, subpart 1 at the time of the applicable deadline, but later needs a part 70 or state total facility permit before it can begin actual construction on a change or modification, however small, that would put it over the permit thresholds. Accordingly, the source could not reasonably have been expected to apply for a part 70 or state permit by the deadlines in part 7007.0350, subpart 1. Current part 7007.1150 (E) requires that a change or modification that triggers the requirement to obtain a part 70 or state permit for the first time cannot be done until a permit is issued. This is the case no matter how small the change or modification, even if it would generally be considered insignificant under the current rule, because it triggers for the first time the important part 70 or state permit requirement for the stationary source. The MPCA is proposing this amendment to part 7007.0750, subpart 5 (A) to allow an installation and operation permit to be issued for the change or modification prior to issuance of a total facility permit in this situation. This continues the original intent of current part 7007.1150 (E), which contemplated that an installation and operation permit would be available. The amendment continues the existing requirement that the other criteria in part 7007.0750, subpart 5, items B and C must be met before an installation and operation permit can be issued.

While a change that is not a modification at a stationary source does not require a permit amendment (part 7007.1150(B)), a change or modification that subjects a stationary source for the first time to the requirement to obtain a part 70 or state permit does require that an appropriate total facility or installation and operation permit be obtained before beginning actual construction on the change or modification (part 7007.1150(E)). Accordingly, part 7007.0750, subpart 5 is amended to allow installation and operation permits to authorize changes as well as

modifications prior to the issuance of the total facility permit. This amendment is reasonable because the installation and operation permit would often be appropriate for changes, since they are usually more minor than modifications at a stationary source. This also continues the original intent of part 7007.1150 (E), which contemplated that an installation and operation permit would be available.

The amendment to part 7007.0750, subpart 5 is also reasonable because it puts a stationary source that becomes newly subject to the requirement to obtain a part 70 or state permit due to a change or modification after the deadlines in part 7007.0350, subpart 1, on the same footing as a source that was subject to those deadlines. Both stationary sources could now obtain an installation and operation permit for the change or modification if they meet the other criteria of the existing rule. Since the installation and operation permit is designed to be an option that allows a source to proceed with a modification or change, with appropriate environmental limits placed on the operation of the modification or change, while awaiting the total facility permit, it is reasonable to have its availability not depend on the fortuity of when a source first became subject to the requirement to apply for a part 70 or state permit.

The amendment to part 7007.0750, subpart 5 (A) requires, however, a conforming change in part 7007.0400. One of the purposes of the current rule was to encourage compliance with the deadlines for applying for a total facility permit under part 7007.0350, subpart 1; if a stationary source subject to that requirement does not apply on time, the possible convenience of an installation and operation permit is not available. Since sources not subject to the deadlines in part 7007.0350, subpart 1 are now also eligible for installation and operation permits, a rule amendment was necessary to establish timelines for submitting the subsequent total facility permit application for those sources.

Proposed subpart 4 of part 7007.0400, and the amendment to part 7007.0750 that references it, are designed to establish enforceable application deadlines for these sources. The amendments to part 7007.0750 state that the stationary source may not continue to be operated if the total facility application is not applied for on time, and will be in violation of the requirement to have a permit for the stationary source. This reasonably reflects that an installation and operation permit is a convenience, but does not discharge the source's obligation to obtain a total facility permit for the stationary source as a whole once the stationary source is required to hold a part 70 or state permit.

Proposed subpart 4 of part 7007.0400 establishes deadlines for the total facility permit application, depending on whether the application is for a part 70 or state permit. If the application must be for a part 70 permit, the application must be submitted within 365 days after the permit is issued for the change or modification authorized in the installation and operation permit. This is consistent with 40 CFR section 70.5(1)(i), which states:

> A timely application for a source applying for a part 70 permit for the first time is one that is submitted within 12 months after the source becomes subject to the permit program or on or before such earlier date as the permitting authority may establish.

It is reasonable to conform to the federal timelines in this instance because the part 70 permits are federal operating permits under the Act. Similarly, it is reasonable to establish a shorter (180 days) application deadline for state, general or registration permits because those applications are less complex and time-consuming to prepare than for part 70 permits. Both application deadlines give the stationary source a reasonable time to prepare an application based on the complexity of the application required, without unduly delaying the time when the required total facility permit can be issued for the stationary source as a whole. Tying the application deadlines to the date of installation and operation permit is issued is reasonable to set a clear date by which the MPCA must receive the total facility permit application.

A technical amendment to part 7007.0400, subpart 1 provides a description of the situations in which each subpart of the part will apply. It is reasonable to explain the intended application of each subpart to clarify the applicable deadline. The technical amendment does not change the current applicability of subparts 2 and 3, and describes the situation under which new subpart 4 will apply. This description is reasonable to assure that the appropriate application deadline can be easily located when consulting this part.

A technical amendment to part 7007.0750, subpart 5 (A) also explicitly requires that the MPCA have a complete application for a proposed modification or change in order to issue an installation and operation permit. This was added for the sources eligible under item (A)(2), because those sources would not yet have submitted a total facility permit application, and the MPCA would have to have complete information on the change or modification to establish appropriate limits in the installation and operation permit, as well as to verify that the criterion in existing item C is met. This language is also intended to apply to sources eligible under item (A)(1) that have submitted total facility permit applications within the deadlines of part 7007.0350, subpart 1, both because the MPCA would have to have complete information on the change or modification to establish appropriate limits in the installation and operation permit, and also because that information may not be in the total facility permit application, especially if the modification or change is planned after the total facility application has been submitted to the MPCA.

6. Part 7007.0500 Application Content

Subpart 2.C.1

This technical amendment is reasonable to reflect that subitems, other than subitem (2) under the proposed rule, allow some information in a permit application to be for the stationary source as a whole rather than for each emissions unit. The amendment does not change the current requirement that application information address each emissions unit unless explicitly stated otherwise. This continues to reflect the requirements of 40 CFR 70.5 (c) that the information be for each emissions unit, for each item listed in 40 CFR 70.5 (c)(3)(i)-(vii) (This federally-required information remains in subitems (3), (4) and (6) to (10)).

Subpart 2.C.3

This subpart was changed to better delineate the requirements for information on stack parameters so that it is sufficient to perform an adequate regulatory analysis and at the same time, eliminate superfluous generation of information that is not needed for either permitting or compliance determination purposes.

The stack parameters include the location of the stack or equivalent means of exhaustion, exhaust flow rate and temperature, as well as stack height and diameter.

The location of the stack or equivalent emission point is always necessary because it provides the basic identification information for compliance tracking. It must always be provided. The permit application must contain clear identification and location information for every emission unit and its associated stacks or equivalent emission points.

During the permitting process, some of the information regarding stack parameters for each emission point is necessary in many cases but not in all cases. An inventory of emission sources at a given facility may include several hundred emission points. A detailed description including exhaust flow rate and temperature and stack height and diameter involves a significant expenditure of both time and money. It is therefore, reasonable to limit the extent of this detailed and exhaustive description to only what is needed to complete the regulatory analysis during both, the permit review process and the continued demonstration of compliance during the life of the permit. It also preserves the federal requirement that this information be provided where relevant to apply or show compliance with applicable requirements in 40 CFR section 70.5 (c)(3)(i).

A "major source" according to part 7007.0200, subpart 2(A), has the potential to emit more than 10 tons per year of a single hazardous air pollutant or 25 tons per year of two or more hazardous air pollutants combined. A major source of criteria pollutants (defined in part 7007.0200, subpart 2(B) or 2(C)) has the potential to emit greater than 100 tons per of a single criteria pollutant. The major sources of criteria pollutants, as well as other stationary sources required to submit a criteria pollutant emission inventory under Minn. Rules pt 7019.3000, have generally submitted information on exhaust gas flow rate and temperature and stack height and diameter for each emissions unit, as well as other pertinent information such as fuel use, to the MPCA.

The above rule language similarly requires that a major source for hazardous air pollutants must provide the exhaust gas flow rate and temperature and stack height and diameter for each "emission point". This information is needed for the MPCA to begin implementing its strategy to regulate toxic air pollutants. To ensure that sufficiently detailed information is available to MPCA staff to develop a "toxic emission inventory", similar to the information already being provided by major sources of criteria pollutants, the MPCA believes it is reasonable to also require major sources of hazardous air pollutants to submit information in their permit applications on exhaust gas flow rates

and temperature and stack height and diameter for each emissions point. Since major sources of hazardous air pollutant emissions will be a primary focus of the MACT standards, and the MPCA's health-based evaluation of MACT standards to see if additional state-mandated controls are necessary, the MPCA believes it is reasonable to require these emission sources to provide this detailed facility information in their permit applications. This detailed emission point information can then be used in a more realistic air quality analysis to establish a basis for development of the MPCA's evaluation of toxic air pollutants, and MACT standards.

Subpart 2.C.4.

Stationary sources are currently required to submit an emission inventory if they the potential to emit more than 25 tons per year of a single criteria pollutants (CO, NOx, SO_2, PM_{10}, or VOC). An emission inventory is also required if a stationary source has the potential to emit more than 0.5 tons per year of lead.

The criteria pollutants are considered to be "regulated" pollutants because some type of standard has been set for them, most often in the form of an ambient air concentration. Under the Act (1990), the hazardous air pollutants listed in section 112(b) will eventually be regulated by various MACT standards and will then be "regulated air pollutants" as defined in Minn. Rules pt. 7007.0100, subpart 19. Some of these hazardous air pollutants are currently considered to be "regulated" due to recently promulgated MACT standards. The MPCA also believes it is reasonable to require emissions data for the hazardous air pollutants that are not currently regulated because at some time in the future they will become "regulated" pollutants. In addition, this emissions data is needed for the MPCA's strategy for regulating toxic air pollutants and the MPCA believes it is reasonable to require permittees to provide this information in their permit applications. It is particularly important to get this information now from state source, because their permits are not expiring, and the permits will not be reissued every five years as will be the case for part 70 sources.

The MPCA's strategy for regulating toxic air pollutants requires a health-based review of all MACT standards proposed and/or promulgated by EPA. This health-based review of MACT standards will assess the potential impact of toxic air emissions from those sources regulated by the MACT on human health and the environment. Of critical importance to conducting this health-based review are potential emissions of hazardous air pollutants from the various sources regulated by a particular MACT standard. To begin providing the data that staff needs to implement the MPCA's strategy for regulating toxic air pollutants and conduct the health-based review of MACT standards, the MPCA believes it is reasonable to require that permit applications contain estimates of potential emissions for all regulated and hazardous air pollutants emitted by the permittee.

Subpart 2.C.5.

This subitem was revised to clarify the types of pollutants about which a source must report actual emissions. The prior language required submission of data on actual emissions of regulated pollutants unless the source had submitted an emission inventory as required by part 7019. The term "regulated pollutant" includes criteria pollutants, hazardous air pollutants, and other air pollutants. The emission inventory requirement (part 7019.3000 and 7019.3010) only applies to criteria pollutants. This inconsistency would have absolved many Minnesota sources of the need to report actual emissions of hazardous pollutants, and yet would have required those who did not submit emission inventories to develop actual emission data for the "other" regulated pollutants that MPCA does not need.

The revised language is reasonable because it clarifies the requirement for actual emission data submission by specifying clearly which pollutants this requirement applies to, and makes the requirement consistent for those sources who have submitted and those who have not submitted an annual emission inventory. It leaves in place the practical concept that if a source has reported its actual criteria pollutant emissions in the emission inventory, it need not include the same information in the permit application. The reference to part 7019 is also corrected to refer to the emission inventory chapter 7019, as the rule originally intended.

Subpart 2.C.5.b.

Key phrases in this subitem that will be discussed in further detail are (1) "actual emission rates", and (2) "for the entire stationary source".

Actual emission estimates are needed to facilitate the use of the toxics inventory data to begin to determine the magnitude of air toxics emissions in the state, prioritize those emissions as to their relative potential to be a threat to the health of humans or the environment, and design an air toxics program to specifically address the problems or potential problems with regards to those emissions. Using "potential to emit" data may grossly over-estimate the emissions of toxic air pollutants and in turn likely over-estimate any potential problems due to those emissions. To provide a more representative picture of emissions of toxic air pollutants in the state the MPCA believes it is reasonable to request estimates of actual emissions.

To minimize the work load in calculating and reporting actual emissions from each emissions unit, the MPCA believes it is reasonable for stationary sources that are major sources of criteria pollutants under part 7007.0200, subpart 2 (B) or (C) (i.e. - not major based on hazardous air pollutants), to provide the estimate of actual emissions on a "total facility basis" rather than on an "emissions unit basis".

Subpart 2.C.5.c.

A stationary source that is a major source for hazardous air pollutants under part 7007.0200, subpart 2(A), emits more than 10 tons per year of an individual hazardous air pollutant, or 25 tons per year of two or more hazardous air pollutants combined. Given the identifier of a "major" source due to its emissions of hazardous air pollutants, the MPCA believes it is reasonable to have these stationary sources that are "major sources of hazardous air pollutants" report their actual emissions of hazardous air pollutants on an emissions unit basis. Also, MPCA staff anticipates that major sources of hazardous air pollutants will be regulated more than "non-major" sources of hazardous air pollutants. These future regulations will be emissions unit specific. Therefore it is important to have emissions unit specific information to properly write the regulation in the first place and then to properly apply the regulation. Based on this information need, the MPCA believes it is reasonable to require that major sources of hazardous air pollutants submit their estimates of actual emissions on an emissions unit basis.

7. 7007.1050 DURATION OF PERMITS.

Subpart 3a. Registration Permits.

Subpart 3a states that the duration of a registration permit is nonexpiring. This provision is reasonable because the registration permit is a subpart of the state permit and the state permit is also nonexpiring.

8. 7007.1110 REGISTRATION PERMITS GENERAL REQUIREMENTS

This part of the proposed rule sets forth the general requirements that will apply to all holders of registration permits, regardless of which registration permit option they qualify for. One concept common to all parts that apply to registration permits is that registration permits will be issued , administered and enforced by the commissioner of the MPCA. The import of this is that the MPCA Board is delegating to the commissioner by rule the authority to issue and administer the registration permits. This is reasonable because the registration permit is intended to regulate the smaller sources of air emissions in the state, such as school district heating boilers, backup diesel generators and small auto body shops. As a practical matter, permits for these sources are noncontroversial, and rarely, if ever, come before the MPCA Board. Also, since the rule contains all of the restrictions that will be imposed on qualifying sources, and those restrictions are mandatory by virtue of the rule, issuing and administering the registration permits is more a ministerial task than one of policy formation, and is therefore more efficiently performed by delegation to the commissioner in the rule.

Another concept common to all registration permit parts is that the stationary source must qualify for a registration permit, not simply one or more emissions units at a

stationary source. The MPCA developed the registration permit rule as a streamlined alternative to obtaining a state, part 70 or general permit, because there are numerous stationary sources that can be regulated effectively under the registration permit concept. This allows the MPCA to focus limited staff resources less on smaller stationary sources of air emissions and more on larger stationary sources of air emissions, while still protecting the environment and assuring compliance with applicable requirements by the smaller sources. Allowing sources to carve themselves into various emissions units, some with a registration permit and some with a part 70 or state permit, would be complex, would not obviate the need for a part 70 or state permit for other emissions units at the stationary source (thus not saving MPCA staff resources or regulated party resources in filling out complex permit applications), and would complicate application of limitations to a stationary source to limit overall emissions from the stationary source to meet applicable requirements that apply to emissions from the stationary source as a whole. To keep the concept of a registration permit simple and streamlined for the regulated party and for the MPCA to implement, the stationary source as a whole must qualify to be eligible for a registration permit.

A final concept common to all registration permits is that a registration permit cannot be amended. To keep the registration permit concept simple and streamlined, the rule is designed to allow stationary sources to continue to be governed by their registration permits unless a change or modification makes them no longer eligible for their registration permit option. The obligations of a stationary source issued a registration permit that makes a change or modification that renders it ineligible for its registration permit or ineligible for any registration permit option are clearly articulated in part 7007.1110. This concept is primarily designed to keep the restrictions on registration permittees federally enforceable. EPA requires that the restrictions on stationary sources be established through a public notice procedure to be federally enforceable. The MPCA intends that this rule establish the federally enforceable limits for registration permittees, and that the public notice required by the rulemaking process serve as the public notice required to make these permits federally enforceable. This assists in streamlining because individual registration permits will not be subject to a public notice and comment procedure. Individual public notice is unnecessary under the proposed rule because the content of the registration permit is mandated by the rule itself, will therefore not change among permittees, and is offered for public review and comment in this rulemaking. If EPA does not recognize registration permits as federally enforceable, then stationary sources will have to obtain a part 70, state or general permit to establish federally enforceable limits on potential to emit, and the streamlining accomplished by registration permits will be lost.

The MPCA also believes that the lack of ability to amend registration permits will not cause any practical problems, because if a source ceases to qualify under one registration permit option, but does qualify under another option, the streamlined application for the other registration permit option will be relatively easy to complete, and the new registration permit can then be issued quickly. It is also important to receive a complete application under the new option, because it will verify eligibility and be used

as the basis for the type of records the rule requires to be maintained to show compliance with the new option. Similarly, if a change or modification at the stationary source renders it ineligible for any registration permit option, then a permit amendment to the registration permit would be of no use; the source must at that point apply for and obtain a part 70, state or general permit. For these reasons, it is reasonable to not allow a registration permit to be amended.

a. Subpart 1. Sources that may apply for a registration permits.

This subpart defines the MPCA's intended requirements for a stationary source to be eligible for a registration permit. To qualify, a stationary source must meet the general requirements of part 7011.1110, and the specific requirements of one of the four registration permit options in parts 7007.1115 to 7007.1130. This is reasonable because many requirements apply to all four registration permit options and can be consolidated into one part, with requirements specific to each option stated only in the part governing the particular option.

This subpart also states the MPCA's intent that the registration permit is an option for sources that can qualify for state permits, but qualified sources are not required to obtain registration permits if they would rather have another type of permit. This is reasonable because in creating the registration permits, the MPCA intends only to make available for stationary sources that qualify a more streamlined permit option, not to force eligible stationary sources into registration permits. This leaves qualified sources with a streamlined option available, but leaves to the source the decision of what type of permit is best for its business operations. If an eligible source does not choose a registration permit, an applicable general permit, or an individual state or part 70 permit, will impose the limitations on the stationary source's emissions required by applicable requirements (defined in part 7007.0100, subpart 7).

b. Subpart 2. Sources that may not obtain a registration permit.

Subitem A.

Subitem A lists several categories of stationary source that may not obtain a registration permit, regardless of whether the source would otherwise qualify. It is reasonable to not allow acid rain affected sources to obtain registration permits because part 7007.0200, subpart 3 requires that these sources obtain a part 70 permit. Since registration permits are only available to sources that can qualify for a state permit, acid rain affected sources cannot be eligible for them. Also, 40 CFR section 70.3 requires these sources to obtain part 70 permits. The same rationale applies to permits for solid waste incinerators that are required to obtain part 70 permits by part 7007.0200, subpart 4. Current part 7007.0200, subpart 5 by its terms applies to sources required by federal rules to obtain part 70 permits. Since federal rules establish that requirement, state rules cannot change it, and those sources must obtain part 70 permits.

This subitem also outlines two categories of source subject to a state permit requirement that are not eligible for registration permits. First, the current rule allows the MPCA to require a source to obtain a state permit if restrictions on the source are needed to comply with a national ambient air quality standard (NAAQS) (part 7007.0250, subpart 3). It is reasonable to make these sources ineligible for a registration permit because compliance with the NAAQS will involve source-specific and pollutant-specific emission limits and compliance demonstration requirements that can be imposed in an individual state permit, but which cannot be anticipated or included under the registration permit rule because they would only apply to an individual source and are dependent on the source's specific location.

Finally, this subitem also makes sources subject to permits under the waste combustor standard of performance, which is currently before the MPCA for final adoption, ineligible for registration permits. This is reasonable because the waste combustor standard of performance meant to require certain waste combustors to obtain a state permit in order to incorporate into the permit the complex and comprehensive new requirements of the new performance standard that apply to the individual waste combustor. The waste combustor rule also sets out detailed permit application and permit content requirements that are not compatible with the proposed simplicity of the registration permit. Waste combustor permits will be a good deal more complicated than the registration permits proposed for other sources by this rule. It is therefore reasonable to exclude waste combustors from eligibility for registration permits.

Subitem B.

This subitem lists ten New Source Performance Standard (NSPS) categories. The provision makes stationary sources qualifying under registration permit options A, B, C, or D and subject to one or more of the ten listed NSPS categories eligible for the registration permit option. Staff evaluated and identified NSPS categories similarly to the method used to identify NSPS categories under part 7007.0300. In summary, the criteria MPCA staff used in to determine whether or not to include an NSPS category was whether or not there existed, in the NSPS source category, sources of the size desirable to qualify for a registration permit. In addition MPCA staff evaluated the compliance requirements included in the applicable NSPS. If the compliance requirements were relatively straightforward the NSPS category and the NSPS category did not have a history of citizen complaints it was included.

(1) Projected Emissions Qualify for a Registration Permit. There many small stationary sources subject to these ten NSPS categories whose emissions allow them to qualify for registration permit.

(2) Straightforward Compliance Requirements. The MPCA reviewed the compliance requirements in each existing NSPS to determine its suitability for a registration permit.

This subitem is reasonable, because for a source subject to NSPS not listed, the issuance of the state permit will allow a more detailed description of the compliance requirements to be included in the permit, whereas for a NSPS category listed in this provision the registration permit will only state that compliance with the applicable requirements is required.

If the NSPS contained case by case compliance alternatives such as contained in 40 CFR Part 60, Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, it was not included in the list. If the NSPS contained complex monitoring requirements such as requiring continuous emission monitors it was not included in the list. Although Subpart Dc does require the installation of continuous emission monitors for certain sources the MPCA believes it is reasonable to include Subpart Dc on the list. Subpart Dc only requires continuous emission monitors for certain size sources. Those stationary sources that qualify for a registration permit and are subject to Subpart Dc likely would not be large enough that subpart Dc would require the operation of continuous emission monitors. (See 40 CFR subpart 60.46c(e) and 40 CFR subpart 60.47c(a).)

MPCA staff anticipate that NSPS categories will be added and that existing NSPS may be modified. If a NSPS is added or an existing NSPS is modified in such a way that staff believe the NSPS should be added to the list in this section, MPCA staff will propose amendments to this rule to include the new or modified NSPS categories. In addition, the MPCA will provide written guidance to those stationary sources affected by these NSPS regarding compliance requirements.

c. Subpart 3. Registration permit application.

This section includes four provisions which apply to a stationary source submitting a registration permit application.

The intent of item A is to insure the timelines for submittal of a registration permit application are consistent with the submittal of permit applications for new and existing stationary sources. This provision is reasonable because it maintains the permit application deadlines under the current rule. Since registration permits are an option that sources subject to part 70, state or general permits may elect to apply for, the logical time to receive the application is the time the stationary source would otherwise have to apply for a part 70, state or general permit.

Item B requires the owner or operator of a stationary source applying for a registration permit to submit the application on a standard application form provided by the commissioner. This provision is reasonable because it will result in consistent information provided when applying for a registration permit. Furthermore, a standard application form will only obtain information the MPCA needs to evaluate the registration permit application. As a result, the permittee will spend less time in filling out the application and the MPCA will obtain only the information required for review.

This item is consistent with the current requirement that part 70, state and general permit applications be on a form provided by the MPCA (in part 7007.0500, subpart 1). It is also reasonable to provide the commissioner with the authority to create different application forms for the different registration permits options, because the application forms may be able to save the applicant and the MPCA staff time if they are tailored specifically to each option, especially the less complicated registration permit options. A draft of the standard application forms for a registration permit is included as Exhibit 9.

Items C and D both serve the purpose of obtaining complete and accurate information in the registration permit application. Item C is reasonable because it requires the permittee to submit corrections to a registration permit application as soon as the owner or operator becomes aware of incorrect information submitted. Item D is reasonable because it allows the MPCA to obtain additional information needed to evaluate a registration permit application or to verify that the stationary source qualifies for a registration permit. Examples of the type of information the MPCA would request are: calculations or records verifying calculations made in the application process; compliance records; or other information specifically related to the stationary source qualifying for or complying with the registration permit. These requirements are consistent with the current requirements for part 70, state and general permits in part 7007.0600.

Item C adds the requirement that a registration permittee promptly inform the commissioner of incorrect information that was submitted in its registration permit application and after the registration permit is issued as well. This is reasonable, because errors in the information submitted in the application could mean that a stationary source does not qualify for a registration permit at all, or that it has received a permit under the wrong registration permit option. It is important that this information be reported to the commissioner so that the source can obtain the correct permit with the correct compliance requirements for the source.

d. Subpart 4. Registration permit certifications.

This section requires a certification be included with submittals made to the commissioner under the registration permit process. This requirement is reasonable because it helps assure that information submitted to the commissioner regarding registration permits is truthful, accurate, and complete. This provision is also reasonable because it maintains consistency with: 1) the current rule which states that a responsible official (as defined in part 7007.0100, subpart 21) submit the certification; 2) the certifications currently required in part 70, state and general permit applications by part 7007.0500, subpart 3; and 3) the current requirement that reports submitted by a permittee once a permit is issued also contain a certification by a responsible official (in part 7007.0800, subpart 6 (C)(5)).

e. Subpart 5. Registration permit issuance, denial and revocation.

This proposed subpart sets forth the grounds for the issuance, denial, or revocation of a registration permit. The provision regarding issuance requires the issuance of a registration permit if the stationary source submits a complete application, qualifies under the parts 7007.1110 to 7007.1130, and the commissioner anticipates that the stationary source will comply with its registration permit. Likewise the provision allowing denial of the registration permit application allows denial if the determination is made that the stationary source does not qualify under parts 7007.1110 to 7007.1130, or if the commissioner determines that the stationary source will not be able to comply with its registration permit. These criteria for issuance and denial are reasonable because the MPCA obviously intends that only qualified sources that will comply with the requirements of this proposed rule will obtain registration permits (a determination assisted by a complete application), to assure that they are truly the smaller, less complicated stationary sources that are appropriately regulated under the registration permit options.

Additionally, a registration permit application can be denied if grounds under part 7007.1000, subpart 2, items B-G apply. It is reasonable to include items B to G as grounds for registration permit denial because they are grounds for permit denial that have applied to air emission permits for years (in part 7001.0140), and still apply under the current rule (in part 7007.1000). The criteria are reasonable, because they involve noncompliance at the source that has not been corrected, submission of false or misleading information, endangerment to human health or the environment, failure to pay required fees or penalties or failure to submit a required pollution prevention plan. These criteria are basic to compliance with the air program, and if a stationary source cannot meet them, it should constitute a grounds for permit denial. It is reasonable to not allow a source to obtain the streamlined registration permit on the same grounds that a part 70, state or general permit could currently be denied.

The proposed rule does exclude part 7007.1000, subpart 2, item A, because it refers to issuance procedural requirements in part 7007.1000, subpart 1, for a state or part 70 permit that do not apply to registration permit sources. For example, part 7007.1000, subpart 1, items B to D include criteria that the public notice procedures have been followed for the individual permit. As explained in the introduction to part 7007.1110 above, these procedures will not apply to individual registration permits because their content is mandated through the public notice procedures of rulemaking and will not be able to change without another rulemaking procedure. The proposed rule on its face requires compliance with all applicable requirements and mandates the content of the permit in a way that does not vary federal requirements, so part 7007.1000, subpart 1, items E and F need not apply. A complete application is explicitly required as a ground for permit issuance, so part 7007.1000, subpart 1, item A need not apply. It is a stated requirement for registration permit issuance that the commissioner anticipate that the source will comply with the registration permit, so part 7007.1000, subpart 1, item G need not apply. Finally, the sources regulated under registration permits will be smaller

sources not generally subject to the requirements of Minn. Stat. ch. 116D, so part 7007.1000, subpart 1, item H is not necessary. The MPCA notes that if chapter 116D applies to a registration permit source, the requirements of chapter 116D will govern anyway, because this rule cannot change either the statutory requirements or the rules of the Environmental Quality Board which implement chapter 116D.

Finally, the registration permit revocation procedure is reasonable because it continues the current revocation procedures that apply to all other permits, with the change that the commissioner, rather than the MPCA Board, would make the determinations and follow the procedures of part 7007.1700. This change is consistent with the delegation to the commissioner to implement and administer registration permits discussed in the introduction to part 7007.1110, above.

f. Subpart 6. Registration permit content.

This subpart specifies the content of a registration permit. The registration permit will simply list the requirements that apply to the permittee under subpart 7. It is reasonable to mandate the contents of a registration permit, with the only variable being the insertion of the specific registration permit option under which the registration permit is granted, to assure consistency in what will be required in registration permits and to prevent addition of individual permit conditions in a registration permit that would require individual public notice and comment to be federally enforceable, as discussed in the introduction to part 7007.1110, above.

g. Subpart 7. Registration permit compliance requirements.

This provision contains the following three items that identify the rules with which the owner or operator of a stationary source issued a registration permit must comply. Item A states that the registration permittee shall comply with part 7007.1110 (General Requirements). This provision is reasonable because the general requirements in part 7007.1110 apply to all registration permittees. It is also reasonable to give special notice that the general conditions in subpart 20 of part 7011.1110 apply. These general conditions have traditionally been printed into state permits, but for registration permits will now simply be referred to as part of part 7007.1110 to streamline the registration permit and reduce its length. The specific reference is intended to remind registration permittees that the general conditions still apply to all air emission permits, including registration permits, and that the permittee must comply with them.

Item B states that the owner or operator must also comply with the applicable registration permit option-specific compliance requirements. This provision is reasonable because each one of the four options qualifying a stationary source for a registration permit contains its own compliance requirements, while the option-specific requirements for the other three options would not apply. This provision is reasonable because it is necessary to require compliance with the appropriate registration permit option's requirements.

Item C states that the owner or operator must comply with all applicable requirements. This is reasonable, because these requirements apply with or without a permit, and the owner or operator must comply with them. Proposed subpart 2 of part 7007.1110 only allows sources to be eligible for registration permits is they are smaller sources subject to the relatively more straightforward new source performance standards. Similarly, these smaller sources are also subject to state rules. To reflect each of these requirements in a registration permit would eliminate the streamlined nature of the registration permit alternative, because each source would need to be evaluated as to the specific state and federal rules applicable to each individual source (i.e.- the evaluation that occurs in part 70 or state permits currently). In exchange for the opportunity to elect to be governed under the more streamlined registration permit, therefore, the owner or operator assumes responsibility to determine which applicable requirements apply to the stationary source, and to comply with them. The option-specific permit application should assist the permittees in identifying the applicable requirements.

h. Subpart 8. Emission inventory required for stationary sources issued registration permits.

This provision reminds the owner or operator of a stationary source with a registration permit of the requirement to submit an annual emission inventory in compliance with chapter 7019. The purpose for requiring an emission inventory is to: 1) have access to information to verify that the source remains qualified for the registration permit; and 2) as the basis for which emission fees are charged for actual emissions from a source under chapter 7002.

This subpart does not change the current requirement in 7019.3000, subpart 1 that sources that are required to obtain a permit under chapter 7007 must submit an annual emission inventory (part 7019.3000, subpart 1 refers to part 7002.0015, subpart 2, which includes in the inventory and in fees any source required to obtain a permit under chapter 7007). This proposed rule did not change the sources subject to the requirement to get a part 70 or state permit, hence those subject to the emission inventory and fees, except to exempt certain additional sources from the requirement to obtain a permit in the changes to part 7007.0300 unrelated to registration permits. This proposed rule instead creates a streamlined permit option for those sources that are already required to obtain a part 70 or state permit under chapter 7007. It is reasonable to reference the requirement to submit an emission inventory in this subpart to remind registration permittees of this existing rule requirement.

i. Subpart 9. Record retention, access to records, and inspections for registration permits.

Item A requires the owner or operator issued a registration permit keep required records at the site of the stationary source for period of five years and that the records be available for examination or submittal upon request. This item is reasonable because it is

consistent with the existing rules for recordkeeping and retention, which are necessary to allow MPCA inspectors to verify compliance with the any air emission permit, including registration permits. Item B requires that the owner or operator of stationary source issued a registration permit provide access to the stationary source and records for inspections. This provision is reasonable because it informs the owner or operator of the stationary source that the MPCA has statutory authority for inspecting a stationary source and the required records to determine compliance. Items A and B do not change the recordkeeping requirements that would have been required if the source had obtained a state or part 70 permit (see part 7007.0800, subparts 5(C) and 9). Finally, the last statement in the subpart notifies the source this subpart in no way limits the commissioner's, the MPCA's or EPA's authority under Minn. Stat. 116.091, or section 114 of the Act or other law. This provision is reasonable because the intent of this subpart is not to limit the MPCA's inspection and information gathering authorities, and because it makes the same statement about these authorities made in the current rule for part 70, state and general permits (see part 7007.0800, subpart 9).

j. Subpart 10. Changes or modifications at stationary sources issued registration permits that trigger new source performance standards or national emission standards for hazardous air pollutants.

This subpart requires that the owner or operator of a stationary source provide notice to the commissioner of changes at the stationary source that make it subject to certain standards. The standards to which this subpart applies are those under which sources are eligible for registration permits (part 7007.1110, subpart 2(B), or which generally do not require any permit (part 7007.0300). Items A and B require the owner or operator of a stationary source issued a registration permit to submit a notification to the commissioner for a change which results in the source being subject to a new source performance standard (NSPS) listed under subpart 2, item B, or a standard listed in part 7007.0300 (sources not required to obtain a permit). Item A is reasonable because the standards themselves require notification of the commissioner and this serves as a reminder to the owner or operator. Item B is reasonable because the commissioner needs a description of the changes in order to verify that the owner or operator still qualifies for the registration permit, and it is reasonable to require submission of a copy of the standard with applicable portions highlighted so that the owner and operator will become familiar with the portions of the standard which apply.

k. Subpart 11. Change rendering stationary source ineligible for its registration permit or that changes the applicable registration permit option.

There are certain changes at a stationary source, even the changes for which a notice is required under subpart 10, a stationary source can make which increase emissions and the change is not a modification as defined under part 7007.0100. These changes can result in an increase in emissions such that the source would no longer be able to meet the requirements of the registration permit. Examples of this type of change would be changes which are not physical changes such as: a change in hours of operation;

or a change in raw material usage; or other similar changes. When a stationary source is issued a state or part 70 permit, the permit issued has provisions which govern these types of changes. A registration permit however will not have specific provisions governing the type of changes this provision addresses. Therefore, it is reasonable that this subpart address this type of change.

Item A requires the owner or operator to notify the MPCA within 30 days of making this type of change. This provision is reasonable because recalculation of emissions is required once per month, so in 30 days the owner or operator should know that the change has made the stationary source either ineligible for a registration permit or has changed the applicable registration permit option. A change that increases emissions, but is not a "modification, " is usually a small increase that would only be discovered during such a recalculation.

Item B requires the owner or operator to submit the required permit application within 90 days of making the change. Sources that make the type of change described in this subpart will be subject to the more complex state, part 70 or general permit application process for the first time, and it is reasonable to give the owner or operator up to 90 days to prepare and submit the application.

The subpart also states that the stationary source may not continue to be operated if the required permit application is not submitted on time, and will be in violation of the requirement to have a permit for the stationary source. This reasonably reflects that the notice required in item A does not discharge the source's obligation to obtain the required permit once the stationary source is required to hold a part 70, state or general permit instead of a registration permit, or a permit for a different registration permit option, and helps to assure that the permit application will be timely.

Finally, this subpart provides that once a stationary source has made a change that makes it ineligible for any registration permit option, it must demonstrate permanent emission reductions explained below in subpart 14 before it can again be eligible for a registration permit. This provision is reasonable to prevent a source from "bouncing" in and out of a registration permit based on fluctuations in actual emissions from the source. Such fluctuations would raise concerns about the source's ability to maintain continuous compliance with its registration permit, and the source would then best be regulated under a state, part 70 or general permit. It is reasonable, however, to allow a source to requalify for a registration permit if the permanent reductions required by subpart 14 are put in place at the source to assure that it will be able to comply with a registration permit continuously. This also comports with the ground for registration permit issuance that the commissioner must anticipate that the permittee will comply with the registration permit requirements before issuing a registration permit.

l. Subpart 12. Modifications rendering stationary source ineligible for the applicable registration permit option.

Changes at a stationary source that are defined as "modifications" are usually more significant changes that those contemplated by subpart 11. This proposed subpart therefore requires that the owner or operator notify the commissioner before making modifications that would change the applicable registration permit option, but still leave the stationary source eligible for a registration permit. Since this type of modification, however, will generally be more minor than modifications that will render the stationary source ineligible for any registration permit option, it is reasonable to allow the source to proceed upon seven days prior written notice to the commissioner. This procedure is somewhat analogous to the minor modification procedure applicable to part 70 or state sources in current part 7007.1450, subparts 7 and 8, although this procedure culminates not in a permit amendment but in a new registration permit under a different registration permit option.

Finally, since the modification will make the permittee subject to a different registration permit option, the subpart requires in item C that the permittee comply with the requirements for the different registration permit option, including all applicable requirements, instead of the option listed in the current registration permit, until the new registration permit is issued. This is reasonable because it assures that the stationary source will be in compliance with the new registration permit option from the time it makes the modification that puts it into that option. This is also reasonable, because such modifications will generally make the stationary source move from a simple to a more complex registration permit option, and the compliance requirements for each option are included in the next most complex option, as a source moves from option A through option D. As a result, compliance requirements will most often be added by this item, not subtracted.

m. Subpart 13. Modification rendering stationary source ineligible for a registration permit.

This subpart is reasonable because it imposes on registration permittees the same requirement imposed on other stationary sources that want to modify a stationary source in such a way that the source triggers the requirement for the first time to obtain a part 70 or state permit. The similar requirement is in part 7007.1150 (E), and requires that the appropriate part 70 or state permit be obtained before beginning actual construction on such a modification. A state or part 70 installation and operation permit is also available if the requirements for such a permit are met, prior to receipt of the state or part 70 total facility permit. This subpart is reasonable, because this type of modification makes the stationary source sufficiently large to no longer qualify for a registration permit, or to even become a part 70 source. As a result, it is reasonable that the permittee be required to obtain a permit with the appropriate restrictions for such larger sources before this type of modification can be made.

Finally, as was provided in subpart 12, this subpart provides that once a stationary source has made a modification that makes it ineligible for any registration permit option, it must demonstrate permanent emission reductions explained below in subpart 14 before it can again be

eligible for a registration permit. This provision is reasonable to prevent a source from "bouncing" in and out of a registration permit based on fluctuations in actual emissions from the source. Such fluctuations would raise concerns about the source's ability to maintain continuous compliance with its registration permit, and the source would then best be regulated under a more detailed state, part 70 or general permit. It is reasonable, however, to allow a source to requalify for a registration permit if the permanent reductions required by subpart 14 are put in place at the source to assure that it will be able to comply with a registration permit continuously. This also comports with the ground for registration permit issuance that the commissioner must anticipate that the permittee will comply with the registration permit requirements before issuing a registration permit.

n. Subpart 14. Addition of control equipment or pollution prevention practices which result in or reinstate registration permit eligibility.

This provision addresses a stationary source which become eligible for a registration permit or reinstates eligibility through permanent addition of listed control equipment or implementation of pollution prevention practices. This provision is reasonable because it will encourage stationary sources to add listed control equipment or implement pollution prevention plans in order to obtain registration permits, which will result in the reduction of actual emissions in the state of Minnesota. The second sentence of this subpart requires the submittal of a description of a pollution prevention practice to the commissioner along with the required registration permit application. The submittal is required if the pollution prevention practices are the reason the source becoming eligible for, or reinstating eligibility for, the registration permit. This provision is reasonable because without the submittal the commissioner would not be able to verify that the practices result in the required decrease of emissions.

The subpart also defines "pollution prevention practices" as they are defined in Minn. Stat. section 115D.03, subds. 8 and 9 (the toxic pollution reduction act), except that practices that reduce any regulated air pollutant (including the criteria pollutants) could help a source qualify for a registration permit, not just reductions of toxic or hazardous air pollutants. This is reasonable, because whatever the source reduces, it will still have to have sufficiently low emissions of all regulated pollutants and hazardous air pollutants to qualify for any registration permit option. The statement that emission reductions that are solely the result of a decrease in production at the stationary source do not count as "pollution prevention practices" is reasonable, both because it comports with section 115D.03, subd. 9, and because any subsequent increase in production would increase emissions and possibly cause the source to violate its registration permit. It is reasonable that such a decrease not allow a source to reinstate or establish eligibility for a registration permit, because the commissioner must anticipate that the source will comply with the registration permit to issue one, and this type of reduction does not supply that assurance.

o. Subpart 15. Change of ownership or control or stationary source issued a registration permit.

This provision requires a new owner or operator to apply and obtain a registration permit. This provision is reasonable because the provision results in the new owner or operator being responsible for compliance at the stationary source. The provision will also result in the new owner or operator being more familiar with the requirements of the registration permit. This requirement should be simple for registration permit sources, because the application is streamlined, and a new registration permit will generally issue quickly if the source qualifies. This procedure is necessary because the registration permit itself is not subject to amendment, as discussed in the introduction to part 7007.1110, above.

p. Subpart 16. Application for a different type of permit.

This provision allows the commissioner or the administrator 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, or general permit, or for a different registration permit option. The provision allows this determination to be made under four conditions: 1) if the source has had a history of noncompliance; 2) if the source does not qualify for a registration permit; 3) the source qualifies for a different registration permit option, or 4) the applicable requirements that apply to the source are about to or have changed substantially. This provision is reasonable because it protects the commissioner's and the administrator's authority to require a source to apply for the appropriate permit. Item A is reasonable, because if a source has a history of noncompliance, then the source should be regulated under the more comprehensive state, part 70 or general permits to assure continuing compliance. Items B and C are reasonable because if a source holds a registration permit when it does not qualify, or holds the wrong registration permit, the commissioner must have a way to get the source into the correct permit category if the source will not apply voluntarily. Item D is reasonable, because changes to applicable requirements may require some sources to be regulated under state, part 70 or general permits in order to assure compliance with the applicable requirement through more detailed permit conditions.

The subpart also states that the stationary source may not continue to be operated if the required permit application is not submitted on time, and will be in violation of the requirement to have a permit for the stationary source. This reasonably reflects that the source must discharge its obligation to obtain the required permit once the stationary source is required to hold a part 70, state or general permit instead of a registration permit, or a permit for a different registration permit option, and helps to assure that the permit application will be timely.

Finally, it is reasonable to allow the administrator to request these permit applications, especially if the administrator believes that the source should be regulated under a part 70 permit, to assure that sources that are required to have federal part 70 permits have them, and to assure that only eligible source have registration permits to assure that the appropriate emission reductions are federally enforceable.

q. Subpart 17. Voiding an existing permit.

This is provision allows the commissioner to: 1) void an existing part 70 or state permit if the stationary source is issued a registration permit; 2) no longer cover a source under a general permit if it is issued a registration permit, 3) void a registration permit issued under one option when a registration permit is issued under another option; and 4) void a registration permit when the source is issued a part 70, state or general permit. This reflects the principle that the MPCA does not want two registration permits applying to a source at the same time, and that a source cannot hold a registration permit if it holds a part 70, state or general permit. This reasonably reflects the principle that the whole stationary source must be subject to the registration permit, prevents confusion about which requirements apply to a source, and allows the commissioner to implement this principle as a ministerial function that follows from issuance of a different type of permit to a source that is entering or leaving the registration permit group of sources.

r. Subpart 18. No circumvention; permit shield.

This subpart states that an owner or operator is subject to enforcement action if it is discovered that the stationary source does not qualify for the registration permit, and that sources issued a registration permit do not qualify for the permit shield in part 7007.1800. In offering the streamlined option of a registration permit, the commissioner is depending to a large extent on correct and truthful information about a stationary source being in the permit application. If that information is incorrect, then the owner or operator must be responsible for not having fulfilled the obligation to obtain the appropriate permit. This is the same requirement that applies to general permits in part 7007.1100, subpart 7, for the same reason: general permit issuance relies on the source being correct that it is in the category eligible for a particular general permit. This reasoning applies with equal force to the concept of registration permits.

It is also reasonable that the permit shield does not apply to registration permits because these permits will not entail the detailed analysis of which requirements are applicable that will accompany issuance of the much more comprehensive part 70, state and general permits, nor will the permit content include a specific list of applicable requirements for each individual source. Such steps are essential to the proper definition of what is subject to a permit shield, and are incompatible with the streamlined process for issuing registration permits. If a source wishes to avail itself of the permit shield, it has the option to apply for and obtain a part 70, state or general permit.

s. Subpart 19. List of registration permit facilities.

This provision is would make available to the public upon request a list of facilities issued a registration permit. Once this rule goes through the rulemaking public notice and comment process, individual registration permits issued under this rule will not repeat that process. Therefore, it is reasonable to provide the public upon request with a list similar to the list provided for facilities issued general permits (see part

7007.1100, subpart 6), which are issued to individual sources without public notice and comment once the general permit template has been through that process.

t. Subpart 20. Registration permit general conditions.

This subpart includes the general conditions currently required to be included or included by reference in all part 70, state and general permits (see part 7007.0800, subpart 16). Because many of the general conditions listed in part 7007.0800, subpart 16 refer to the MPCA when it will be the commissioner performing the function for registration permits, or refer to permit amendment or reopening and amendment, which will not apply to registration permits, it is reasonable to include the general conditions in part 7007.1110, edited to reflect these differences between other chapter 7007 permits and the registration permit. It was also necessary to delete references made in the general conditions to parts of chapter 7007 that do not apply to registration permits, such as the permit shield, minor permit amendments or the administrative amendment procedure for changes in ownership or control of a source (compare items D, G and N in this subpart with the same items in part 7007.0800, subpart 16). It is reasonable for the MPCA to sort these differences out by editing and restating the general conditions as they will apply to registration permits, so that these requirements will be clearly stated for registration permittees.

u. Subpart 21. Parts that do not apply to registration permits.

This subpart identifies parts that apply to part 70, state and general permits that do not apply to registration permits. It is reasonable that these be listed so that it is clear what applies to registration permits and what does not. Parts 7007.0500 to 7007.0950 do not apply because the detailed permit application content, completeness review, timelines, permit content and public review of draft permit requirements contained in those parts for state and part 70 permits do not apply to registration permits because specific requirements in those areas are covered in a streamlined way in part 7007.1110, and because registration permits will not be subject to public notice and comment after this rulemaking procedure because the rule mandates their content. Part 7007.1000, subpart 1 does not apply for the reasons explained in subpart 5, above. Parts 7007.1150 to 7007.1250 and parts 7007.1350 to 7007.1650 do not apply to registration permits because they cannot be amended, as explained in the introduction to part 7007.1110, and because the provisions of part 7007.1110 cover the situations where changes or modifications change the applicable registration permit option or render the source ineligible for any registration permit. Part 7007.1800 does not apply for the reasons stated in subpart 18, above.

OPTION-SPECIFIC REQUIREMENTS FOR REGISTRATION PERMITS. The next four sections will describe the reasonableness of Option A, B, C, and D (7007.1115 - 7007.1130). Options A-D are the four options available in qualifying for a registration permit. All four options contain an eligibility section, application content section, and a compliance requirements section. Options A, B, and C were designed as simplified permit options fro a large number of small emission sources. Option D, although more

complex than the other options, allows certain stationary sources small actual not eligible for Options A, B, or C to qualify for a simplified registration permit.

9. PART 7007.1115. REGISTRATION PERMIT OPTION A. .

Subpart 1. Eligibility.

Subpart 1 states that this option applies to sources that need a permit for the sole reason that they are subject to a NSPS listed in part 7007.1110, sub. 2, item B. Minn. Rules pt. 7007.0250, sub. 2, requires that sources subject to an NSPS obtain a state permit even if the source does not have the potential to emit more than the thresholds that would otherwise require the source to obtain a state permit (Minn. Rules pt 7007.0250, sub. 4). The thresholds are:

PERMIT THRESHOLDS TABLE

POLLUTANT	POTENTIAL EMISSION THRESHOLDS
Nitrogen Oxides (NOx)	100 tons per year
Volatile Organic Compounds (VOC)	100 tons per year
Particulate Matter (PM)	100 tons per year
Carbon Monoxide (CO)	100 tons per year
Sulfur Dioxide (SO_2)	50 tons per year
Particulate Matter less than 10 microns (PM_{10})	25 tons per year
Lead	0.5 tons per year

Option A allows sources in this category to apply and obtain a registration permit following a process which is the most streamlined of the four registration permit options. Furthermore, sources in this category as stated above will have potential emissions below permit thresholds and therefore actual emissions can be assumed to be even lower than that making this type of source a very small emission source. Option A is reasonable because it provides for a streamlined process for a stationary source where the only reason the source is required to obtain a permit is because of being subject to a listed NSPS and where the source will have a small amount of actual emissions. For a discussion of the reasonableness of the selection of performance standards available under this option, see the discussion of proposed revisions to part 7007.1110, sub. 2.

Subpart 2. Application content.

The following four provisions are common to each of the four options (Option A, Option B, Option C, and Option D):

A. Information identifying the stationary source and its owners or operators, including company name and address (plant name and address if different from the company name), owner's name and agent, and contact telephone numbers, including names of plant site manager or contact, and the person preparing the application if different;

B. A description of the stationary source's processes and products, by Standard Industrial Classification (SIC) code; and

C. A copy of the applicable new source performance standard(s) listed in part 7007.1110, subpart 3, items A-I, with the applicable portion(s) of the standard(s) highlighted for each affected facility.

Insignificant activities at the stationary source listed in part 7007.1300 are not required to be included in the application.

Both items A and B are reasonable because the information is necessary to properly identify and classify the stationary source. Item C requires a highlighted copy of each applicable New Source Performance Standard (NSPS) listed in Part 7007.1110, subpart 2, item B be submitted with the registration permit application. The requirement to highlight the applicable NSPS is reasonable because NSPS can have different requirements depending on the type of emission unit. Therefore it is important that the owner or operator know the specific requirements of the NSPS that apply to each emission unit. The last provision in the application content states that a stationary source applying for a registration permit is not required to include insignificant activities in the registration permit application. This is reasonable because the actual emissions at most stationary sources receiving a registration permit will be well below part 70 permit thresholds, and the type of unit covered under the insignificant list will be unlikely to impact the exceedance of the threshold.

Subpart 3. Compliance requirements.

The compliance requirements provisions of the rule have three common requirements which state that a source with a registration permit shall comply with requirements contained in part 7007.1110 (Registration Permit General Requirements), comply with the requirements of the specific option, and comply with applicable state and federal requirements. This provision is reasonable because it serves as a reference to the general requirements. Secondly, the provision requiring compliance with the provisions contained in the option is reasonable because each option contains specific requirements and this serves as the reference to them. The last provision is reasonable because there are other general state and federal requirements which apply to all sources emitting air pollution in Minnesota. To benefit sources obtaining registration permits MPCA staff intend to develop fact sheets to help identify and guide sources through applicable requirements.

10. PART 7007.1120. REGISTRATION PERMIT OPTION B.

Subpart 1. Eligibility.

This option applies to sources in which the only emissions are from VOC-containing materials. This part sets up a simple applicability provision in that an eligible stationary source would only need to determine if its purchase or usage of VOC-containing materials is less than 2000 gallons for the previous twelve month period. The 2000 gallon threshold for VOC-containing material usage is reasonable taking into account the following calculations.

Two cases will be evaluated. First the case of using a solvent for cleaning and second using a solvent based paint.

In the case of a cleaning solvent, the density of the most common solvents, Toluene and Xylene are approximately 7 lb./gal. Assuming that all of the solvent used is emitted, at this density and 2,000 gallons per year usage, the VOC and hazardous air pollutant emissions would be approximately 7 tons per year. The Part 70 permit threshold for VOC is 100 tons per year and 10 tons per for any one hazardous pollutant. The Part 70 permit threshold for a combination of HAPs is 25 tons per year.

In the case of a solvent based paint, there are two considerations. These considerations are the solvent and a pigment which may be a metal like lead chromate and lead molybdosulfochromate. These metals are hazardous air pollutants (HAPs). For VOCs, the worst case has already been discussed above as in the case of a solvent.

Low transfer efficiency spray equipment, such as siphon type spray equipment that is commonly used in auto body shops and other small to medium scale painting processes, has a transfer efficiency of 30 to 35 percent. That is, 30 percent of the paint sprayed at a target reaches and sticks to a target. Modern spray equipment has a transfer efficiency in excess of 70 percent. The transfer efficiency effects the annual VOC emissions for a facility only in that less paint is required to paint any surface with high transfer efficiency equipment than with low transfer efficiency equipment. This means that if a source switches from low to high transfer efficiency equipment, the overall paint usage will go down and the corresponding emissions of all pollutants from that painting process including VOCs will decrease.

In a high solids paint, these solid HAPs can make up approximately 55 to 60 percent, by weight, of the paint and can have a density as high as 17 lb./gal. Assuming that a facility uses 2,000 gallons per year of a paint that has a solid HAP content of 60 percent by weight and uses spray equipment that has a transfer efficiency of 30 percent, the actual HAP emissions would be approximately 7.1 tons per year. If the remaining 40 percent of the paint was a VOC/HAP, the VOC/HAP emissions would be approximately 6.8 tons per year. The total HAP emissions would then be approximately 14 tons per year. All of these are below the federal thresholds for HAPs and VOCs emissions.

Therefore, Option B is reasonable because the owner or operator of a qualified stationary source is given a very simple method of insuring that the emissions from the source will be a fraction of the part 70 permitting thresholds for VOC emissions and a below the part 70 permit threshold for HAP emissions.

Subpart 2. Application content.

Items A, B, and C are identical to items A, B, and C under Option A therefore refer to the description of the reasonableness under part 7007.1115, Option A, subpart 2.

Item D requires a statement from the owner or operator of a stationary source registering under this option. The statement shall be included in the permit application and shall state whether records to verify compliance will be based on the purchase or use of VOC-containing materials. In most cases the purchase records will be used because it enables the owner or operator to tie into the accounting system for the required records. However, in some cases a stationary source may qualify based on actual use, but because of a purchasing method the source would not qualify. It is reasonable to require the source to choose a method in the application so that both the MPCA and the source understand which method will be used in the future.

For example, a stationary source purchases a bulk quantity 3000 gallons of VOC-containing material. This quantity was purchased to last a minimum of two years. On the basis of purchase records the stationary source would not qualify for option B, because the amount purchased for the first year would is 3000 gallons. If, however, the records were kept based on usage at the stationary source the records would reflect the actual annual usage of approximately 1500 gallons. This provision is reasonable because it allows owner or operator of the stationary source record keeping options which provide flexibility for the source depending on purchasing patterns.

The first sentence in item E requires the owner or operator of an existing stationary source to submit a statement of material purchased or used in the previous 12 months. This provision is reasonable because the basis on which a source qualifies under this option is annual purchase or usage. Qualification for and compliance with this option remains simple by having the owner or operator state the usage in the application and certify that the information is accurate and truthful.

The remaining sentences in item E reference a procedure for the owner or operator to follow in the event the stationary source has been in operation for less than 12 months. This provision requires the owner or operator to estimate the usage during normal monthly operation or to use the average monthly usage whichever is greater. This provision is reasonable because it provides a method to determine applicability for a stationary source in operation less than 12 months. Furthermore, the provisions are reasonable because they require that the calculations are determined based on normal

operations which protects against a source qualifying based on lower monthly emissions during initial operation or startup.

The last sentence of this section, which states that insignificant activities are not required to be included in the application, is identical to the statement under part 7007.1115, subpart 2 (Option A). Therefore, for a discussion of the reasonableness of this provision refer to the application content section of Option A.

Subpart 3. Compliance requirements.

Items A, B and C require monthly recalculations and records by the owner or operator of a stationary source registering under this option. Most of the stationary sources qualifying under this option will be limiting potential emissions below a part 70 permit threshold making the source subject to federal requirements. Therefore, this compliance requirement will be subject to the review and approval of the Environmental Protection Agency (EPA). These compliance provisions were therefore written following EPA guidance and procedures for creating federally enforceable conditions for limiting potential emissions. The MPCA currently issues permits to create federally enforceable conditions for limiting potential emissions. The compliance conditions in this rule follow the compliance conditions in those permits. Monthly calculations and record keeping to verify conditions for the previous 12 months are the standard methods used for verifying compliance in federally enforceable permits. Therefore, these provisions are reasonable because the provisions clearly specify, by rule, the compliance requirements of a stationary source qualifying under this option in the same way a federally enforceable permit would have done for an individual source.

Item D limits the emissions of the stationary source to emissions from VOC-containing materials unless the emissions are fugitive emissions from parking lots and roads or the emissions are insignificant activities exempted under part 7007.1300. This provision reflects the eligibility for Option B stated in subpart 1. This provision is reasonable because Options C and D were developed for stationary sources with emissions other than emissions from VOC-containing materials exist at the source.

Items E and F require compliance with the general registration requirements and applicable requirements. These provisions are identical to provisions in part 7007.1115, subpart 3, items B and C, therefore the reasonableness of these provisions are discussed under the compliance section of Option A above.

11. PART 7007.1125. REGISTRATION PERMIT OPTION C.

Subpart 1. Eligibility.

This option applies to stationary sources with air emissions from indirect heating sources or boiler(s), internal combustion engine(s), the use of VOC-containing materials,

or any combination of the three. MPCA currently issues many permits to small sources such as this. Little customization of permits for these sources is needed. Examples of this type of stationary source are given in Section IV, part A (Reasonableness of the Rule as a Whole). The MPCA believes that there are many small sources which have as their only emission sources a boiler(s), internal combustion engine(s), they use VOC-containing materials, or any combination of the three. For this reason, this option was set up to provide a simple method of determining qualification under the registration permit option. The option provides multiplication factors to enable the owner or operator of a stationary to determine if it qualifies by knowing:

(1) the type and amount of fuel burned at the source (if qualification is based on fuel purchased or used);

(2) the horsepower rating and the hours of operation of an internal combustion engine (if qualification is based on hours of operation); and/or

(3) the type and amount of VOC-containing materials purchased or used (if qualification is based on the purchase or usage of VOC-containing materials).

The owner or operator of a stationary source with these types of units qualifies for this option by using the calculation method and multiplication factors in section 7007.1125, subpart 4. The calculation method in set up to be a conservative and straightforward method of determining qualification. The method determines qualification using the multiplication factors given in the rule for each unit, and then adding together the calculation for each unit to arrive at a total. If the total is less than 100, then the source qualifies under option C. The threshold number 100 relates to 100 tons per year, the Part 70 permit threshold for the three pollutants. However, 100 tons/year is not used because under the calculation for VOCs, the formula is increased by a factor of 10 to account for a worst-case assumption that all the VOC emissions are hazardous air pollutants. The Part 70 permit threshold for hazardous pollutants is 10 tons per year. As a result of this factor, the numbers in the formula technically become unitless. Overall, this applicability calculation is conservative because a source may be adding as many as three different pollutants together to calculate a total under 100, when thresholds for each pollutant would normally apply separately. This can be illustrated by using the following example:

For example a facility with a boiler, two internal combustion engines, and a paint booth.

Paint Booth:

VOC-containing material #1 usage:

Usage: 300 gallons per year
Density of VOC containing material: 12 lb/gallon
WF: 5 lb VOC/10 lb of VOC containing material

VOC-containing material #2 usage:

Usage: 150 gallons per year
Density of VOC containing material: 16 lb/gallon
WF: 6 lb VOC/10 lb of VOC containing material

Boiler fuel use:

120 ton of sub bituminous coal
183 million cubic feet of natural gas

Internal Combustion Engine fuel use

Engine 1 : 23 million cubic feet of natural gas
Engine 2 : 500 gallons of No 1 diesel

VOC Calculations:

Material #1 - 10[.5 lbs of VOC/lb of VOC-containing material x 12 lb/gal x (1 ton/2000 lb) x 300 gal/year] = 9

Material #2 - 10[.6 lbs of VOC/lb of VOC-containing material x 16 lb/gal x (1 ton/2000 lb) x 150 gal/year] = 7.2

UNIT (FUEL)	CALCULATION (from rule)	EMISSIONS	EMISSION TYPE
Boiler(coal)	120 x 2.91E-02	3.49	PM10
Boiler (NG)	183E 06 x 7.00E-08	12.81	NOx
Engine 1	23E 06 x 1.70E-06	3.91	NOx
Engine 2	500 x 2.35E-04	58.75	NOx
VOC Material #1	(above)	9	VOC
VOC Material #2	(above)	7.2	VOC
TOTAL		**95.16**	

The example total of 95.16 is less than 100. This example facility would qualify for a the registration permit under option C. This is a typical example for stationary sources that would qualify under this option. And this example shows how, in this case, by adding PM10, NOx, and VOC emissions together in the calculation the method becomes conservative. The existing rule requires that a source calculate the emissions of each pollutant and compare them to the 100 ton per year threshold. In contrast this calculation adds the three pollutants together and then compares this to an amount based on the 100 ton per year threshold.

Subpart 2. Application content.

Items A, B, and C are identical to items A, B, and C under Option A therefore refer to the description of the reasonableness under part 7007.1115, Option A, subpart 2.

Items D and E are identical to Items D and E under part 7007.1120, subpart 2 above, with the exception that instead of requiring records exclusively for VOC-containing materials, this provision requires records for fuel purchase or use, and hours of operation if the calculations are based on those parameters. This is reasonable because eligibility calculations under this option are based on burning fuels, operating hours (for boilers and engines), as well as the usage of VOC-containing materials.

The last sentence of this section, which states that insignificant activities are not required to be included in the application, is identical to the statement under part 7007.1115, subpart 2 (Option A). Therefore, for a discussion of the reasonableness of this provision refer to the application content section of Option A.

Subpart 3. Compliance requirements.

Items A, B and C require a monthly recalculation of emissions for the previous twelve months. Items A, B, and C also require records of the monthly recalculations, records of purchase or use of fuels or VOC-containing materials, and records of operating hours if the source qualifies for Option C based on these parameters. This provision is reasonable because it follows EPA guidance for monthly compliance demonstration with a federally enforceable permit limit. For additional discussion concerning compliance with federally enforceable conditions refer to the discussion under part 7007.1120, subpart 3 (Option B, Compliance Requirements)

In addition, item A, subitem (2) requires a source to maintain a record of a MSDS or a signed statement from a supplier stating the VOC content of each VOC-containing material. This provision is reasonable because the calculation method is based on the content of VOC-containing material and the record would be used to verify VOC calculations under this option.

In addition, item B, sub item (2) requires a source using a fuel with an associated sulfur limit to maintain a record of a vendor certification or independent test verifying the sulfur content of each batch of fuel. This provision is reasonable because the calculation method for fuels with listed sulfur content limits is based on a fuel having a sulfur content less than the limit listed under this option.

Items D, E, and F require the summation of the recalculations required under items A, B, and C, the comparison of the summation to the figure 100, and a prohibition on the burning of fuel exceeding sulfur limits. These provisions are reasonable because they are necessary to document that the stationary source remains in compliance at all times with Option C.

Item G limits the emissions of the stationary source to emissions from indirect heating units(boilers), reciprocating internal combustion engines, or emissions from VOC-containing materials unless the emissions are fugitive emissions form parking lots and roads or the emissions are insignificant activities exempted under part 7007.1300.

This provision is reasonable because it reflects the type of stationary source Option C was designed to cover. Option D was developed for stationary sources with emissions other than emissions from the above stated sources.

Items H and I require compliance with the general registration requirements and all applicable requirements. These provisions are identical to provisions in part 7007.1115, subpart 3, items B and C, therefore the reasonableness of these provisions are discussed under the compliance section of Option A above.

Subpart 4. Tables and calculations.

Examples of the four types of calculations under this subpart have been covered in detail in both the simplification section of this SONAR (Section IV.A.1.a), and the introductory description of this option. Therefore, the intent of this section will be to explain how the calculation methods were developed and the reasonableness of the calculations methods used for Option C. This discussion of this section will be divided into the following five parts: (1) Sulfur Limits; (2) Indirect Heating Units (boilers) Calculations; (3) Reciprocating Internal Combustion Engine Calculations (tons per year method); (4) Reciprocating Internal Combustion Engine Calculations (operating hours method); and (5) VOC Calculations.

Parts (1) through (4) above are based on a detailed calculations based on sulfur limits for specified fuels and emission factors for the boiler and internal combustion engines. These calculations are included as Exhibit 3. Exhibit 3 is based on the following assumptions:

(a) For any one fuel burned, if the limiting pollutant emitted is kept under its Part 70 permit threshold, then the other pollutant emissions will be under their respective Part 70 thresholds.

(b) For multiple fuels burned which share the same limiting pollutant, if the limiting pollutant emitted is kept under its Part 70 threshold, then the other pollutant emissions will be under their respective Part 70 thresholds.

(c) If the limiting pollutant for each fuel used (which the facility may burn) can be determined, then it is possible to determine that a facility's emissions are below all thresholds by means of only one set of calculations.

(1) Sulfur Limits

The sulfur limit table is included as page 1 of Exhibit 3. A sulfur limit was established for each fuel allowed to be burned under this option. The sulfur limits for indirect heating units (boilers) were derived using the emissions limits stated in Minn. Rules pt. 7011.0510, subpart 1, and the average heating value of the fuel. The sulfur

limits for reciprocating internal combustion (RIC) engines were derived using the emissions limits stated in Minn. Rules pt. 7011.2300, subpart 3, and the average heating value of the fuel. The one exception for both boilers and RIC engines is that for No. 1 and No. 2 distillate oil, the ASTM specification was used (0.5% sulfur).

(2) Indirect Heating Units (boilers) Calculations

The purpose is to derive a simple means of determining if a stationary source with a boiler which burns fuel has emissions under thresholds requiring a part 70 permit. The calculation method and assumptions are explained below, and a detailed outline of how the emissions factors were derived is included on pages 2, 3 and 4 of Exhibit 3.

Method

1. The emission factors from AIRS/AP-42 are adjusted using the weighting factors to determine the limiting pollutant (and multiplication factor) for each fuel burned.

2. A matrix is derived listing the acceptable fuels and their respective emission factors by which compliance with the Part 70 thresholds may be demonstrated/determined.

Example As an example, consider a facility with four boilers which burn natural gas and distillate oil as its only source of emissions.

For no. 1 or no. 2 distillate oil, the weighted factor is calculated as follows:

From AIRS/AP-42 we obtain the following emission factors:

PM	PM_{10}	SO_2	NO_X	VOC	CO	Pb	Units
2.0	1.08	143.6(S)	20.0	0.34	5.0	0.00042	pounds/1000 gallons burned

Where S is the sulfur content of the fuel expressed as a percent. The proposed rule reflects an existing limit of 0.5 percent.

From this, we can obtain the SO_2 emissions in pounds per gallon of fuel burned.

(143.6 x 0.5 lb of SO_2)/1,000 gallons = 0.0718 lbs of SO_2/gallon of fuel burned

We would like the emissions expressed in units of tons of SO_2 per gallon of fuel burned.

0.0718 lbs of SO_2/gallon of fuel burned x 1 ton/2,000 lbs
=0.0000359 = 3.59E-05 tons of SO_2/gallon of fuel burned

By following the same process, the weighted factors for the rest of the pollutants can be calculated. The results are as follows:

PM	PM_{10}	SO_2	NO_X	VOC	CO	Pb	Units
1.0E-06	5.0E-07	3.59E-05	1.2E-05	1.0E-07	2.5E-06	2.0E-10	tons/gal

Reviewing the results show that SO_2 is the highest weighted factor which indicates that SO_2 would be the first pollutant to trip a permitting threshold when burning no. 1 or no. 2 distillate oil in the boiler. Therefore 3.59E-05 tons/gal is the multiplication factor used for boilers burning no. 1 or no. 2 distillate oil.

The process is be repeated for natural gas where the limiting pollutant is NO_X and the multiplication factor is 7.0E-08/cubic foot and the results are incorporated into the equations below:

3.59E-05	×		gal/yr of distillate oil	=	
7.00E-08	×		cf/yr of natural gas	=	
			Total	=	

The example facility can demonstrate that it is below the permitting thresholds by showing that the results of its annual fuel use, when plugged into the above equations, results in a number which is less than 100.

For a facility that burned 500,000 gallons of oil and 900,000,000 cubic feet of natural gas per year, the equations become:

3.59E-05	×	500,000	gal/yr of distillate oil	=	17.95
7.00E-08	×	900,000,000	cf/yr of natural gas	=	63.00
			Total	=	80.95

The facility was below any of the permitting thresholds for the twelve month period of the example. This can be verified by calculating the actual emissions for the criteria pollutants and comparing the results to the permitting thresholds.

Fuel	PM	PM_{10}	SO_2	NO_X	VOC	CO	Pb	Units
Natural Gas	1.35	1.35	0.27	63.00	1.26	15.75	0.00	tpy
Distillate Oil	0.50	0.25	17.95	5.00	0.05	1.25	0.00	tpy
Totals	1.85	1.60	18.22	68.00	1.31	17.00	0.00	tpy

Therefore the limiting emissions in this case, based on actual emissions, is NO_X at 68 tons/year. As demonstrated, because the SO_2 from the oil and the NO_X from the natural gas are additive in this example, the actual emissions are substantially below the permitting thresholds.

The above calculations have demonstrated how the multiplication factors were derived for natural gas and No. 1 and No. 2 distillate oil, and the following chart shows all the fuels allowed to be burned under this option.

Fuel	Factor			Units	
anthracite	4.64E-02	×		tons burned =	
bituminous	4.10E-02	×		tons burned =	
sub bituminous	2.91E-02	×		tons burned =	
lignite A	1.89E-02	×		tons burned =	
coke	4.55E-02	×		tons burned =	
wood and bark	8.40E-03	×		tons burned =	
kerosene	3.59E-05			gallons burned =	
No. 1 and No. 2 distillate	3.59E-05	×		gallons burned =	
No. 4 distillate	1.35E-04	×		gallons burned =	
No. 5 and No. 6 residual	1.43E-04	×		gallons burned =	
LPG	6.60E-06	×		gallons burned =	
natural gas	7.00E-08	×		cubic feet burned =	

The chart only includes the most common fuels used in boilers. If a boiler burns a fuel not listed, the stationary source would have to use Option D to determine whether a registration permit can be obtained.

(3) Reciprocating Internal Combustion Engine Calculations (tons per year method)

The following chart outlines the multiplication factors to be used for RIC Engines. The multiplication factors were derived in the same way as the multiplication factors for boilers as described above. Again, the fuels represent the common types of fuels used in RIC engines.

Fuel Usage:

No. 1 and No. 2 diesel, and kerosene	2.35E-04	×		gallons burned =	
LPG	6.95E-05	×		gallons burned =	
natural gas	1.70E-06	×		cubic feet burned =	

(4) Reciprocating Internal Combustion Engine Calculations (operating hours method)

Many stationary sources have RIC engines which are used as emergency generators. This calculation method was developed because most owners operate the engines for a only a few hours per month. In addition, this type of stationary source typically keeps records of operating hours for maintenance purposes. Therefore, for this type of source, this method provides a simplified calculation method. Under this calculation method, the owner or operator is required to know the horsepower capacity and the operating hours to determine eligibility as shown in the calculation below.

1.22E-05	×		hp capacity ×		hours of operation =	

A detailed calculation of the multiplication factor is located on page 4 of Exhibit 7. An example of how this calculation would be used follows:

Assume that a stationary source has two RIC engines. Operating records show that:

Engine # 1 is rated at 600 hp and was operated 205 hours over the previous 12 month period.

1.22E-05	×	600	hp capacity ×	205	hours of operation =	1.5

Engine #2 is rated at 200 hp and was operated for 165 hours over the previous 12 month period.

1.22E-05	×	200	hp capacity ×	165	hours of operation =	0.4

In this example, if the engines were the only emission units at the stationary source, the calculated number (1.9) corresponds with the total emissions of 1.9 tons/year, and is a fraction of the 100 ton/year threshold.

(5) VOC Calculations

The purpose of this method is to derive a simple means of determining if a stationary source which uses VOC emitting material has emissions under thresholds requiring a part 70 permit. The calculation method stated below is a common method of determining VOC emissions. The calculation uses the density of the substance, the percentage of VOC-containing materials in the mixture, and the number of gallons of the mixture to arrive at the VOC emissions. Because the calculation method must keep the source under all part 70 permit thresholds, the worst case situation would be to assume that all of the VOC emissions were from a single hazardous air pollutant. In this situation, the applicable worst case permit threshold would be 10 tons per year. The emissions thresholds for indirect heating units and internal combustion engines are based on either SO_2, PM_{10} or NO_X emissions which are both 100 tons per year. VOC emissions are increased by a factor of ten so the results can be compared on an equal basis.

VOC-containing material calculation:

Material 1	____	$\frac{\text{lb Solvent or VOC}}{\text{lb of material}}$	x	____	$\frac{\text{lb of material}}{\text{gal of material}}$	x	____	$\frac{\text{gal of material}}{\text{yr}}$	x 10 =	____

SUMMARY

In summary, Option C is reasonable because the owner or operator of a stationary source can determine what type and combination of fuels a facility may choose from and what the factors are for each fuel. Qualification under this part is simplified by:

1. making the calculation method straightforward for the owner/operator to use, if the stationary source the type of emission units described; and

2. allowing the stationary source to clearly demonstrate if emissions are below the part 70 permitting thresholds.

Again, as stated in previous options, if the stationary source fails to qualify under this option because the stationary source has emission units other than the units allowed, the stationary source may qualify under Option D.

4. PART 7007.1130. REGISTRATION PERMIT OPTION D.

Subpart 1. Eligibility.

This option is intended for sources with actual emissions below the part 70 permitting thresholds, that were not able to qualify under Options A, B, or C. A stationary source qualifying under this option would have to have actual emissions of 50% or less of the part 70 thresholds, except for stationary sources emitting PM10 in a PM10 nonattainment area for which the threshold is 25 tons per year, The actual emission pollutant thresholds for this option are:

OPTION D EMISSIONS THRESHOLDS

POLLUTANT	THRESHOLD (ton/yr)
HAP	5 ton/yr for a single HAP
	12.5 ton/yr total for all HAPs
PM	50 ton/yr
PM10	50 ton/yr for an Attainment Area
	25 ton/yr for a Nonattainment Area
VOC	50 ton/yr
SO_2	50 tons/yr
NO_x	50 tons/yr
CO	50 tons/yr

The MPCA developed this option to allow stationary sources with multiple emission units but with small actual emissions to qualify for a registration permit. The first three options do not cover all stationary sources with small actual emissions. The first three options are designed to allow a large number of the stationary sources

qualifying for a registration permit to determine applicability in a simplified manner. Determining applicability under option D is more difficult than the under the first three options. But the option of allowing sources to calculate actual emissions enables sources with emission units not included in the first three options to qualify for the registration permit option in a manner no more difficult than what would be required for a state permit. Option D is reasonable because it assures that stationary sources remain under the thresholds requiring a part 70 permit, and it provides an option for stationary sources to qualify for a streamlined registration permit. Furthermore it will lessen the burden both on the permittee and on the MPCA in regulating qualified stationary source while providing adequate environmental protection by allowing sources to qualify if actual emissions are 50% of the part 70 permit threshold.

There will be a secondary benefit to having the Option D registration permit thresholds at 50% of the part 70 permit threshold. The secondary benefit will be that owners and operators may institute measures to reduce actual emissions below the 50% threshold. This can be done in a number of ways but the methods of calculating actual emissions allow the use or addition of pollution control equipment and the implementation of pollution prevention practices as a way to reduce actual emissions. The impact of this provision will be an overall reduction of actual emissions in the State of Minnesota.

Subpart 2. Application content.

Items A, B, and C are identical to items A, B, and C under Option A, therefore refer to the description of the reasonableness under part 7007.1115, Option A, subpart 2.

Items D and E are identical to Items D and E under part 7007.1120, subpart 2 above, with the exception that instead of requiring records exclusively for VOC-containing materials, the provision requires records for fuel purchase or use, hours of operation, and production if the calculations were based on those parameters. This is reasonable because eligibility calculations under this option are based on burning fuels, operating hours, production, and/or the usage of VOC-containing materials.

Item F requires the owner or operator to submit a highlighted copy of the control equipment's operating parameters, as provided by the control equipment's manufacturer, if pollution control equipment is used to limit emissions. This provision is reasonable because each type of control equipment has operational parameters at which the control equipment operates the most efficiently to gain the desired reduction in emissions. Therefore, by requiring the operational parameters be submitted and highlighted in the registration permit application, the owner or operator and the MPCA know what parameters the control equipment should be operated at in meeting a emissions reduction to qualify under this option.

This provision requires the owner or operator of a stationary source that qualifies for a registration permit under Option D using listed control equipment to comply with

the requirements of the control equipment performance standard (Minn. Rules 7011.0060 to 7011.0080). This provision requires the owner or operator that used an alternative control efficiency to calculate emissions and to comply with the operating parameters of the performance test that established the alternative control efficiency. Minnesota Rules pt. 7007.11130, subp. 1, item D requires the owner or operator to have the control equipment manufacturers specification in order to be allowed to use a control efficiency as determined by Minn. Rules pt 7011.0070. This means that to use either the assigned or alternative control efficiency the owner or operator must have the control equipment manufacturers specification.

If through a performance test, the owner or operator can demonstrate an alternative control efficiency and the equipment is operated in the same manner prescribed by the control equipment manufacturers specification, it is reasonable to allow the owner or operator to use the alternative control efficiency when calculating emissions. It is also reasonable to require the owner or operator to continue to operate the control equipment in the manner which it demonstrated in the alternative control efficiency.

The last sentence of this section states that insignificant activities are not required to be included in the application and is identical to the statement under part 7007.1115, subpart 2 (Option A). Therefore, for a discussion of the reasonableness of this provision refer to the application content section of Option A.

Subpart 3. Compliance requirements.

Items A, B C, and D require a monthly recalculation of emissions for the previous twelve months. Items A, B, C, and D also require records of the monthly recalculations, records of purchase or use of fuels or VOC-containing materials, records of operating hours, and records related to production if the source qualifies for Option D based on these parameters. This provision is reasonable because it follows EPA guidance for insuring monthly compliance determination with a federally enforceable permit limit. For additional discussion concerning compliance with federally enforceable conditions refer to the discussion under part 7007.1120, subpart 3 (Option B, Compliance Requirements)

In addition, item A, sub item (2) requires a source to maintain a record of a MSDS or a signed statement from a supplier stating the VOC content for each VOC-containing material. This provision is reasonable because the calculation method is based on the VOC content of VOC-containing material and the record would be used to verify VOC calculations under this option.

Item E requires the owner or operator to recalculate actual emissions and record the actual emissions recalculation one time per month. Furthermore, it requires the actual emissions calculation for all emission units except those exempt as an insignificant activity under part 7007.1300. The recalculation and record keeping provisions are reasonable because they are necessary to document that the stationary source remains

eligible under Option D. Secondly, it is reasonable to exclude insignificant activities because the qualification thresholds are a minimum of 50% below the part 70 thresholds. Therefore, insignificant activities will not impact a sources ability to remain below the part 70 thresholds. Finally, if CEM data is used to calculate actual emissions it is reasonable to have operating dates recorded as required in subpart 4 (B)(2).

Item F requires that a source qualifying due to the use of pollution control equipment must comply with the control equipment performance standard located in part 7011.0060 to 7011.0080. Under option D, the stationary source can use pollution control equipment to limit actual emissions below qualification thresholds. The pollution control equipment performance standard specifies operation monitoring and record keeping requirements. These requirements insure that the control equipment operates in a manner consistent with the efficiency credit given. For a description of why the control equipment performance standard itself is reasonable refer the section over viewing parts 7011.0060 to 7011.0080 covered later in this document.

Items H and I require compliance with the general registration requirements and all applicable requirements. These provisions are identical to provisions in part 7007.1115, subpart 3, items B and C, therefore the reasonableness of these provisions are discussed under the compliance section of Option A above.

Subpart. 4. Calculation of actual emissions.

This subpart sets forth the method for calculating actual emissions for sources applying for a registration permit under Option D. This subpart adopts the methods set forth in the emissions inventory rule (Minn. Rules pt. 7019.3010) with minor modifications to reflect its new application to registration permits. The vast majority of the owners and operators that will be using Option D are large enough to have been required to report actual emissions under the requirements of the emissions inventory rule. Therefore, these owners or operators will be familiar with the emissions inventory method of calculating emissions and thus will be familiar with the methods set forth in this subpart. It is reasonable to use a method that the owners or operators are familiar with to lessen their workload. It is also reasonable to use a method that will provide data of recognized quality that will correlate with the emissions inventory that is maintained by the MPCA.

Item A calculation method.

The method of calculating emissions under item A for Option D is a modification of the calculation method used for the emissions inventory. The modification allows the owner or operator to take credit for emissions reductions caused by the use of pollution control equipment without having to conduct stack tests or install continuous emissions monitors. Minnesota Rules pt. 7019.3010, subp. 1 sets forth the method to calculate emissions using U.S. EPA emissions factors and a corresponding operation parameter. The equation in item A includes a multiplier that includes the control efficiency for a type of listed control equipment as assigned under the proposed control equipment rules (Minn. Rules, pt 7011.0070). Since it is the goal of the

proposed rule to simplify the permitting process through this option and to encourage the use of pollution control equipment, it is reasonable to modify the emissions inventory method to account for the emissions reduction caused by the use of listed control equipment.

Item B calculation method.

This item sets forth the requirements for calculating emissions using data collected with continuous emissions monitors. Item B adopts subpart 2 of the emissions inventory rule (Minn. Rules pt. 7019.3010). No changes to this method of calculating emissions are proposed.

Item C calculation method.

This item sets forth the requirements for calculating emissions using data collected through stack tests. Item C modifies subpart 3 of the emissions inventory rule (Minn. Rules pt 7019.3010) in that it requires the tests to have been conducted within one year of the date of application for the registration permit instead of in the calendar year for which the emissions are being calculated. Since the owners and operators are required to submit their permit applications at various times during the year, it is reasonable to change the window of acceptable test data from the calendar year to one year from the application date.

Item D calculation method.

This item sets forth the requirements for calculating VOC emissions using material balance procedures. Item D modifies subpart 4 of the emissions inventory rule (Minn. Rules pt 7019.3010) in that it references the control efficiencies for listed control equipment in the proposed control equipment rule (Minn. Rules pt. 7011.0070) instead of the more general U. S. EPA efficiency factors. Since the listed control equipment in Minn. Rules pt. 7011.0070 have been evaluated specifically for this proposed rule, it is reasonable to limit the control efficiencies to those that have been evaluated.

Item E calculation method.

This item sets forth the requirements for calculating SO_2 emissions using material balance procedures. Item D adopts subpart 5 of the emissions inventory rule (Minn. Rules pt. 7019.3010). No changes to this method of calculating emissions are proposed.

Subpart 5. Emissions thresholds.

This subpart contains the emission thresholds discussed earlier under Subpart 1. It is reasonable to clearly state these thresholds in the rule.

13. 7007.1150 WHEN A PERMIT AMENDMENT IS REQUIRED.

The proposed amendments to part 7007.1150, item C are designed to clarify the meaning of the item rather than change its meaning. Currently, item C allows stationary sources to add

control equipment upon seven days written notice to the MPCA, in certain circumstances. The second to the last sentence in item C explains that item C does not apply if the installation of the control equipment constitutes a "modification." "Modification" is defined in the current rule, part 7007.0100, subpart 14, and includes "title I modification," defined in the current rule at part 7007.0100, subpart 26. It is therefore clear and explicit in the current rule that if installation of control equipment constitutes a modification, which includes a title I modification, a permittee must follow the appropriate permit amendment procedures under parts 7007.1250, 7007.1350, 7007.1450 or 7007.1500 before installing the control equipment, instead of the procedure in item C.

The MPCA's experience with the current rule, which has been effective for approximately six months, is that in practice, regulated parties who read the first part of item C become so enthusiastic about the streamlined procedure for installing some control equipment that they forget to first confirm that the installation does not constitute a title I modification or other type of modification. Some installations of control equipment or pollution control projects could be a modification, especially a title I modification. To try to proactively prevent violations of the existing rule, the MPCA believes it is reasonable to state this limitation on use of item C as many times as possible. Accordingly, the amendments list the limitations of item C in both criteria for control equipment installation, and also add the term "title I modification" to assist permittees in remembering that "modification" always includes "title I modification." Because the current rule is already clear on this point, and permittees are responsible for following the rule, the MPCA would not normally add or need to add a clarification such as this, but its experience with this rule indicates that the repetition is helpful in this instance.

The MPCA is also repeating the requirement that the notice must be in writing in the second sentence of item C for the same reasons, even though the first sentence of item C states that the notice must be written.

14. 7007.1200 CALCULATING EMISSION CHANGES FOR PERMIT AMENDMENTS.

Subpart 1. How to calculate emission changes.
Subpart 2. Calculation methods to determine if the proposed change is a title I modification.
Subpart 3 A. Calculation method for modifications that are not title I modifications.

These subparts were changed to accomplish two purposes. One is to provide a more clear description of the methodology to be followed when calculating emission changes for permit amendments. The second purpose is to afford more flexibility to the regulated community with regards to the complexity of the permit amendment that they need to obtain and the extent of activities that they may initiate as they wait for their permit amendment to be issued. The proposed changes do not diminish the original intent of the rule, nor do they relax the requirements to comply with applicable state and federal

regulations nor do they impair the ability of the MPCA to enforce any of the parts 7007.0050 to 7007.1850.

Subpart 1 was changed to emphasize that the method to calculate emission changes is different for emission changes that constitute a Title 1 modification. It also stresses the requirement to first verify if the proposed change constitutes a Title I modification. It indicates that a method to calculate emission changes for modifications that do not qualify as a Title I modification is provided in this part. Lastly, it brings the permittee's attention to the fact that there is a special permitting procedure for facilities whose proposed modification would render them for the first time, as subject to state or Part 70 permitting requirements.

Subpart 2 explains that the permittee must follow the procedures to calculate emission changes for Title 1 modifications that have been established by federal regulations. Subpart 2 does not change the calculation method in part 7007.1200, but places it first to more clearly remind permittees of the provision.

Subpart 3 retains current itmes B and C, and requirements of the current subpart 1, but changes now allow the permittee to take into account proposed physical and operational limitations and emission decreases as long as there is a written record of such limitations or decreases.

This allowance will not authorize beginning of construction of a modification that would otherwise be subject to Title I requirements. In order to qualify for this allowance, the permittee already had to rule out the possibility of a Title I modification as required in subparts 1 and 2.

For proposed minor and moderate modifications, the permittee is bound to comply with the terms of the operational and design limitations or emission decreases proposed in their permit application pursuant to part 7007.1450 subpart 8. Furthermore, the ability of the MPCA to enforce erroneous determinations on the type of amendment required remains because minor or moderate amendments are not covered by the permit shield under part 7007.1800.

For proposed insignificant modifications, the permittee is required to keep a record of the calculations made to determine if it qualified as an insignificant modification as well as a description and purpose of the modification pursuant to 7007.1250 subpart 3. The permittee is required to keep accurate and true records of regulated activities pursuant to MN Statutes 115.075 and Minnesota rules. Therefore, the ability to enforce against false or erroneous determinations is preserved.

15. 7007.1250. INSIGNIFICANT MODIFICATIONS.

One major change to this section of the rule is the addition of HAPs to the table of pollutants. This change was made because HAPs are, or soon will be, regulated pollutants. Since a modification which will increase emissions above the thresholds listed in 40 CFR 63.44 (as proposed) is considered a Title I modification, and the rule considers emission increase of 25 percent or less of the Title I modification thresholds to be insignificant, adding the HAPs to the rule at the 25 percent level is consistent with the priniciples behind the existing rule. At the time the existing rule was adopted, the MPCA stated that it would adopt the federal thresholds once they were developed by EPA.

The HAP thresholds as proposed in 40 CFR 63.44 are included in the following table. This is included in this document for easy reference, because EPA did not print the proposed table in the Federal Register and the MPCA had to request it under the rulemaking docket. The MPCA plans to revise this rule to adopt the final EPA rule when EPA promulgates it.

63.44 De minimis emission rates

CAS#	Chemical Name	De minimis Level (tons/year)
57147	1,1-Dimethyl hydrazine	0.008
79005	1,1,2-Trichloroethan	1
79345	1,1,2,2-Tetrachloroethane	0.3
96128	1,2-Dibromo-3-chloropropane	0.01
122667	1,2-Diphenylhydrazine	0.09
106887	1,2-Epoxybutane	1
75558	1,2-Propylenimine (2-Methyl aziridine)	0.003
120821	1,2,4-Trichlorobenzene	10
106990	1,3-Butadiene	0.07
542756	1,3-Dichloropropene	1
1120714	1,3-Propane sultone	0.03
106467	1,4-Dichlorobenzene(p)	3
123911	1,4-Dioxane (1,4-Diethyleneoxide)	6
53963	2-Acetylaminofluorine	0.005
532274	2-Chloroacetophenone	0.06
79469	2-Nitropropane	1
540841	2,2,4 - Trimethylpentane	5
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	6E-07
584849	2,4 - Toluene diisocyanate	0.1
51285	2,4-Dinitrophenol	1
121142	2,4-Dinitrotoluene	0.02
94757	2,4-D, salts, esters(2,4-Dichlorophenoxy acetic acid)	10
95807	2,4-Toluene diamine	0.02
95954	2,4,5-Trichlorophenol	1

88062	2,4,6-Trichlorophenol	6
91941	3,3-Dichlorobenzidene	.2
119904	3,3'-Dimethoxybenzidine	0.1
119937	3,3'-Dimethyl benzidine	0.008
92671	4-Aminobiphenyl	1
92933	4 - Nitrobiphenyl	1
100027	4 - Nitrophenol	5
101144	4,4-Methylene bis(2-chloroaniline)	0.2
101779	4,4'-Methylenedianiline	1
534521	4,6-Dinitro-o-cresol, and salts	0.1
75070	Acetaldehyde	9
60355	Acetamide	1
75058	Acetonitrile	4
98862	Acetophenone	1
107028	Acrolein	0.04
79061	Acrylamide	0.02
79107	Acrylic acid	0.6
107131	Acrylonitrile	0.3
107051	Allyl chloride	1
62533	Aniline	1
71432	Benzene	2
92875	Benzidine	0.0003
98077	Benzotrichloride	0.006
100447	Benzyl chloride	0.1
57578	beta-Propiolactone	0.1
92524	Biphenyl	10
117817	Bis(2-ethylhexyl)phthalate (DEHP)	5
542881	Bis(chloromethyl)ether	0.0003
75252	Bromoform	10
156627	Calcium cyanamide	10
105602	Caprolactam	10
133062	Captan	10
63252	Carbaryl	10
75150	Carbon disulfide	1
56235	Carbon tetrachloride	1
463581	Carbonyl sulfide	5
120809	Catechol	5
133904	Chloramben	1
57749	Chlordane	0.01
7782505	Chlorine	0.1
79118	Chloroacetic acid	0.1
108907	Chlorobenzene	10
510156	Chlorobenzilate	0.4
67663	Chloroform	0.9
107302	Chloromethyl methyl ether	0.1
126998	Chloroprene	1
1319773	Cresols/Cresylic acid (isomers and mixture)	1
95487	o-Cresol	1
108394	m-Cresol	1

106445	p-Cresol	1
98828	Cumene	10
334883	Diazomethane	1
132649	Dibenzofuran	5
72559	DDE (p,p'-Dichlorodiphenyldi-chloroethylene)	0.01
84742	Dibutylphthalate	10
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	0.06
62737	Dichlorvos	0.2
11422	Diethanolamine	5
64675	Diethyl sulfate	1
60117	Dimethyl aminoazobenzene	1
79447	Dimethyl carbamoyl chloride	0.02
68122	Dimethyl formamide	1
131113	Dimethyl phthalate	10
77781	Dimethyl sulfate	0.1
106898	Epichlorohydrin	2
140885	Ethyl acrylate	1
100414	Ethyl benzene	10
51796	Ethyl carbamate (Urethane)	0.8
75003	Ethyl chloride	10
106934	Ethylene dibromide (Dibromoethane)	0.1
107062	Ethylene dichloride (1,2-Dichloroethane)	0.8
107211	Ethylene glycol	10
151564	Ethylene imine (Aziridine)	0.003
75218	Ethylene oxide	0.1
96457	Ethylene thiourea	0.6
75343	Ethylidene dichloride (1,1-Dichloroethane)	1
50000	Formaldehyde	2
76448	Heptachlor	0.02
118741	Hexachlorobenzene	0.01
87683	Hexachlorobutadiene	0.9
77474	Hexachlorocyclopentadiene	0.1
67721	Hexachloroethane	5
822060	Hexamethylene,-1, 6 -diisocyanate	0.02
680319	Hexamethylphosphoramide	0.01
110543	Hexane	10
302012	Hydrazine	0.004
7647010	Hydrochloric acid	10
7664393	Hydrogen fluoride	0.1
123319	Hydroquinone	1
78591	Isophorone	10
58899	Lindane (hexachlorcyclohexane, gamma)	0.01
108316	Maleic anhydride	1
67561	Methanol	10
72435	Methoxychlor	10
74839	Methyl bromide (Bromomethane)	10
74873	Methyl chloride (Chloromethane)	10

71556	Methyl chloroform (1,1,1-Trichloroethane)	10
78933	Methyl ethyl ketone (2-Butanone)	10
60344	Methyl hydrazine	0.06
74884	Methyl iodide (Iodomethane)	1
108101	Methyl isobutyl ketone	10
624839	Methyl isocyanate	0.1
80626	Methyl methacrylate	10
1634044	Methyl tert-butyl ether	10
12108133	Methylcyclopentadienyl manganese	0.1
75092	Methylene chloride (Dichloromethane)	10
101688	Methylene diphenyl diisocyanate	0.1
91203	Naphthalene	10
98953	Nitrobenzene	1
62759	N-Nitrosodimethylamine	0.001
69892	N-Nitrosomorpholine	1
684935	N-Nitroso-N-methylurea	0.0002
121697	N,N-Dimethylaniline	1
90040	o-Anisidine	1
95534	o-Toluidine	4
56382	Parathion	0.1
82688	Pentachloronitrobenzene (Quintobenzene)	0.3
87865	Pentachlorophenol	0.7
108952	Phenol	0.1
75445	Phosgene	0.1
7803512	Phosphine	5
7723140	Phosphorous	0.1
85449	Phthalic anhydride	5
1336363	Polychlorinated biphenyls (Aroclors)	0.009
106503	p-Phenylenediamine	10
123386	Propionaldehyde	5
114261	Propoxur (Baygone)	10
78875	Propylene dichloride (1,2-Dichloropropane)	1
75569	Propylene oxide	5
91225	Quinoline	0.006
106514	Quinone	5
100425	Styrene	1
96093	Styrene oxide	1
127184	Tetrachloroethylene (Perchloroethylene)	10
7550450	Titanium tetrachloride	0.1
108883	Toluene	10
8001352	Toxaphene (chlorinated camphene)	0.01
79016	Trichloroethylene	10
121448	Triethylamine	10
1582098	Trifluralin	9
108054	Vinyl acetate	1
593602	Vinyl bromide (bromoethene)	0.6
75014	Vinyl chloride	0.2
75354	Vinylidene chloride (1,1-Dichloroethylene)	0.4
1330207	Xylenes (isomers and mixture)	10
108383	m-Xylenes	10

95476	o-Xylenes	10
106423	p-Xylenes	10
-	Arsenic and inorganic arsenic compounds	0.005
7784421	Arsine	0.005
-	Antimony compounds (except those specifically listed)*	5
1309644	Antimony trioxide	1
1345046	Antimony trisulfide	0.1
7783702	Antimony pentafluoride	0.1
28300745	Antimony potassium tartrate	1
-	Beryllium compounds (except Beryllium salts)	0.008
-	Beryllium salts	0.00002
-	Cadmium compounds	0.01
130618	Cadmium oxide	0.01
-	Chromium compounds (except Hexavalent and Trivalent)	5
-	Hexavalent Chromium compounds	0.002
-	Trivalent Chromium compounds	5
10025737	Chromic chloride	0.1
744084	Cobalt metal (and compounds, except those specifically listed)*	0.1
10210681	Cobalt carbonyl	0.1
62207765	Fluomine	0.1
-	Coke oven emissions	0.03
-	Cyanide compounds (except those specifically listed)*	5
143339	Sodium cyanide	0.1
151508	Potassium cyanide	0.1
-	Glycol ethers (except those specifically listed)*	5
110805	2-Ethoxy ethanol	10
111762	Ethylene glycol monobutyl ether	10
108864	2-Methoxy ethanol	10
-	Lead and compounds (except those specifically listed)*	0.01
75741	Tetramethyl lead	0.01
78002	Tetraethyl lead	0.01
7439965	Manganese and compounds (except those specifically listed)*	0.8
12108133	Methylcyclopentadienyl manganese	0.1
-	Mercury compounds (except those specifically listed)*	0.01
10045940	Mercuric nitrate	0.01
748794	Mercuric chloride	0.01
62384	Phenyl mercuric acetate	0.01
-	Elemental Mercury	0.01
-	Mineral fiber compounds (except those specifically listed)*	a
1332214	Asbestos	a
-	Erionite	a
-	Silica (crystalline)	a
-	Talc (containing asbestos form fibers)	a
-	Glass wool	a
-	Rock wool	a
-	Slag wool	a
-	Ceramic fibers	a

-	Nickel compounds (except those specifically listed)*	1
13463393	Nickel Carbonyl	0.1
12035722	Nickel refinery dust	0.08
-	Nickel subsulfide	0.04
-	Polycyclic organic matter-POM (except those specifically listed)*	0.01
56553	Benz(a)anthracene	0.01
50328	Benzo(a)pyrene	0.01
205992	Benzo(b)fluoranthene	0.01
57976	7,12-Dimethylbenz(a)anthracene	0.01
225514	Benz(c)acridine	0.01
218019	Chrysene	0.01
53703	Dibenz(ah)anthracene	0.01
189559	1,2:7,8-Dibenzopyrene	0.01
193395	Indeno(1,2,3-cd)pyrene	0.01
-	Dioxins & Furans (TCDD equivalent) **	-
7782492	Selenium and compounds (except those specifically listed)*	0.1
7488564	Selenium sulfide (mono and di)	0.1
7783075	Hydrogen selenide	0.1
10102188	Sodium selenite	0.1
13410010	Sodium selenate	0.1
99999918	Radionuclides (including radon)	b

* For this chemical group, specific compounds or subgroups are named specifically in this table. For the remainder of the chemicals of the chemical group, a single de minimis value is listed, this value applies to compounds which are not named specifically.

** The "toxic equivalent factor" method in EPA/625/3-89-016, [U.S. EPA (1989) Interim procedures for estimating risk associated with exposure to mixtures] should be used for PCDD/PCDF mixtures. A different de minimis level will be determined for each mixture depending on the equivalency factors used which are compound specific.

a De minimis values are zero pending public comment on the rule. Currently available data do not support assignment of a "trivial" emission rate, therefore, the value assigned will be policy based.

b The EPA relies on subpart B and I, and Appendix E of 40 CFR part 61 and assigns a de minimis level based on an effective dose equivalent of 0.3 milliem per year for a 7 year exposure period that would result in a cancer risk of 1 per million. The individual radionuclides subject to de minimis levels used for section 112(g) are also contained in 40 CFR part 61.

The other change to this subpart is discussed with part 7011.0065, below.

16. 7007.1300. INSIGNIFICANT ACTIVITIES LIST.

Part 70 allows states to adopt a list of insignificant activities which need not be described in detail on permit applications. 40 CFR § 70.5(c). The MPCA has developed such a list, as set forth in this part. It serves the dual purpose of identifying the sorts of activities and units that need not be described in the permit application, and of identifying the sorts of modifications that do not warrant a permit amendment. In both

cases the goal is the same: to minimize the time spent by the MPCA (and sources) on insignificant emissions sources, so that more attention may be directed to the important ones. Based on MPCA experience in regulating the listed activities the additional insignificant activities listed in the rule are reasonable.

The public is specifically invited to submit additional information to the MPCA regarding why additional activities should be placed on the list, or why activities on the list should be taken off. These comments regarding additions should include estimates on the type and amount of pollutants emitted by a given emission unit. If the MPCA concurs with the suggested inclusions, the MPCA may elect to add to the list in future rulemakings.

Subpart 2 contains a list of insignificant activities which do not have to be listed in the permit application. Subpart 3 contains significant activities that the permittee will have to list in a permit application. The list in subpart 2 is reasonable because MPCA staff have determined that the activities are unlikely to impact overall emissions in the permittee's applicability analysis, and historically they have not been counted in determining applicability under state or delegated federal programs.

The list in subpart 3 includes activities which need to be listed in a permit application for the following reasons:

- EPA requires under 40 CFR § 70.5(c) that certain types of insignificant activities which are included because of size or emission levels be listed in a permit application; and

- Insignificant activities listed in subpart 3 may in some circumstances impact the applicability analysis. For example, if a source is close enough to a threshold for a certain pollutant which would require a more restrictive permit, the MPCA could request the an applicant to calculate emissions for the specific pollutant for activities under this subpart. This is reasonable because EPA requires it under 40 CFR § 70(c), and because the MPCA may need to evaluate some insignificant activities in circumstances where the source is just below a regulatory threshold.

Subpart 2. Insignificant activities not required to be listed.

Additions to item B were made under the category "plant upkeep". The additions are reasonable because they are all routine maintenance activities conducted on a irregular basis which result in very little emissions. Spray paint booths were excluded because, if they are used often, they could be a large and regular source of VOC emissions, especially if used for maintenance at large industrial facilities.

Additions to item D were made under the category "finishing operations". The changes add typical finishing operations at manufacturing facilities. Because these emissions are limited to inside of a building and the nature of the activities generate a

heavy particulate, the operations will not generate a large amount of airborne emissions. Therefore, the finishing operations under this subpart are reasonable because very little airborne emissions will be generated.

Additions to item E were made under the category "storage tanks". The changes includes the addition of the following three subitems:

(2) lubricating oils.

(3) above or below ground fuel oil storage tanks with a combined total tank capacity of less than 100,000 gallons.

(4) gasoline storage tanks with a combined total tank capacity of less than 2000 gallons.

Subitem (2) adds the storage of lubricating oils as an insignificant activity. This is reasonable because lubricating oils have a low volatility threshold and therefore result in a small amount of emissions.

Subitem (3) adds the storing of fuel oil in tanks less than 100,000 gallons as an insignificant activity. MPCA staff calculated the emissions from this category using the EPA software program title *TANKS*. The resultant emissions at the 100,000 gallon above ground level was 134.98 lbs/year assuming 52 turnovers per year of the tank contents. Therefore, this threshold is reasonable because it would be more than 10 times less than the single HAP threshold of 10 tons per year (assuming 100% of the emissions were a single HAP).

Subitem (4) adds the storing of gasoline in tanks less than 2,000 gallons to the insignificant activity list. MPCA staff calculated the emissions from this category using the EPA software program title *TANKS*. The resultant emissions at the 2,000 gallon above ground level was 1958.72 lbs/year assuming 52 turnovers per year of the tank contents. Therefore, this threshold is reasonable because it would be more than 10 times less than the single HAP threshold of 10 tons per year (assuming 100% of the emissions were a single HAP). .

Additions to item K were made under the category "miscellaneous". The additions include the following:

(3) Operation of mobile sources, except for fugitive emissions from mobile sources at a stationary source required to be included under title I of the Act, and except for stationary sources where the MPCA determines the fugitive emissions from associated mobile source activity may impact attainment of national ambient air quality standards.

(4) Purging of natural gas lines.

(5) Natural draft hoods, natural draft ventilation, comfort air conditioning, or comfort ventilating systems not designed or used to remove air contaminants generated by, or released from specific units of equipment.

(6) Funeral home embalming processes and associated ventilation systems.

Subitem (3) above was added to include fugitive emissions from mobile sources as an insignificant activity. The two exceptions were added for a mobile sources: if the fugitive emissions are required be evaluated under Title I of the Act; and fugitive emissions determined to impact attainment of national ambient air quality standards. The first exception would impact for example a stationary source with fugitive emissions from mobile sources that are required to be modeled in the air quality analysis for a PSD permit. The second exception would impact sources with a large amount of fugitive emissions from mobile sources such as a large mining operation or sand and gravel operations. The fugitive emissions from these sources may significantly impact air quality in the immediate vicinity. In these cases, a determination would have to be made by the MPCA that the fugitive emissions from a stationary source are impacting attainment. This subitem is therefore reasonable because generally fugitive emissions do not impact a permit threshold. However, the two exceptions were added for the cases the fugitives could either be required by rules or potentially impact a permit threshold.

Subitems (4), (5), and(6) are reasonable because they are all miscellaneous activities conducted on a irregular basis which result in very little emissions, and which historically have not been considered.

Item L is reasonable because a demonstration process unit operated for educational purposes less than 50 hours per year will result in very little emissions. Besides, the scope of this activity is limited to teaching and therefore is not operated as a production unit.

Subpart 3. Insignificant activities required to be listed.

A number of additions to the list of insignificant activities required to be listed were made in this subpart. However, an important change was made by adding the following exceptions:

> **If emissions units listed in this subpart are subject to additional requirements under section 114(a)(3) of the Act (enhanced monitoring) or section 112 of the Act (hazardous air pollutant requirements), or are part of a title I modification, or if accounted for make a stationary source subject to a part 70 permit, emissions from the emissions units must be calculated in the permit application.**

The result of the above noted change is that if a emissions unit is subject to a enhanced monitoring requirement or a hazardous air pollutant (HAP) requirements the emissions from the unit will be required to be calculated and included in the permit application. The overall intent of this subpart is to require units that could potentially impact a permit threshold to be listed. However, in the area of enhanced monitoring and HAP requirements many regulations have not been completed, and proposed regulations indicate that emission units below current permit thresholds will be impacted. Therefore,

it is reasonable to have this requirement exclude emissions units which may in future regulations be required to obtain a permit, or have an associated permit provision based on the size and type of pollutants emitted.

The reasonableness of this subpart overall is based on the fact that insignificant activities in this subpart have to be listed in the permit application. Furthermore, if a determination is made by the MPCA that a specific insignificant activity(s) could potentially impact a permit threshold the MPCA can request the permittee to provide the calculations. For example, if a source is at 98 tons/year of VOC emissions (permit threshold being (100 tons/year) and the source has listed insignificant activities which emit VOCs, then the MPCA would require the permittee to submit calculations on those activities to determine if the VOC threshold will be triggered. It is reasonable to generally not require calculations for these small sources of emissions unless necessary to determine what type of permit is needed or what the applicable requirements are for the facility.

The changes made to item E included adding gasoline tanks with a capacity less than 10,000 gallons which have calculated actual emissions (using EPA's *TANK* program) of roughly 4.5 tons per year. The second addition was or the storage of non-hazardous VOC-containing materials. With the limiting vapor pressure and temperature the VOC emissions be a faction of the threshold. Because of the above stated information it is reasonable to include the addition to item E.

The changes made to items F and H are reasonable because the units are required to be listed and because if the units are subject to an enhanced monitoring provision or a HAP requirement, or needed to determine what type of permit is needed, the unit is excluded as an insignificant activity under this subpart.

Item I adds a potential emission de minimis threshold for criteria pollutants. Emissions units under the stated threshold would be listed but not calculated in the permit application. This provision will be helpful to stationary sources with many very small emission units. Again this provision is reasonable because the emissions units are required to be listed and because if the units are subject to an enhanced monitoring provision or a HAP requirement the unit is excluded as an insignificant activity under this subpart.

Subpart 4. Part 70 source insignificant activities required to be listed.

The MPCA added a list of activities in subpart 4. The activities only pertain a source applying for a part 70 permit and the qualified activities are required to be listed in a permit application. For large facilities with numerous small emission sources where it is already known that the stationary source will require a part 70 permit, it is reasonable to allow a source to simply list the activities, because the MPCA does not need this level of detail in the permit application. This will save some large facilities from the onerous task of describing the emissions from hundreds of small emission units. Furthermore, the

provision is reasonable for the same reasons insignificant activities listed under subpart 3 are reasonable in that the emissions units are required to be listed and because if the units are subject to an enhanced monitoring provision or a HAP requirement the unit is excluded as an insignificant activity under this subpart.

17. 7007.1450. MINOR MODIFICATIONS.

The only change to this section of the rule is the addition of HAPs to the table of pollutants. This change was made because HAPs are, or soon will be, regulated pollutants. Since a modification which will increase emissions above the thresholds listed in 40 CFR 63.44 (as proposed) is considered a Title I modification, and Title I modifications must be major permit amendments, allowing an owner or operator to make emission increases up to the level of the HAP thresholds using the minor or moderate permit amendment procedure is consistent with the principles behind the existing rule. Again, the MPCA said it would add the federal thresholds to this rule when they became available.

18. PART 7011.0060. DEFINITIONS.

Subpart 1. Scope.

This subpart describes the sections of Minnesota Rules in which terms used in this rule are defined. Since terms used in this rule are defined in other parts of Minnesota rules, it is reasonable to clearly establish the parts of Minnesota Rules from which the terms used in this part are taken.

Subpart 2. Hood

This subpart defines the term "hood". "Hood" means a component designed to capture emissions from a source and to discharge them to control equipment. Hoods are located at some distance from and do not completely surround emissions from the emissions source. Since the hood does not completely surround the emissions source, the capture efficiency of the hood is less than 100 percent. The overall efficiency of the pollution control system is very dependent upon the capture efficiency of the hood; if a contaminant is not captured, it cannot be controlled. Since many emissions sources with control equipment are not completely surrounded, it is necessary to define a hood with a capture efficiency that is less than 100 percent. Since hoods can come in many shapes and sizes, it is reasonable to define the term "hood" by the function of capturing emissions from a source and discharging them to pollution control equipment.

The design and operation of a hood greatly affects its capture efficiency. It is a costly and difficult process to accurately and precisely determine the capture efficiency of a hood; to the point where it would be unreasonable to require the owner or operator of a stationary source with one or more hoods to test to determine the actual capture efficiency. Since the capture efficiency

can vary significantly from application to application, some assurance is needed that any individual hood is well designed and is operated effectively.

The industry standard for the design and operation of hoods is "Industrial Ventilation - A Manual of Recommended Practice". This manual sets forth the procedures for evaluating an emissions source and procedures for using this information in designing and operating a hood. Hoods are designed with a goal of 100 percent capture efficiency. While this goal, for the most part, is unachievable for a hood, a well designed, operated and maintained hood can achieve 95 percent or greater capture efficiency. Hoods that conform with the recommended practices set forth in "Industrial Ventilation - A Manual of Recommended Practice" are more likely to have a high capture efficiency than those that do not conform. A capture efficiency is assumed in the proposed rule for listed control equipment which uses a hood. Some assurance that the hood is well designed and operated is needed, to ensure that the assumed capture efficiency is achieved, therefore it is reasonable to require that the design and operation of the hood conform to the practices set forth in "Industrial Ventilation - A Manual of Recommended Practice."

Subpart 3. Listed Control Equipment.

This subpart defines the term "listed control equipment". "Listed control equipment" means air pollution control equipment listed under Minn. Rules pt. 7011.0070, subp. 1, Table A for which a control efficiency has been determined and assigned. A control efficiency must be assigned to a piece of air pollution control equipment in order for an emissions source to receive credit for the installation and/or operation of that control equipment. The credit is received in the calculation of the sources potential to emit and/or actual emissions calculations where allowed by chapter 7007.

There are many different types of air pollution control equipment. The control efficiency of the equipment varies with the type of control equipment. It is necessary to define the control efficiency that can be applied to all air pollution control equipment within an equipment type. Since there may be an incentive for the source to claim an unrealistically high control efficiency for control equipment, it is necessary to assign an efficiency that is representative of average, well-run, and well-maintained equipment. The U.S. EPA assigns a control efficiency to air pollution control equipment for the reporting of actual emissions for the emissions inventory. The assigned control efficiency is at least as conservative as that which has been assigned to the equipment by the U.S. EPA.

It is necessary to clearly state which air pollution control equipment has been evaluated and assigned a control efficiency. For these reasons, it is reasonable to define the term "listed control equipment". It is also reasonable to limit the use of the term to the air pollution control equipment types that have been evaluated and for which efficiencies are listed in the proposed rule.

Subpart 4. Control Equipment Manufacturer.

This subpart defines the term "control equipment manufacturer". "Control equipment manufacturer" means a person that manufactures and sells pollution control equipment. The

proposed rule requires that the pollution control equipment is operated and maintained in accordance with the manufacturer's specifications unless a part 70, state, general permit, or a permit amendment governing the equipment is obtained. Defining this term, as proposed, will prohibit owners and operators of emissions sources, with no expertise in pollution control equipment design and manufacture, from constructing their own equipment and specifying meaningless or useless operating and maintenance requirements. The proposed definition limits the persons that can claim to be control equipment manufacturers to those whose expertise is recognized enough to be able to sell their equipment to related entities.

The owner or operator of a stationary source that does not meet the definition of pollution control equipment manufacturer and operates control equipment of its own design shall not be able to take into account the assumed control efficiency for listed control equipment. These sources will have to obtain a part 70, state, or general permit in order to limit the source's potential to emit. The appropriate operating, maintenance and monitoring parameters will then be established during the permitting process and will be incorporated into the permit through enforceable permit conditions.

Most of the pollution control equipment in use is not designed and built by the owner or operator of the source. It is reasonable to limit the application of the assumed control efficiency to equipment that has been designed and manufactured by a person with recognized expertise in the field.

Subpart 5. Total Enclosure.

This subpart defines the term "total enclosure". "Total enclosure" means an emissions capture device that completely surrounds emissions from an emissions source and captures all emissions from it. The emissions are then discharged through ductwork to pollution control equipment.

Certain emissions sources do not allow contaminants to escape to the surrounding air. Boilers vent their emissions through stacks and, if applicable, through pollution control equipment before venting to the ambient air. Contaminants are not emitted to the air surrounding the source; meaning the capture efficiency is 100 percent. A boiler then would be defined as a total enclosure. Enclosures around an emissions source in which there are no exits or vents are also total enclosures.

It is reasonable to allow sources, such as boilers and other sources with an enclosure with no exits or vents, to take into account, when calculating emissions, an overall control efficiency that reflects a high capture efficiency. It is reasonable to define the term "total enclosure" and to limit the terms use to sources in which a capture device completely surrounds the emissions from the emissions source and captures 100 percent of the emissions.

19. PART 7011.0065. APPLICABILITY.

Subpart 1. Applicability.

This subpart states that the Control Equipment Performance Standards apply to the owners and operators of stationary sources with listed control equipment that use or have used the assigned control efficiency in emissions calculations.

The owners and operators of stationary sources can use the listed control equipment and the assigned control efficiency when calculating emissions to determine what type of permit (registration, general, state, or part 70) is required or what type of permit amendment (major, moderate, minor or insignificant) is required.

Language has been added to Minn. Rules pt. 7007.1250, subp. 1 (Insignificant Modifications) which requires the owner or operator of a source, that has determined that through the use of listed control equipment that a modification is an insignificant modification, to have operating specifications for the listed control equipment from the control equipment manufacturer. The owner or operator of a stationary source is not required to notify the commissioner of insignificant modification nor are they required to apply for a permit amendment. Therefore, the permit for the source will not reflect the insignificant modification and will not regulate the source in respect to that modification. For other modifications (minor, moderate and major) the permit, as amended, or the permit application will regulate the source. Since source specific operating parameters can only be set forth in a source specific permit or permit amendment and since insignificant modifications do not result in a change in the permit, it is necessary and reasonable to set forth the operating parameters in the rule. It is also reasonable to require that the control equipment be operated in accordance with the control equipment manufacturer's specifications which will become, by operation of the rule, requirements for the source. It is also reasonable to require the owner or operator of a stationary source to have the pollution control equipment manufacturer's specification in order to take into account the emissions reductions caused by the use of the listed control equipment when calculating emissions for purposes of determining if a modification is insignificant.

Under current rules, the owner or operator of a source must determine the permit type or permit amendment type based on potential to emit without considering the effects of control equipment. This is because, without a permit, the use of that control equipment is not required. There is no guarantee that the equipment, even if it is installed, will be operated. With the adoption of the proposed rule and the addition of it to Minnesota's State Implementation Plan (SIP), the use of control equipment is required of sources that take into account the control equipment's effect on emissions. The impact of the control equipment on emissions is federally enforceable. The control efficiency assumed for a piece of listed control equipment can then be taken into account when calculating emissions from a stationary source. Therefore, the proposed rule will allow the owner or operator of a stationary source to apply for and receive a permit or permit amendment that is easier to obtain and comply with if these control efficiencies are considered (an Option D registration permit for example).

Subpart 2. Exceptions to Applicability.

There are two exceptions to the applicability of the proposed rule. The exceptions are (1) non-use is allowed in a permit; and (2) even without the control equipment, the source would not be required to obtain an operating permit under Minn. Rules ch. 7007.

If a permit issued under Minn. Rules ch. 7007 specifically allows the non-use of air pollution control equipment, this rule, Minn. Rules pts. 7011.0060 to 7011.0085, does not apply. The proposed rule regulates a broad range of air emissions sources. Since rules regulate a broad range of sources, it is not possible to foresee all of the conditions under which pollution control equipment is operated. If a stationary source has a permit under Minn. Rules ch. 7007, it has been the subject of closer scrutiny than can be given under a rule or under review of a registration permit application. Decisions that were made as a result of that scrutiny are probably better (for the stationary source and the environment) than those that are made for all sources in general during rulemaking. Therefore, it is reasonable to defer to a facility specific permit conditions under which the owner or operator of an emissions unit with control equipment is allowed to not operate listed control equipment.

If a source's potential to emit, is less than that level at which a permit is required by state rules or federal regulations, even without the use of control equipment, the source is very small. Sources of this size have been determined to have an insignificant impact on the air quality. It is reasonable to exempt a stationary source of this size with control equipment from the requirements of Minn. Rules pts. 7011.0060 to 7011.0085.

20. PART 7011.0070. LISTED CONTROL EQUIPMENT.

Subpart 1. Listed Control Equipment and Control Equipment Efficiencies.

Table A. Control Equipment Efficiency.

This subpart and table list control equipment types that have been investigated and assigns a control efficiency to these control equipment types. The listed control efficiency will be used for the purpose of calculating emissions from sources that are controlled by the listed equipment.

This subpart states that the efficiency assigned in Table A applies unless an alternative efficiency has been assigned in a part 70, state or general permit. If a stationary source has a permit under Minn. Rules ch. 7007, it has been the subject of closer scrutiny than can be given under a rule. Decisions that were made for that individual source as a result of that scrutiny are probably better (for the stationary source and the environment) than those that are made for all sources in general during rulemaking. Therefore, it is reasonable to defer to a facility specific permit that establishes an alternative control efficiency.

This subpart also states that the owner or operator of the stationary source is responsible for ensuring that the control equipment always attains at least the control efficiency assigned in Table A. Since a stationary source to which the proposed rule applies is given credit for the emissions reduction that results from the use of listed control equipment, it is reasonable to require that owner or operator to attain the control efficiency which results in that emissions reduction.

This subpart also states that the listed control efficiencies do not apply to hazardous air pollutants and shall not be used to calculate hazardous air pollutant emissions. Many hazardous air pollutants have unique characteristics that makes them difficult to control. Mercury, for example, is a metal with an extremely low boiling point (it vaporizes at a very low temperature) and is therefore not collected by most particulate matter control devices. This makes the control of mercury difficult. The listed control equipment has not been investigated specifically for the control of hazardous air pollutants. Due to the unique characteristics of hazardous air pollutants, it is reasonable to limit the use of the assigned control efficiencies to the criteria pollutants.

The assigned control efficiency for each type of control equipment was established by reviewing U.S. EPA control efficiency reports and emissions data (Exhibit 11, "Review of Control Technologies and Identification of Typical Efficiencies for the Minnesota Pollution Control Agency"). Through testing, the U.S. EPA has established control efficiencies for many types of control equipment. The control equipment listed in this subpart is a subset of the group that has been assigned control efficiencies by the U.S. EPA. The control efficiencies assigned in Table A for total enclosures is at least as conservative as that which has been assigned by the U.S. EPA. The control efficiencies assigned in Table A for systems with hoods is 80 percent of that which is assigned for systems with total enclosures to reflect a capture efficiency of 80 percent versus 100 percent for a total enclosure.

United States EPA literature was reviewed to establish the recommended control efficiency for each type of control equipment evaluated in Exhibit 11, "Review of Control Technologies and Identification of Typical Efficiencies for the Minnesota Pollution Control Agency". Not all types of control equipment that were evaluated are listed in the proposed rule. The proposed rule establishes control efficiencies for only the control equipment that is easily distinguished by type and, if applicable as in the case of cyclones, by control efficiency, and for which the appropriate monitoring parameters could be established by rule rather than by a site-specific or manufacturer specific information.

Within a single type of control equipment where it is not easy to identify physical or operational equipment characteristics that determine control efficiency (high, medium or low efficiency), the lowest control efficiency has been assigned to the entire equipment type. This is the case for electrostatic precipitators (ESPs). The control efficiency for ESPs used to control emissions from emissions units other than boilers ranges from 70 percent to greater than 95 percent. There are several factors that influence the control efficiency of an ESP. Since there is no single physical or operational characteristic that would identify a unit as a high (95 percent) or low (70 percent) efficiency, it is reasonable to assign the more conservative control efficiency. This allows the owner or operator to at least receive credit for the installation and operation of

the control equipment. If the owner or operator wants to receive credit for a higher efficiency unit, the owner or operator can apply for an alternative control efficiency under subpart 2 of this part. To qualify for the alternative efficiency, the owner or operator must demonstrate the control efficiency through a performance test. If the demonstrated efficiency is higher than the efficiency assigned in Table A, the owner or operator may use the alternative control efficiency in the calculation of emissions from the source. If the demonstrated efficiency is lower than the efficiency assigned in Table A, the owner or operator shall use the lower control efficiency in the calculation of emissions from the source.

The column in Table A labeled "Total Enclosure" reflects the overall control efficiency that is achieved with the listed control equipment and with a total enclosure; this column assumes 100 percent capture efficiency. The Column in Table A labeled "Hood" reflects the overall control efficiency that is achievable by pollution control systems with hoods. The assigned control efficiency for pollution control systems with a hood, is set at 80 percent of the efficiency for systems with a total enclosure. The capture efficiency of 80 percent is based on a conservative estimate of the capture efficiency that can be consistently achieved by a well designed, maintained and operated hood. Hoods are designed to capture 100 percent of the emissions, however, it is not possible for a hood to capture 100 percent of the emissions from a source. A well designed, operated, and maintained hood can capture 95 percent or more of the emissions from a source.

The owner or operator of a stationary source that assumes the control efficiency that is assigned to a system under Table A is required to evaluate whether the hood conforms to the practices recommended in "Industrial Ventilation A Manual of Recommended Practice". The owner or operator is also required to certify that the hood conforms to the recommended practices. The evaluation and certification are required to ensure that the hood is well designed and operated.

"Industrial Ventilation A Manual of Recommended Practice" sets forth procedures for designing, and operating hood systems. When designing a hood, the engineer must consider, among other things, the size of the source, the buoyancy of the emissions, the temperature of the emissions, the velocity at which emissions leave the source, cross winds that influence the direction of the emissions after they have left the surface of the source, whether or not an operator will be standing by the source, and physical or space constraints of the system. All of these factors must be considered when the hood system is evaluated. The owner or operator is also required to keep a maintenance record for the fan and hood. It is reasonable to require the owner or operator to evaluate the hood and to keep a maintenance record to ensure that the hood system is well designed, operated and maintained.

In AP-42 "Compilation of Air Pollutant Emissions Factors", the U.S. EPA has assumed an efficiency of 79 to 95 percent for the capture of VOC emissions from various VOC sources. Also in AP-42, the U.S. EPA assumed a 50 to 60 percent efficiency for the capture of particulate matter from steel furnaces. The capture efficiencies that were assumed in AP-42 by the U.S. EPA do not represent what will be achieved in all cases. In the document "Technical Manual: Hood System Capture of Process Fugitive Particulate Emission" (EPA/600/7-86/016, E.R.

Kashdan, Et Al. Research Triangle Park, April 1986) many metal furnace hood systems were tested to determine the particulate matter capture efficiency. The capture efficiencies ranged from 50 to 98 percent.

None of the capture efficiencies nor control efficiencies assigned in Table A reflect worst case estimates of the efficiencies of the listed control equipment. It may be possible to have a capture efficiency for a hood of zero percent; and therefore, the control efficiency would also be zero percent. A capture efficiency of twenty percent should represent a very poorly designed, maintained and operated hood. The assumed capture efficiency of 80 percent is a conservative estimate of what a well designed, maintained and operated hood can achieve, and since hoods must conform to established standards to qualify under this rule, this capture efficiency is reasonable.

Owners and operators may assume this capture efficiency for a hood only for purposes of calculating emissions for a registration permit under Option D, and not for calculations under part 1200. Option D has a threshold which is 50 percent of the federal thresholds. With the thresholds set at 50 percent of the federal thresholds, a factor of safety of 2 is provided for. Since there is no factor of safety provided in rules for a source that is modifying under parts 7007.1150 to 7007.1500, the owner or operator of a source which is modifying may not apply the control efficiencies for hoods in calculating what type of amendment is required.

It is reasonable to assume that a hood system that is well designed, operated and maintained has a capture efficiency of 80 percent or greater. For these reasons, it is reasonable to allow owners or operators of stationary sources to use this efficiency in the calculation of emissions for an Option D registration permit. For these reasons, it is also reasonable to prohibit owners or operators of stationary sources that are modifying from applying this capture efficiency to emissions calculations for a permit amendment.

This subpart also defines the specific control equipment types. The definitions describe physical and operational characteristics that distinguish one equipment type from another. These characteristics are also used to distinguish among equipment designs (and efficiencies) within a type. Drawing 1, and Table 1 describe the physical dimensions of centrifugal collectors (cyclones) that produce the assigned control efficiency. Since the described characteristics define the equipment type and the efficiency of the equipment within an equipment type, it is reasonable to define the listed control equipment in those terms.

Subp. 2. Alternative Control Equipment Efficiencies; Control Efficiencies for Hazardous Air Pollutants.

This subpart states that the owner or operator of a stationary source may propose an alternative control equipment efficiency for the above listed control equipment. The owner or operator using control equipment which has been tested to verify the actual efficiency in compliance with Minnesota performance test rules (Minn. Rules pt. 7017.2001 to 7017.2060) may apply to receive credit for the higher control efficiency.

The assumed control efficiencies are conservative. Some of the control equipment is actually capable of achieving a significantly higher control efficiency. As stated above under subpart 1, ESPs are capable of greater than 95 percent control efficiency and the assigned control efficiency is 70 percent. For some owners and operators, it may be important to receive as much credit as possible for the reduction in emissions achieved with the listed control equipment. This subpart allows the owner or operator to determine the actual emissions reduction that the listed control equipment at the source is achieving and then receive credit for that reduction. It is reasonable to allow owners and operators to apply for an alternative control efficiency if they can demonstrate a control efficiency other than that which is proposed under subpart 1 of this part.

This subpart also states that the owner or operator of a stationary source may receive credit for control of hazardous air pollutants if the control efficiency is determined in accordance with performance test requirements in Minnesota rules. It is recognized that some of the listed control equipment can and does reduce the emissions of hazardous air pollutants. However, there is not enough information about the ability of the equipment to reduce these emissions to assign a control efficiency number in this rule. Owners or operators of hazardous air pollutant sources with unit specific data demonstrating a control efficiency can receive credit for that control. New and modifying sources will not have unit specific data to demonstrate a control efficiency. Since a control efficiency for hazardous air pollutants has not been assigned under this subpart, new and modifying sources of hazardous air pollutants will be required to calculate their emissions without considering the effects of using the listed control equipment.

It is reasonable to allow the owner and operator to submit data which demonstrates a unit specific control efficiency and to allow the owner or operator to account for that emissions reduction in the calculation of emissions. It is also reasonable to require new and modifying sources to calculate hazardous air pollutant emissions without taking into account the use of control equipment since no unit specific data is available and there is not enough general hazardous air pollutant control data available to assign a control efficiency in Table A of subpart 1.

This subpart also states how to apply for an alternative pollution control efficiency and that the owner or operator is responsible for attaining the alternative control efficiency at all times. Since the owner or operator has demonstrated and is given credit for the alternative emissions reductions that result from the use of listed control equipment, it is reasonable to require that owner or operator attain the alternative emissions reduction (alternative control efficiency) for which credit is given. It is also reasonable to describe the process to apply for an alternative control equipment efficiency.

Subp. 3. Certification for Hoods.

This subpart requires an engineer to certify that the hood conforms with the practices set forth in "Industrial Ventilation A Manual of Recommended Practice". As stated above, this manual is the industry standard for designing and operating hoods. It is reasonable for the hoods to be evaluated under the recommended practices of this manual. It is reasonable that an engineer certify that the hood conforms with the recommended practices, because it provides an

elevated level of confidence that the hood is well designed and operated and there is reasonable assurance that the hood can achieve a capture efficiency of 80 percent or greater.

21. 7011.0075 CONTROL EQUIPMENT GENERAL REQUIREMENTS.

Subpart 1. Operation of Control Equipment.

This subpart requires the owners or operators of stationary sources that are subject to the proposed rule with listed control equipment to operate the listed control equipment whenever the emissions unit that it is controlling is operating. It is reasonable to require the owner or operator of a stationary source with control equipment, for which credit is given for the emissions reduction caused by the control equipment, to operate that control equipment whenever there are emissions to be controlled, i.e. whenever the equipment that it is controlled is operating.

The requirement to operate the listed control equipment will apply whether or not the owner or operator has a permit. Because it is required in rule to operate listed control equipment, owners or operators of stationary sources can take into account the emissions reductions that result through the use of listed control equipment when applying for a particular type of or permit amendment. To reduce emissions to the environment and to allow owners or operators to take into account emissions reductions caused by the use of the control equipment, it is reasonable to require that the listed control equipment be operated whenever the emissions unit that it is controlling is operated.

This subpart also requires the owner or operator to operate the equipment within the control equipment manufacturer's specifications or range of specifications or specifications resulting from the most recent performance test unless a permit issued under chapter 7007 establishes another operating range. It is reasonable to require the owner or operator to operate the control equipment within the specifications under which the most effective pollution control has been demonstrated (the manufacturer's specifications or those specifications demonstrated by test to be at least as effective as the manufacturer's specifications). It is reasonable to defer to a facility specific permit that establishes an alternative operating range and the conditions under which the owner or operator of an emissions unit with control equipment is allowed to operate the listed control equipment under these alternative parameters.

Subpart 2. Maintenance of Control Equipment.

This subpart requires the owner or operator of a stationary source to maintain all control equipment. Proper maintenance of control equipment is vital for the control equipment's ability to achieve the control efficiency assigned in Minn. Rules pt 7011.0070, subp. 1, Table A. The control efficiencies assigned in Table A represent the average emissions reductions that can be achieved by well designed, operated and maintained control equipment. Since the owner or operator of a stationary source with listed control equipment is allowed to take into account the emissions reductions caused by the use of listed control equipment and the assigned control

efficiency can only be consistently achieved if the equipment is maintained, it is reasonable to require that the listed control equipment be maintained.

The owner or operator is required to maintain the control equipment in accordance with the control equipment manufacturer's specifications and additionally as set forth in a permit. Since the manufacturer knows best how to maintain the control equipment, it is reasonable to require that the control equipment be maintained in accordance with the manufacturer's specifications. It is possible that, in unique circumstances, additional maintenance requirements may be established in a part 70, state, or general permit. It is reasonable to allow the MPCA to require additional maintenance requirements for unique circumstances as would be set forth in such a permit.

This subpart sets forth the minimum maintenance requirements for listed control equipment. The owner or operator shall maintain a parts supply, inspect all equipment, calibrate monitoring equipment and keep maintenance and repair records. The staff shall be trained in the maintenance and operation of the control equipment. All of the specified minimum requirements are basic requirements that should be included in any maintenance plan. To ensure that the control equipment is maintained at a level that enables the equipment to operate at the level required to achieve the assigned control efficiency, it is reasonable to establish the minimum maintenance requirements for listed control equipment.

Subpart. 3. Installation and Operation of Monitoring Equipment.

This subpart requires the owner or operator to install and operate equipment to monitor key control equipment parameters whenever emission units that it is controlling are in operation. The required equipment parameter(s) is (are) specified in 7011.0080 or in a facility specific permit. The monitoring equipment must be installed either by the permit application deadline as specified in Minn. Rules or before the emissions unit that is being controlling is operated. Monitoring equipment and a record of the monitored parameter(s) is necessary to be able to determine if the listed control equipment is operated properly and is working effectively. Since the operation of the control equipment is required and monitoring is required to determine if the control equipment is performing properly, and since credit for emissions reductions is taken by the owner or operator of the stationary source, it is reasonable to require the owner or operator to monitor the control equipment to determine if the control equipment is operated properly and is working effectively.

Subp. 4. Shutdown and Breakdown Procedures.

This subpart requires the owner or operator to comply with the shutdown and breakdown procedures as set forth in Minn. Rules pt 7019.1000. Minnesota Rules pt 7019.1000 establishes when and how the owner or operator of a stationary source notifies the MPCA in the event of shutdown or breakdown of control equipment. It is reasonable to require sources with listed control equipment to notify the MPCA if the control equipment will be shutdown or has broken-down.

Subp. 5. Deviation of Listed Control Equipment from Operating Specifications.

This subpart requires the owner or operator to report when the control equipment does not comply with the operating specifications. The owner or operator shall report to the commissioner when five percent or more of the measurements recorded in any calendar quarter are not within the specified range established by the manufacturer or permit. The parameters to be monitored are those set forth in Minn. Rules pt 7011.0080 or a permit under Minn. Rules ch. 7007. Deviations may indicate that the emissions unit or control equipment is not operating as well as it can and should. Corrective action may be recommended. Deviations may also indicate an event during which significant quantities of pollutants are emitted from the stationary source, and the MPCA be aware of such occurrences.

As a result of a report of deviations, the commissioner or administrator may request that owner or operator conduct performance tests to better quantify the emissions and control efficiency that is being achieved by the control equipment. The commissioner may request that the owner or operator of a stationary source with a registration permit obtain a state permit with more stringent compliance requirements. The reason for doing this is to better regulate a source with repeated deviations. It is reasonable to require the owner or operator of a stationary source report deviations from operating specifications because these deviations may be indicate a problem that needs attention.

Subp. 6. Demonstration of Control Equipment Efficiency.

Minnesota Rules pt. 7017.2020, subp. 1 sets forth reasons for which a performance test can be required. This subpart adds one more reason for which a performance test can be required. The commissioner or administrator may require the owner or operator of a stationary source to conduct a performance test to demonstrate that the control equipment is achieving at least the control efficiency assigned in Minn. Rules pt. 7011.0070, subp. 1, Table A. Since the assigned efficiency of any type of control equipment represents the average efficiency that is achievable by well designed, operated and maintained control equipment, some equipment will exceed the assigned control efficiency and other equipment will have a control efficiency that is lower than which has been assigned. Since the owner or operator receives credit for the emissions reductions that result from the use of listed control equipment, it is reasonable to allow the commissioner or administrator to require verification.

Subp. 7. Recalculation of Potential to Emit.

This subpart sets forth the circumstances under which a stationary source owner or operator shall recalculate (and submit the results to the commissioner) the potential to emit of the stationary source. These circumstances are: if it is determined that the control efficiency is lower than that which is assigned under Minn. Rules pt 7011.0070 (this would usually be the result of testing), if changes have been made that could decrease the control efficiency or upon the request of the commissioner or administrator.

If the owner or operator determines as a result of recalculating the stationary sources potential to emit that they are not eligible for the type of permit that was issued or permit

amendment that was issued, the owner or operator shall apply for the appropriate permit or permit amendment with in 120 days. This subpart also states that if the owner or operator does not submit the appropriate permit application within the 120 days, it shall be considered a violation of the requirement to obtain a permit. The owner or operator would then be subject to enforcement action for operating without a permit. This is reasonable, because if the control efficiency is not as assumed, the stationary source may not have the correct permit, and therefore has not discharged the source's obligation to hold the required permit in order to be entitled to operate.

22. 7011.0080 MONITORING AND RECORDKEEPING FOR LISTED CONTROL EQUIPMENT.

This part sets forth the minimum monitoring and recordkeeping requirements for an owner or operator of a stationary source with listed control equipment. This part requires the owner or operator to include in the record the specified range of operation for operating parameters, and requires that the records be kept for five years after the date on which the record is made.

In order for the owner or operator of a stationary source to receive credit for the operation of air pollution control equipment, when applying for a permit or permit amendment, the operation of the equipment must be required by an applicable rule and the source must be able to demonstrate that the equipment is operated properly and is working effectively. This subpart specifies what records the owner or operator must keep to demonstrate that the pollution control equipment is operated properly and is working effectively.

All of the monitored parameters are indicators that the equipment is operated properly and is working effectively, and were selected because the MPCA has for years routinely required these parameters for the specific control equipment in permits. Some indicators provide information about the degree of effectiveness of the equipment, the pressure drop in a bag house for example. If the pressure drop is too low, it may be indicating that there is a tear in a bag resulting in higher emissions than one that is in good condition. If the pressure drop is too high, the bags may need to be cleaned. If the pressure drop is within the specification range assigned by the control equipment manufacturer, it is reasonable to assume that the bag house is achieving the assigned PM10 control efficiency.

For some control equipment, the fact that it is working means that it is reasonable to assume that it is effective, VOC flaring for example. The monitored parameter (the presence of a flame) simply indicates that the device is working. Temperature monitoring at a flare indicates the presence of a flame. Volatile organic compounds are highly flammable. Tests have demonstrated a high destruction efficiency when they are burned in a flare. As long as a temperature measuring device indicates a temperature high enough to indicate the presence of a flame, it is reasonable to assume that the assigned VOC emissions reduction is being achieved.

The monitored indicators act as a surrogate to monitoring the actual emissions of particulate matter, VOCs or NO_X. It is not possible to continuously monitor particulate matter emissions and it is prohibitively expensive for most sources to continuously monitor VOC and NO_X emissions (over $100,000 capital and $25,000 annual costs). At over $3500 per test, it is prohibitively expensive for most small sources to test the stack emissions (PM10, NO_X, VOC) on a regular (monthly) basis. For these reasons, it is reasonable to monitor a control equipment parameter (surrogate) that indicates whether the equipment is working or how well it is working.

The owner or operator of a stationary source that uses a hood for the capture device must keep, at the source, an engineer's evaluation of each hood and maintain a record of the operation of the hood. The operation record is a monthly recording of the rotational speed of the fan or a measurement of the face velocity (the velocity of the incoming gases at the entrance to the hood). The face velocity is a vital characteristic of the hood. The required face velocity is one of the characteristics that will be determined by an engineer when a hood is evaluated to determine if it conforms to the recommended practices set forth in "Industrial Ventilation A Manual of Recommended Practice". The fan rotation speed directly relates to the face velocity. It is reasonable to require the owner or operator to keep a record of an engineer's evaluation of each hood since some assurance that the hood is well designed and operated is necessary. An alternative to keeping the record on site would be to submit it to the MPCA with the application. Since the owner or operator is allowed to replace or modify the hood at any time as long as the source still qualifies for the permit that it holds, it is less burdensome (for the owner or operator and the MPCA) for the evaluation to be kept on site. Since the face velocity (or fan rotation speed) is vital to the hood's ability to capture emissions and therefore, achieve the assigned control efficiency, it is reasonable to require the owner or operator to record monthly the face velocity (or fan rotation speed) and to maintain that record for five years.

This part requires the monitored parameters for combustion sources or pollution control by combustion to be monitored continuously. It is reasonable to require continuous monitoring of these parameters because the emissions from these sources is very dependent on the combustion conditions. If the proper combustion conditions are not continuously maintained, the emissions from that source can increase quickly and dramatically. The speed with which the combustion conditions can change requires very frequent (continuos) monitoring. For example, the emissions from a VOC source with a non functioning flare can increase by 20 fold (assuming 95 percent control efficiency) compared to when the flare is functioning. If quick action is not taken to correct the situation, significant emissions can result. These are control systems for which it is reasonable to assume that the emissions reductions are being achieved if the system is working. Therefore, if the system is not working, it is also reasonable to assume that no emissions reduction is being achieved. For these reasons, it is reasonable to require continuous monitoring of the control equipment parameters.

This part requires the parameters monitored for particulate matter control equipment to be monitored and the results of the monitoring recorded daily. Although these systems can fail suddenly resulting in significant emissions, it is more likely that the performance of the system will deteriorate (plug or need cleaning) to the point where it is not as effective as it is when it is in good condition. The period of time over which this typically occurs is much greater than 24

hours. These are control systems for which the monitored parameter indicates how well the system is working. Since the monitoring indicates how well the system is working, the owner or operator can anticipate when the control equipment will need servicing and maintenance and can keep the control equipment in a (good) condition at which it is reasonable to assume that the control equipment can achieve the assigned control efficiency. For these reasons, it is reasonable to require daily, instead of continuous monitoring of these control equipment parameters.

V. SMALL BUSINESS CONSIDERATIONS IN RULEMAKING

Minn. Stat. § 14.155, subd. 2 (1990) requires the MPCA when proposing rules which may affect small businesses, to consider the following methods for reducing the impact on small businesses:

a) the establishment of less stringent compliance or reporting requirements for small businesses;

b) the establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;

c) the consolidation or simplification of compliance or reporting requirements for small businesses;

d) the establishment of performance standards for small businesses to replace design or operational standards required in the rule; and

e) the exemption of small businesses from any or all requirements of the rule.

The proposed rule amendments will affect small business as defined in Minn. Stat. 14.115 (1990). The rule amendments are proposed with the primary intent of incorporating changes to MPCA's existing air permit rules (chapter 7007) to reduce the administrative impact on small business and the MPCA. In considering changes to the rule, all of the above methods were implemented to some extent.

As stated in the Introduction, these rule amendments accomplish four goals. Three of these four changes are intended to ease administrative burdens for small businesses. The most important of these changes is the establishment of a separate and simplified permit process for small sources of air pollution. This simplified registration permit is intended to substitute for the more complicated state permit for sources that qualify by the nature of the source or the level of emissions. The registration permit has simplified and clarified application, record keeping, and reporting requirements. The conditions of the permit are spelled out in rule, rather than customized from source to source.

Another important change that will allow more small businesses to qualify for this simplified registration permit is the addition to chapter 7011 of a performance standard for certain common types of pollution control equipment. If a source properly operates listed control equipment, it can take account of the equipment in calculating emissions to determine what type of permit is required. This provision should allow many more sources to qualify for a registration permit.

Other provisions which are intended to ease administrative burdens for small business include: 1) exempting from the requirement to obtain a permit small sources who require a permit solely because they are subject to three additional new source performance standards (part 7007.0300), 2) allowing small sources who require a permit solely because they are subject to certain new source performance standards to obtain registration permits (part 7007.1115), 3) adding activities to the insignificant activities list (part 7007.1300) for which a permit amendment is not required, and 4) adding a hazardous pollutant threshold, below which no permit amendment is required for insignificant and minor modifications (part 7007.1250 and 7007.1450). These changes are discussed in detail in the discussion of the reasonableness of these parts.

Only one change proposed here is likely to increase the reporting requirements for small business, the requirement to report emission rates of hazardous pollutants (part 7007.0500 Sub 2 (C) (4 and 5)). These revisions require that permit applications from major sources contain information on actual emission rates of the pollutants designated by EPA as hazardous air pollutants. Sources which are major toxic sources must report on a unit by unit basis, and those that are major for criteria pollutants must report only total emissions. The revisions also extend the reporting of potential emissions of hazardous pollutants from those that are regulated to all EPA designated hazardous pollutants. Although these revisions will impact primarily larger businesses, it is possible that some small businesses will be major sources of hazardous pollutants due to the relatively small size threshold established in the Clean Air Act. The threshold is 10 tons/yr of one hazardous pollutant or an aggregate of 25 tons/yr.

The MPCA has recently decided not to pursue a separate and much more costly requirement for a comprehensive inventory of even very small sources of air toxic emissions because of cost. Instead, this application requirement is proposed. The provisions requiring an estimate of actual emissions, affect only major sources of air pollution. The provision extending the requirement for estimates of potential emissions of toxic pollutants will apply only to sources that do not obtain registration permits. The requirements are directed at larger businesses which are more significant sources of toxic pollutants. Toxic emission information will be used to judge applicability of, and compliance with toxic emission standards, and will be used in the future to aid in development of air toxic control strategies both for the individual source and source categories.

Small businesses which are major sources, are by the Clean Air Act (1990 Amendments) required to obtain Part 70 permits (generally this is the most complex type of permit issued under chapter 7007). It was considered reasonable to use this as a threshold for reporting actual toxic emissions, since these are generally large sources that have the potential to emit large amounts of toxic pollutants, and have the resources and familiarity with pollutant emissions to track and report emissions. Sources that are not major will not likely emit large amounts of toxic pollutants and will generally lack the sophistication to develop accurate estimates of emissions.

VI. CONSIDERATION OF ECONOMIC FACTORS

In exercising its powers, the MPCA is required by Minn. Stat. § 116.07, subd. 6 (1990) to give due consideration to economic factors. The statute provides:

> In exercising all its powers the MPCA 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 therefrom, and shall take or provide for such action as may be reasonable, feasible, and practical under the circumstances.

As stated in the prior section and elsewhere in this document, the primarily purpose of these rule amendments is to streamline the permit process to remove administrative burdens, where appropriate, from smaller sources that emit less pollution. Such sources have fewer resources to devote to developing permit applications, analyzing environmental regulations, and record keeping. It was felt that a standardized approach to these smaller sources would benefit both the source and MPCA through reduced cost and improved compliance with regulations.

MPCA did not develop a detailed estimate of the cost of compliance with the streamlining provisions of these amendments since it is clear that they are cost saving measures, because they provide additional and a very streamlined permit option for qualified sources. If a qualifying source does not choose to obtain a registration permit, a state permit must be obtained. As a point of reference, the Statement of Need and Reasonableness for the air permit rules (chapter 7007, effective October, 1993) estimated the annualized cost to obtain a state permit at less than 1/2 that of a Part 70 permit, and the cost to obtain a general permit at $154. Although the state permit is less costly than a Part 70 permit, it is expected to amount to thousands of dollars. The registration permit option proposed in these amendments should reduce the cost of obtaining a permit to sources qualified for a registration permit to a level comparable with a general permit.

The two provisions which will involve increased cost for major sources of air pollution, are the incorporation of a requirement to submit hazardous pollutant actual emission information with permit applications (proposed part 7007.0500 sub 2 .C. 5), and the extension of the requirement to report potential emissions of hazardous pollutants that are not yet regulated (proposed part 7007.0500 sub 2.C.4). In Exhibit 12, Cost Estimates for Determining Hazardous Pollutant Emission Rates, MPCA has attempted to estimate the cost to industry to quantify both actual and potential emissions. It is estimated that an initial inventory of actual emissions may cost approximately $5,000 for the average major source. Developing emission estimates for subsequent permit applications should be significantly less costly. Permit applicants are currently required to submit potential emission data for toxic pollutants already designated

regulated pollutants (existing part 7007.0500 subp 2.C.4). The additional cost to quantify potential emissions of all hazardous pollutants or to quantify actual emissions would be small.

MPCA is proposing this option after considering several options for collection of hazardous emission data. Other options considered would have been more costly for Minnesota businesses without yielding appreciably more extensive or higher quality information. Other options considered involved more frequent submission, more extensive source coverage, larger numbers of pollutants, and environmental monitoring. It was determined that a five year inventory (at application) of the EPA designated hazardous pollutants for major sources is appropriately concentrated on the larger sources that are likely to account for the bulk of hazardous pollutant emissions from stationary sources, and that emission levels were not likely to change drastically over a five year period.

MPCA staff have determined that it is more appropriate to approach environmental monitoring as an MPCA responsibility because of the variety and number of toxic sources and the uncertainty as to whether a source specific requirement is the most cost effective way to gather environmental monitoring data. MPCA staff may propose a more frequent inventory of selected highly toxic or persistent emissions at a later date when more information is available on the relative risk and sources of hazardous pollutants.

In considering the economic impacts of these revisions, the MPCA did not consider the economic effect of the revisions on individual industry sectors or on the state as a whole because the net effect of the revisions, particularly for small sources, is expected to be a benefit.

VII IMPACT ON AGRICULTURAL LANDS

The MPCA is required by Minn. Stat. § 14.11, subd. 2 (1990) to consider the impacts of the proposed rules on agricultural lands. The statute provides:

If the MPCA in proposing the adoption of the rule determines that the rules may have a direct and substantial adverse impact in agricultural land in the state, the MPCA shall comply with the requirements of sections 17.80 to 17.84.

The MPCA believes that the proposed rules will not have any impact on agricultural lands because the rules affect stationary sources of air pollution, not agricultural land.

VIII IMPACT ON LOCAL PUBLIC BODIES

Minn. Stat. § 14.11, subd. 1 (1990) provides that if the adoption of a rule by MPCA will require the expenditure of public money by local bodies, the notice published by the MPCA must contain a written statement giving the MPCA's reasonable estimate of the total cost to all local public bodies in the state to implement the rule for the two years immediately following adoption of the rule if the estimated cost exceeds $100,000 in either of the two years. "Local public bodies" means officers and governing bodies of political subdivisions of the state and other officers and governing bodies of less than statewide jurisdiction which have the authority to levy taxes.

It is anticipated that these rule revisions will result in a cost savings to public bodies already subject to Minnesota's air permit rule (chapter 7007). Municipal utilities and space heating boilers at schools and colleges are the most numerous public facilities subject to the requirement to obtain air permits. These revisions will allow many of these sources to obtain simplified registration permits and hence save money and effort.

There may be a few large utilities which will be subject to the new requirement to submit estimates of air toxic emissions. For utilities, it is expected that emission information should be readily calculable from fuel use data using available emission factors. It is not anticipated that this provision will result in the expenditure of more than $100,000 per year by local public bodies in either of the next two years. In conjunction with the streamlining aspects of the revisions, there will be a significant net cost savings.

IX. CONCLUSION

Based on the foregoing, the proposed amendments to Minn. Rules chapters 7007 and 7011 are both needed and reasonable.

X. LIST OF WITNESSES AND EXHIBITS

A. 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. Andrew Ronchak: Will testify on the general need for and reasonableness of the proposed rules.

2. Cliff Twaroski: Will testify on the need for, reasonableness of, and cost of the changes to Minn. Rules 7007.0500.

3. Mike Mondloch. Will testify on the need for, reasonableness of, and cost of the changes to Minn. Rules 7011.0060 through 7011.0080.

B. Exhibits

Exhibits #	Document Title
1	Minnesota Pollution Control Agency. 1994. Regulating toxic air pollutants: status and strategy. Report to the Environment and Natural Resources Policy Committee of the Legislature. Staff report, Air Quality Division. St. Paul, Minnesota. 14 pp.
2	Minnesota Emergency Response Commission. 1990. A study on expansion of the toxic chemical reporting requirements (Section 313 of the Emergency Planning and Community Right-to-Know Act). Report to the Legislature. St. Paul, Minnesota. 34+ pp.
3	Eisenreich, S.J. 1987. Toxic fallout in the Great Lakes. National Academy of Sciences, Vol. IV: 71-75.
4	International Joint Commission. 1992. Sixth biennial report on Great Lakes water quality. Great Lakes Regional Office, Windsor, Ontario. 59 pp. Sixth Biennial Report Under the Great Lakes Water Quality Agreement of 1978 to the Governments of the United States and Canada and the State and Provincial Governments of the Great Lakes Basin (1992) at page 27.
5	Council of Great Lakes Governors. 1986. Toxic Substances Control. Final Report: Great Lakes Governors Task Force on Toxic Substances Control. 35 pp.
6	Draft of the Standard Application Forms for a Registration Permit
7	Spreadsheet Showing how the Sulfur limits for Specified Fuels and Emission Factors for Boilers and Internal Combustion Engines.
8	Review of Control Technologies and Identification of Typical Efficiencies for the Minnesota Pollution Control Agency.
9	Minnesota Pollution Control Agency. 1994. Cost estimates for determining hazardous pollutant emission rates. Staff report, Air Quality Division. St. Paul, Minnesota. __ pp.

Dated: 26 April , 1994

CHARLES W. WILLIAMS
Commissioner