Minnesota Pollution Control Agency

Adopted Permanent Rules: Air Quality Housekeeping Amendments

7002.0019 AIR QUALITY PERMIT APPLICATION FEES AND ADDITIONAL FEES.

Subpart 1. **Application points.** The points assessed for permit application types designated in this subpart are multiplied by the dollar per point value as determined in part 7002.0018 to calculate the application fee.

	Application Type	Points
A.	Administrative amendment or administrative change of name, ownership, or control One point is assessed for a request for an administrative amendment or a request for change in name, ownership, or control of a stationary source as addressed in part 7007.1100, subpart 8; 7007.1110, subpart 15; 7007.1110, subpart 15a; 7007.1142, subpart 5; or 7007.1400.	1
B.	Registration permit	2
C.	State general permit	3
D.	Part 70 general permit	4
E.	Minor amendment	4
F.	Capped permit	4
G.	Applicability requests These points are applied to each request received for determining the applicability of rules in advance of receiving a permit application. If multiple requests for reviews are submitted to the Pollution Control Agency over time, each request is subject to the fee.	10
H.	Moderate amendment	15
I.	Major amendment	25
J.	Individual state permit	50
K.	Individual Part 70 permit	75

Subp. 2. **Additional points.** The points assessed for activities designated in this subpart are multiplied by the dollar per point value as determined in part 7002.0018 to calculate the additional fee.

	Activity	**Points**
A.	Modeling review	15
	The points for modeling review are not assessed for screening modeling or CAPS modeling.	
B.	Best available control technology (BACT) review	15
	BACT points are applied for each prevention of significant deterioration (PSD) pollutant analyzed.	
C.	Lowest achievable emission rate (LAER) review	15
	LAER points are applied for each nonattainment new source review (NSR) pollutant analyzed.	
D.	Clean Air Act, section 110(a)(2)(D)(i)(I) review	10
	Points are applied for a review of any standard or other requirement related to interstate transport of pollutants established under section 110(a)(2)(D)(i)(I).	
E.	Part 75 continuous emission monitoring analysis	10
F.	New source performance standard (NSPS) review	10
	Points are applied for each applicable standard but do not apply to registration, capped, or general permit applications.	
G.	National emission standards for hazardous air pollutants (NESHAP) review	10
	Points are applied for each applicable standard but do not apply to registration, capped, or general permit applications.	
H.	Case-by-case maximum achievable control technology (MACT) review	20
	Points are applied for each applicable source category reviewed.	
I.	Netting	10
	Points are applied for each prevention of significant deterioration (PSD) pollutant for which a netting analysis is performed.	
J.	Limit to remain below programmatic regulatory threshold	10
	Points are applied, if applicable, to each of the following regulatory programs: Part 70, NESHAP, EAW, AERA, NSPS, PSD, and nonattainment NSR.	

K. Plantwide applicability limit (PAL) 20

Points are applied for each prevention of significant deterioration (PSD) pollutant for which a plantwide applicability limit is established.

L. Air emission risk analysis (AERA) review 15

M. Variance request under part 7000.7000 35

N. Confidentiality request under part 7000.1300 2

O. Environmental assessment worksheet (EAW) review

Points are assigned as follows:

Part 4410.4300, subparts 18, items A and B; and 29 15

Part 4410.4300, subparts 8, items A and B; 10, items A, B, C, and D; 16, items A and D; 17, items A to C and E to G; and 18, items C, D, E, and F 35

Part 4410.4300, subparts 4; 5, item A, subitems (1) and (2); 13; 15; 16, items B and C; and 17, item D 70

A fee for EAW review is charged only if the project falls into a mandatory category specified in part 4410.4300, the agency is the designated responsible governmental unit (RGU), and an air or water permit is required for the project. If a facility requires both an air and water permit, the points for an EAW review are charged only once and multiplied by the lower of the dollar per point value for an air or water permit.

7002.0025 ANNUAL EMISSION FEE RATES.

Subpart 1. **Calculation of fee.**

A. Owners or operators of emission reporting facilities must be assessed an annual emission fee for each ton of a chargeable pollutant emitted to the air by the facility. Emission reporting facilities must be assessed a fee of $X for each ton of any chargeable pollutant as established in the most recently available emission inventory.

B. Notwithstanding item A, the owner or operator of any emission reporting facility or any facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under item C, subitem (1), with less than one ton of total actual emissions must be assessed an annual fee of $25.

C. As described in subitems (1) and (2), the owner or operator of a facility issued an option B registration permit under part 7007.1120 must be assessed an annual emission fee based on either the reported quantity of VOC-containing materials purchased or used (whichever was stated in the facility's permit application) or the actual emissions from the use of VOC-containing materials.

(1) If the owner or operator chooses to be assessed the fee based on the actual emissions from the use of VOC-containing materials, the facility's actual emissions is determined in accordance with parts 7019.3000 to 7019.3090. The assessed fee is determined in accordance with item A.

(2) If the owner or operator chooses to be assessed the fee based on the quantity of VOC-containing materials purchased or used (whichever was stated in the facility's permit application), the fee is:

(a) $50 if the quantity of VOC-containing materials is less than or equal to 1,000 gallons; or

(b) $140 if the quantity of VOC-containing materials is more than 1,000 and less than 2,000 gallons.

[For text of subparts 2 to 3, see Minnesota Rules]

7002.0045 COMPUTATION OF THE DOLLAR PER TON FIGURE.

The dollar per ton figure "$X" used in part 7002.0025 is computed as follows:

$X = [F - [R + ($25 x N)]]/(T - L)

where:

$X = Dollar amount per ton figure.

F = Total annual fee target, as determined in part 7002.0035.

R = Total amount to be billed under part 7002.0025, subpart 1, item C, subitem (2), as option B registration permit annual emission fees based on the quantity of VOC-containing materials purchased or used.

N = Total number of emission reporting facilities and facilities issued option B registration permits that are assessed an annual emission fee based on actual emissions under part 7002.0025, subpart 1, item C, subitem (1), with less than one ton of total actual emissions of chargeable pollutants.

T = Total number of tons of all chargeable pollutants listed in the most recently available annual emissions inventory emitted from emission reporting facilities and facilities issued option B registration permits that are assessed an annual emission fee based on actual emissions under part 7002.0025, subpart 1, item C, subitem (1). No pollutant is double counted.

L = Total number of tons of all chargeable pollutants listed in the most recently available annual emission inventory emitted from emission reporting facilities and facilities issued option B registration permits that are assessed an annual emission fee based on actual emissions under part 7002.0025, subpart 1, item C, subitem (1), that emit less than one ton of total actual emissions of chargeable pollutants. No pollutant is double counted.

7005.0100 DEFINITIONS.

[For text of subparts 1 to 9a, see Minnesota Rules]

Subp. 9b. **Efficiency factor.** "Efficiency factor" means:

A. the control efficiency listed in part 7011.0070, subpart 1a, table A;

B. notwithstanding item A, where no control efficiency is listed for a control equipment type in part 7011.0070, subpart 1a, table A, or where the commissioner has determined that a more representative control efficiency is available under this item,

efficiency factor means a control efficiency developed or approved by the commissioner and derived from the following sources:

(1) EPA publications including, but not limited to, Locating and Estimating documents, Control Technology Center documents, the preamble and background information documents for New Source Performance Standards or National Emission Standards for Hazardous Air Pollutants, and Compilation of Air Emissions Factors (AP-42), United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711 (January 1995 and as subsequently amended). AP-42 is incorporated by reference, is available at https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors, and is subject to frequent change;

[For text of subitems (2) to (5), see Minnesota Rules]

[For text of item C, see Minnesota Rules]

[For text of subparts 10 and 10a, see Minnesota Rules]

Subp. 10a. **Emission factor.** "Emission factor" means the most accurate and representative emission data available from one of the following sources:

A. The emission factor listed in the Compilation of Air Emissions Factors (AP-42), United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711 (January 1995 and as subsequently amended). The document is incorporated by reference, is available at https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors, and is subject to frequent change. Where more than one emission factor is listed in AP-42, "emission factor" means the one approved by the commissioner using best engineering judgment and based on one or more of the considerations in item C, subitem (2).

B. The emission factor listed in Factor Information Retrieval (FIRE) Data System, Version 6.25, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, as amended. The data system is incorporated by reference, is available at https://cfpub.epa.gov/webfire, and is subject to frequent change. Where more than one emission factor is listed, emission factor means the one approved by the commissioner using best engineering judgment and based on one or more of the considerations in item C, subitem (2).

[For text of item C, see Minnesota Rules]

[For text of subparts 10b to 31, see Minnesota Rules]

Subp. 31a. **Performance specification.** "Performance specification" means the specifications for continuous monitoring systems in Code of Federal Regulations, title 40, part 60, appendix B, as amended.

[For text of subparts 32 to 44a, see Minnesota Rules]

Subp. 45. **Volatile organic compound or VOC.** "Volatile organic compound" or "VOC" means any organic compound that participates in atmospheric photochemical reactions. This includes any organic compound other than the following compounds:

[For text of items A to HHH, see Minnesota Rules]

III. any other compound listed in the United States Environmental Protection Agency's Complete List of VOC Exemption rules, as amended. The list is incorporated by reference, is available at www.epa.gov/ground-level-ozone-pollution/complete-list-voc-exemption-rules, and is subject to frequent change; or

[For text of item JJJ, see Minnesota Rules]

7007.0100 DEFINITIONS.

Subpart 1. **Scope.**

A. Except as provided in item B, the definitions in this part and in parts 7000.0100 and 7005.0100 apply to this chapter unless the terms are otherwise defined in this part.

B. The definitions in this part do not apply to parts 7007.4000 to 7007.4030.

[For text of subpart 2, see Minnesota Rules]

Subp. 3. [See repealer.]

[For text of subparts 4 to 6b, see Minnesota Rules]

Subp. 7. **Applicable requirement.** "Applicable requirement" means all the following as they apply to emissions units in a stationary source (including requirements that have been promulgated or approved by the EPA or the commissioner through rulemaking at the time of issuance but have future effective compliance dates):

[For text of items A to U, see Minnesota Rules]

V. any standard or other requirement established under section 169A (Visibility Protection for Federal Class I Areas) or 169B (Visibility) of the act including emission limits established in the determination of best available retrofit technology;

W. any standard or other requirement established under section 110(a)(2)(D)(i)(I) of the Clean Air Act that regulates interstate transport of pollutants; and

X. any standard or other requirement of Minnesota Statutes, section 116.385, the White Bear Area Neighborhood Concerned Citizens Group Ban TCE Act, banning the use of trichloroethylene (TCE) on or after June 1, 2022, and prohibiting the commissioner from issuing a permit after January 1, 2022, that authorizes the use of TCE.

[For text of subparts 7a to 9a, see Minnesota Rules]

Subp. 9b. [See repealer.]

Subp. 9c. [See repealer.]

Subp. 9d. [See repealer.]

Subp. 9e. [See repealer.]

Subp. 9f. [See repealer.]

[For text of subparts 10 to 28, see Minnesota Rules]

Subp. 29. **Written record.** "Written record" means a record that is maintained in electronic or paper format.

7007.0250 SOURCES REQUIRED TO OBTAIN STATE PERMIT.

[For text of subparts 1 to 5, see Minnesota Rules]

Subp. 6. **Waste combustors.**

A. Owners and operators of a waste combustor, as defined in part 7011.1201, must obtain a permit under this part unless the waste combustor is subject to the exemptions in part 7011.1215, subpart 3.

B. Notwithstanding item A, owners and operators of a Class IV waste combustor that does not comply with the stack height requirements of part 7011.1235, subpart 1, but uses alternative techniques to achieve equivalent ambient pollution concentrations, must obtain a permit under this part. The permit obtained must not be a registration permit under parts 7007.1110 to 7007.1130.

[For text of subparts 7 and 8, see Minnesota Rules]

7007.0500 CONTENT OF PERMIT APPLICATION.

Subpart 1. **Application requirements.**

A. The applicant must submit an application on a standard application form provided by the agency. The agency may create different forms for different types of stationary sources. Regardless of whether the particular information is required by a form, an applicant must include all information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the emission fee amount required by chapter 7002.

B. Small business stationary sources, as defined in Minnesota Statutes, section 116.96, subdivision 6, may seek assistance in preparing permit applications under the small business air quality compliance assistance act in Minnesota Statutes, sections 116.95 to 116.99.

[For text of items C to F, see Minnesota Rules]

[For text of subparts 2 to 5, see Minnesota Rules]

7007.0800 PERMIT CONTENT.

[For text of subparts 1 to 4, see Minnesota Rules]

Subp. 5. **Record keeping.** The permit must incorporate all applicable requirements related to record keeping and require the permittee to maintain adequate records, including at least the following:

A. a requirement that the permittee maintain written records adequate to document compliance at the stationary source, including at a minimum:

[For text of subitems (1) to (6), see Minnesota Rules]

B. a requirement that the permittee maintain written records describing any modification made at the stationary source under parts 7007.1250 and 7007.1350, as required

by those provisions, but not otherwise regulated under the permit, and the emissions resulting from those modifications;

C. a requirement that the permittee retain written records of all monitoring data and support information for five years, or longer as specified by the commissioner, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must be kept at the stationary source unless the permit allows otherwise; and

[For text of item D, see Minnesota Rules]

[For text of subparts 6 to 16, see Minnesota Rules]

7007.0850 PERMIT APPLICATION NOTICE AND COMMENT.

Subpart 1. **Technical support document.** For part 70 permits, the commissioner must develop a statement that sets forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

Subp. 2. **Public notice and comment.**

A. The commissioner must comply with the following procedures before issuing, reissuing, or making a major amendment to any part 70 permit.

(1) The commissioner must give notice:

(a) by posting the notice for the duration of the comment period on the agency website for public notices;

(b) in a list provided to the public by the commissioner upon request;

(c) to persons on a mailing list developed by the commissioner, including those who request in writing to be on the list; and

(d) by other means if necessary to ensure adequate notice to the affected public.

(2) The notice must include, at a minimum:

(a) the name and location of the facility to be permitted;

(b) the name and address of the permittee;

(c) the name and address of the agency;

(d) the activity or activities involved in the permit action;

(e) the emissions change involved in any permit amendment;

(f) a copy of the draft permit and the technical support document required under subpart 1;

(g) a statement of whether the facility has filed a pollution prevention progress report to the commissioner as required by Minnesota Statutes, section 115D.08;

(h) the name, address, and telephone number of a person; e-mail address of a person; or website address from which interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, and all other materials available to the commissioner that are relevant to the permit decision;

(i) a brief description of the comment procedures required by this part; and

(j) the time and place of any meeting or hearing that may be held, including a statement of procedures to request a meeting or hearing under subpart 3, unless a meeting or hearing has already been scheduled.

(3) The commissioner must provide at least 30 days for public comment and must give notice of any public informational meeting or contested case hearing at least 30 days in advance of the meeting or hearing. Part 7001.0110 applies to public comments received under this part.

(4) The commissioner must respond in writing to all comments that raise issues and must develop a record of the public participation process, including any public meeting, that contains:

(a) a record of the commenters;

(b) issues raised by the commenters;

(c) a record of written comments received; and

(d) the commissioner's written responses to the comments.

B. Before issuing or reissuing a state permit, the commissioner must comply with the procedures in item A, subitems (1) to (3). This item also applies to any major amendment to a state permit described in part 7007.1500, subpart 1, items C and D, if authorized or required by the administrator.

C. If the commissioner determines that a proposed major amendment to a state permit not described in item B involves issues that generate or are likely to generate significant material adverse comment from the public, based on previous adverse public comment on the proposed amendment or related issues, the commissioner must comply with the procedures of item A, subitems (1) to (3), before issuing the amendment.

D. (1) If the commissioner determines that a proposed minor or moderate amendment to a permit involves issues that generate or are likely to generate significant material adverse comment from the public, based on previous adverse public comment on the proposed amendment or related issues, the commissioner must comply with the procedures of item A, subitems (1) to (3), before issuing the amendment.

(2) A proposed minor permit amendment may be made subject to the public notice and comment procedures only if the commissioner notifies the permittee of the commissioner's determination within 15 working days of receiving the minor amendment application. If the permittee properly proceeded with a modification under part 7007.1450, subpart 7, before receiving the commissioner's determination, the permittee is not subject to enforcement action for proceeding but must cease construction and operation of the modification within a reasonable period. The commissioner must consult with the permittee on when it is reasonable to cease construction and operation. A proposed moderate permit amendment may be made subject to the public notice and comment procedures any time before the commissioner issues a letter of approval authorizing construction under part 7007.1450, subpart 7.

E. The commissioner must upon request provide a list that summarizes current activities involving permit applications, minor, moderate, and major amendment applications, and requests for administrative amendments. The commissioner may use the agency website in lieu of a written list.

Subp. 3. **Petitions for meetings and hearings.**

A. During the public comment period, a person may, in regard to any draft permit or amendment subject to public notice under subpart 2, items A to D, petition for:

(1) a public informational meeting pursuant to parts 7000.0650, subpart 4, and 7001.0110, subpart 3; or

(2) a contested case hearing pursuant to part 7000.1800.

B. The decision to grant or deny the petition for a public informational meeting must be based on the criteria in part 7001.0120, and any meeting held must be in accordance with subpart 2 and part 7001.0120. The commissioner must also give notice of the public informational meeting by posting the notice on the agency website for public notices. The

decision to grant or deny the petition for a contested case hearing must be based on the criteria in part 7000.1900, and any hearing held must be in accordance with parts 7000.1750 to 7000.2200 and 7001.0130.

Subp. 4. **Additional procedures for permits containing Title I conditions.** The commissioner must also comply with all other federal requirements for public participation applicable to permits and permit amendments that include Title I conditions, including requirements in Code of Federal Regulations, title 40, sections 51.102, 51.161, and 51.166(Q), as amended, to the extent applicable.

7007.0950 EPA REVIEW AND OBJECTION.

Subpart 1. **Review by EPA.**

A. The commissioner must provide to the administrator a copy of the following documents, unless the administrator agrees to accept a summary of the documents:

(1) for part 70 permits, each application for a permit or permit amendment, each proposed permit or permit amendment, and each final permit or permit amendment; the technical support document required under part 7007.0850, subpart 1; and the record of public participation developed as required under part 7007.0850, subpart 2, item A, subitem (4); and

[For text of subitem (2), see Minnesota Rules]

[For text of items B and C, see Minnesota Rules]

Subp. 2. **EPA objection.**

A. In the case of a part 70 permit, the commissioner must not issue a permit or permit amendment if the administrator objects to its issuance in writing within 45 days of receiving the proposed permit or permit amendment and any required supporting information.

B. In the case of a state permit, the commissioner must not issue a permit, or an amendment for which EPA review is provided under subpart 1, if the administrator objects to its issuance in writing within 30 days of receiving the draft permit or amendment and any required supporting information.

Subp. 3. **Public petitions to administrator regarding part 70 permits.**

A. If the administrator does not object in writing to a part 70 permit or a major amendment to a part 70 permit under subpart 2, any person may petition the administrator within 60 days after the expiration of the administrator's 45-day review period to make such objection, if:

(1) the petitioner provides a copy of the petition to the commissioner and applicant;

(2) the petitioner includes the elements required in Code of Federal Regulations, title 40, section 70.12(a);

(3) the petitioner submits the petition to the administrator according to the procedures required in Code of Federal Regulations, title 40, section 70.14; and

(4) the petition is based only on objections to the part 70 permit or the amendment that were raised with reasonable specificity during the public comment period provided in part 7007.0850, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless grounds for such objection arose after such period.

B. If the administrator objects to the part 70 permit or the amendment as a result of a petition filed under this subpart before the commissioner issues the permit or amendment, the commissioner must not issue the permit or the amendment until the administrator's objection has been resolved. If the permit or the amendment was issued before the administrator's objection but after the end of the EPA's 45-day review period, the

commissioner must reopen or revoke the permit or the amendment under part 7007.1600 or 7007.1700 to satisfy the EPA's objection.

C. Until amended or revoked, the permit remains in effect. In any case, the owners and operators of the stationary source are not in violation of the requirement to have submitted a timely and complete application. The administrator may also amend, terminate, or revoke a part 70 permit under the administrator's authority under Code of Federal Regulations, title 40, section 70.8(d), as amended.

Subp. 4. **Additional procedures for permits containing Title I conditions.** The commissioner must also comply with all other federal requirements for EPA review applicable to permits and permit amendments that include Title I conditions.

7007.1110 REGISTRATION PERMIT; GENERAL REQUIREMENTS.

[For text of subparts 1 to 2a, see Minnesota Rules]

Subp. 2b. **Additional limitations on stationary source eligibility for registration permit.** A stationary source may not obtain an option B, C, or D registration permit if:

A. the source qualifies for a sector-based state general permit available under part 7007.1100, unless specifically allowed under the general permit; or

B. the commissioner determines that site-specific permit requirements are needed to ensure compliance with applicable requirements or to protect human health or the environment.

[For text of subparts 3 to 15, see Minnesota Rules]

Subp. 15a. **Relocating.**

A. This subpart does not apply if the registration permit already authorizes operation in more than one location under subpart 20 and the proposed relocation is within the scope of that authorization.

B. Before changing the location of the stationary source, the owners and operators must submit a request for change of location on a form provided by the commissioner. The commissioner must reissue the registration permit to the owners and operators with the changed location if:

(1) the stationary source is being relocated within or to an area that is classified as attainment with respect to the national ambient air quality standards;

(2) relocating the stationary source does not trigger the need for air dispersion modeling for the relocated source;

(3) the stationary source will qualify for the same type of registration permit at the new location; and

(4) the owners or operators will not operate a stationary source in both the existing and new locations at the same time for any period.

C. Issuing a registration permit with a new location voids and supersedes the previously issued registration permit.

[For text of subparts 16 to 20, see Minnesota Rules]

Subp. 21. **Registration permit; general conditions.** Registration permits issued by the commissioner under parts 7007.1110 to 7007.1130 must include the general conditions in items A to O, which are included in the permit by reference to part 7007.1110 as a whole.

[For text of items A to N, see Minnesota Rules]

O. The permit authorizes the permittee to perform the activities described in the permit under the conditions of the permit. In issuing the permit, the state, the agency, and the commissioner assume no responsibility for damages to persons, property, or the environment caused by the activities of the permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under the permit. To the extent the state,

the agency, and the commissioner may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minnesota Statutes, section 3.736.

[For text of subpart 22, see Minnesota Rules]

7007.1120 REGISTRATION PERMIT OPTION B.

[For text of subparts 1 and 2, see Minnesota Rules]

Subp. 3. **Compliance requirements.** The owner or operator of a stationary source issued a registration permit under this part must:

A. calculate according to subpart 4 and record by April 1 of each calendar year the total amount of VOC-containing materials purchased or used (whichever was stated in the permit application) during the previous calendar year;

[For text of items B to F, see Minnesota Rules]

Subp. 4. **Calculation method; definitions.** The owner or operator of a stationary source must maintain a record of the gallons of VOC-containing material purchased or used. The amount of VOC-containing material recovered for reuse or recycling, including VOC-containing material shipped off-site for recycling, may be subtracted from the amount of VOC-containing material used or purchased. If the owner or operator ships VOC-containing material off-site for recycling, the owner or operator must keep records of the amount of material shipped off-site for recycling and the calculations done to determine the amount to subtract. Records may be MSDS, invoices, shipping papers, or hazardous waste manifests. For purposes of this part, the following terms have the meanings given.

A. "VOC-containing materials" means materials containing VOC whether or not the VOCs are hazardous air pollutants.

B. "Reuse" has the meaning given under part 7045.0020.

C. "Recycling" means the reclamation or reuse, as defined in part 7045.0020, of a VOC-containing material.

7007.1125 REGISTRATION PERMIT OPTION C.

[For text of subparts 1 and 2, see Minnesota Rules]

Subp. 3. **Compliance requirements.** Unless a stationary source is eligible under subpart 3a, the owners and operators of a stationary source issued a registration permit under this part must comply with all of the requirements in items A to K.

[For text of items A to E, see Minnesota Rules]

F. The 12-month rolling sum determined by the calculation in item D, the eligibility number, must not exceed 50.

[For text of items G to I, see Minnesota Rules]

J. The owner or operator must keep the information in subitems (1) to (3) on-site for emission points venting emission units included in subpart 4, calculation 1, that burn coal, coke, wood, bark, number 5 or 6 residual oil, or number 4 distillate oil. If the commissioner requests any of the information in subitems (1) to (3), the owner or operator must submit the information within 21 days of the request on a form provided by the commissioner:

[For text of subitems (1) to (3), see Minnesota Rules]

[For text of item K, see Minnesota Rules]

[For text of subpart 3a, see Minnesota Rules]

Subp. 4. **Tables and calculations.** The tables and calculations in this subpart must be used to determine whether a stationary source is eligible for a registration permit under this part. For the purposes for fuel specifications listed in calculations 1 and 2A, the Annual Book of American Society for Testing and Materials Standards (ASTM), 100 Barr Harbor

Drive, West Conshohocken, PA 19428-2959, volumes 4.05, 5.01, 5.03, and 5.05 (1993 and as subsequently amended) are incorporated by reference, are available through the Minitex interlibrary loan system, and are subject to frequent change.

A. **Calculation 1. Indirect Heating Emissions Units.** For stationary sources with indirect heating emissions units, multiply the 12-month rolling sum of each fuel used by the multiplication factor (MF) listed in Table 1. Add the results of all the calculations to arrive at the calculation 1 total. The following formula determines the calculation 1 total:

STEP 1: fuel type used (in units specified) x MF = fuel type total

STEP 2: fuel type 1 total + fuel type 2 total + ... fuel type *n* total = Calculation 1 total

TABLE 1

FUEL USED (units burned/year)-[specification]	SULFUR LIMIT	MULTIPLI-CATION FACTOR (MF)
anthracite coal (tons)-[ASTM D 388(Vol 05.05)]	2.38%	4.64E-02
bituminous coal (tons)-[ASTM D 388(Vol 05.05)]	2.10%	4.10E-02
sub bituminous coal (tons)-[ASTM D 388 (Vol 05.05)]	1.66%	2.91E-02
lignite A coal (tons)-[ASTM D 388(Vol 05.05)]	1.26%	1.89E-02
petroleum coke (tons)-[ASTM C 1160(Vol 04.05)]	2.33%	4.55E-02
untreated domestic wood and bark (tons)-[ASTM D 1165(Vol 04.09)]	n/a	8.40E-03
kerosene (gallons)-[ASTM D 3699(Vol 05.03)]	0.50%	3.59E-05
No. 1 and No. 2 distillate (gallons)-[ASTM D 396(Vol 05.01)]	0.50%	3.59E-05
No. 4 distillate (gallons)-[ASTM D 396(Vol 05.01)]	1.80%	1.40E-04

No. 5 and No. 6 residual (gallons)-[ASTM D 396(Vol 05.01)]	1.80%	1.46E-04
liquefied petroleum gas (LPG) (gallons)-[ASTM D 1835(Vol 05.01 and 05.05)]	n/a	1.05E-05
dry or commercial pipeline natural gas (cubic feet)-this must be a mixture of ethane, methane, not more than five percent propane and not more than one percent butane	n/a	1.40E-07

B. **Calculation 2. Reciprocating Internal Combustion Engine Emission Units.** A stationary source with one or more reciprocating internal combustion (RIC) engines must, for each RIC engine, use either calculation 2A or 2B. Stationary sources with RIC engine emission units burning fuels not listed in Table 2, however, must use calculation 2B.

C. **Calculation 2A. RIC Engine Fuel Usage Calculation.** For stationary sources with one or more RIC engines, multiply the 12-month rolling sum of each fuel used by the multiplication factor (MF) from Table 2. Add the results of each calculation to determine the total for that RIC engine. The following formula determines the calculation 2A total:

STEP 1: fuel type used (in specified units) x MF = fuel type total

STEP 2: fuel type 1 total + fuel type 2 total + ... fuel type *n* total = Calculation 2A total

TABLE 2

FUEL USED (units burned/year)-[specification]	SULFUR LIMIT	MULTIPLI-CATION FACTOR (MF)
No. 1 and No. 2 diesel, and kerosene (gallons)-[ASTM 975(Vol 05.01)]	0.5%	3.09E-04
liquefied petroleum gas (LPG) (gallons)-[ASTM D 1835(Vol 05.01 and 05.05)]	n/a	6.95E-05
dry or commercial pipeline natural gas (cubic feet)-[as defined in Table 1]	n/a	1.70E-06

D. **Calculation 2B. RIC Engine Operating Hours Calculation.** For stationary sources with one or more RIC engines, multiply the design capacity of the engine in horsepower by the 12-month rolling sum of hours operated and by the multiplication factor 1.22E-05. The owner or operator must perform this calculation for each RIC engine, then add the results of all the calculations to arrive at the calculation 2B total. The following formula determines the calculation 2B total:

STEP 1: engine horsepower design capacity x hours operated x 1.22E-05 = RIC engine total

STEP 2: RIC engine 1 total + RIC engine 2 total + ... RIC engine *n* total = Calculation 2B total

E. **Calculation 3. VOC Emissions Units.** An owner or operator of a stationary source that purchases or uses VOC-containing materials must, for each material purchased or used that contains VOC, multiply a factor of ten by the weight factor (WF) of the VOC in the material (weight of VOC per weight of VOC-containing material) by the density of the material (in pounds per gallon) by the 12-month rolling sum of gallons of that material purchased or used. The owner or operator must perform this calculation for each material purchased or used that contains VOC (including VOC purchased or used for cleaning) and add the results of the calculations to arrive at the calculation 3 total. In determining the WF and the density, the owner or operator must use the maximum listed in the material safety data sheets (MSDS) or a signed statement from the supplier for each VOC-containing material. The following formula determines the calculation 3 total:

STEP 1: 10 [WF x density of the material (lb/gal) x (1 ton/2,000 lb) x the 12-month rolling sum of material purchased or used (gallons)] = material total

STEP 2: material 1 + material 2 + ... material *n* total = Calculation 3 total

[For text of subpart 5, see Minnesota Rules]

7007.1130 REGISTRATION PERMIT OPTION D.

[For text of subparts 1 and 2, see Minnesota Rules]

Subp. 3. **Compliance requirements.** Unless a stationary source is eligible under subpart 3a, the owner or operator of a stationary source issued a permit under this part must comply with items A to J and subparts 6 to 9.

A. If the stationary source determined eligibility in the permit application, in whole or in part, by calculating VOC and hazardous air pollutant actual emissions from VOC-containing or hazardous air pollutant-containing materials, purchased or used (whichever was stated in the permit application), the owner or operator must:

[For text of subitems (1) to (3), see Minnesota Rules]

(4) if the owner or operator assumes a reduction of emissions in using the materials balance method under subpart 4, item D, due to recycling or disposal of material off-site, keep records of the amount of material, the amount of material shipped off-site for recycling or disposal, and the calculations done to determine the amount to subtract. Acceptable records include the material safety data sheets, invoices, shipping papers, and hazardous waste manifests.

A stationary source in which the only hazardous air pollutant (HAP) emissions are VOC emissions and that has actual VOC emissions less than five tons per year is not required to maintain records and perform the calculations of HAPs emissions under subitems (1) to (3).

[For text of items B to E, see Minnesota Rules]

F. The 12-month rolling sum of actual emissions from the stationary source determined pursuant to subpart 4 must not exceed the thresholds in subpart 5 for any pollutant.

G. If the stationary source determined eligibility in the permit application, in whole or in part, by using fuel sulfur data in the calculations in subpart 4, the owner or operator must:

(1) record by the last day of each month the amount of each fuel burned for each batch of fuel for the previous month;

(2) maintain a record of the fuel sulfur content verified by vendor certification or measured by an independent laboratory using ASTM methods for each batch of fuel received; and

(3) recalculate and record by the last day of each month the 12-month rolling sum of SO_2 emissions for the previous 12 months, the date the calculation was made, and the calculation itself using the calculation method in subpart 4.

H. If the stationary source determined eligibility in the permit application, in whole or in part, by using hours of operation in the calculations in subpart 4, the owner or operator must:

(1) record by the last day of each month the hours operated for each emissions unit, rounded to the nearest hour for the previous month; and

(2) recalculate and record by the last day of each month the 12-month rolling sum of emissions for the previous 12 months, the date the calculation was made, and the calculation itself.

I. If the stationary source determined eligibility in the permit application, in whole or in part, by calculating actual emissions as CO_2e of hydrofluorocarbons, perfluorocarbons, nitrous oxide, and sulfur hexafluoride, purchased or used (whichever was stated in the permit application), the owner or operator must:

(1) record, by the last day of each month, the amount purchased or used (whichever was stated in the permit application) of each material containing

hydrofluorocarbons, perfluorocarbons, nitrous oxide, and sulfur hexafluoride and the mass content of these pollutants for the previous calendar month;

(2) maintain a record of the material safety data sheet (MSDS) or a signed statement from the supplier stating the maximum content of hydrofluorocarbons, perfluorocarbons, nitrous oxide, and sulfur hexafluoride in each material containing hydrofluorocarbons, perfluorocarbons, nitrous oxide, and sulfur hexafluoride purchased or used (whichever was stated in the permit application);

(3) calculate and record, by the last day of each month, the 12-month rolling sum of actual emissions as CO_2e of hydrofluorocarbons, perfluorocarbons, nitrous oxide, and sulfur hexafluoride purchased or used (whichever was stated in the permit application) for the previous 12 months, the date the calculation was made, and the calculation itself; and

(4) if the owner or operator assumes a reduction of emissions in using the material balance method under subpart 4, item D, due to recycling or disposal of material off-site, keep records of the amount of material shipped off-site for recycling or disposal and the calculations done to determine the amount to subtract. Acceptable records include monitoring records, material safety data sheets, invoices, shipping papers, and hazardous waste manifests.

J. If the stationary source determined eligibility in the permit application, in whole or in part, by calculating actual emissions as CO_2e of carbon dioxide, nitrous oxide, or methane resulting from a chemical process such as fermentation, wastewater treatment, or decomposition, the owner or operator must:

(1) record, by the last day of each month, the amount of carbon dioxide, nitrous oxide, or methane generated by the chemical processes for the previous calendar month;

(2) calculate and record, by the last day of each month, the 12-month rolling sum of actual emissions as CO_2e of carbon dioxide, nitrous oxide, or methane for the previous 12 months, the date the calculation was made, and the calculation itself; and

(3) if the owner or operator assumes a reduction of emissions in using the material balance method under subpart 4, item D, due to the collection and reuse, recycling, or disposal of carbon dioxide, nitrous oxide, or methane on-or off-site, keep records of the amount of carbon dioxide, nitrous oxide, or methane used or shipped off-site and the calculations done to determine the amount to subtract. Acceptable records include monitoring records, invoices, shipping papers, operating data for air pollution control equipment, or process equipment.

Subp. 3a. **Compliance requirements for low-emitting sources.** If the actual emissions for the previous calendar year of each pollutant are less than the emission eligibility limits for each pollutant listed in item F, then the owner or operator must comply with items A to H and subparts 6 to 9.

[For text of items A to D, see Minnesota Rules]

E. By April 1 of each calendar year, the owner or operator must calculate and record, pursuant to subpart 4, the sum of actual emissions from the stationary source, and the calculation itself for the previous calendar year. This calculation must include all emissions units at the stationary source, except for insignificant activities under part 7007.1300, subparts 2 and 3, and the information required by subpart 4, item B, subitem (3), if continuous emissions monitor (CEM) data is used in the calculation. The sum of actual emissions for each pollutant from the stationary source must not exceed the emission eligibility limits in item F for any pollutant. If the emission eligibility limit in item F is exceeded for any pollutant, then the stationary source is no longer eligible under this subpart and must comply with subpart 3 and have actual emissions for each pollutant below the

eligibility limits in item F for two consecutive calendar years before eligibility for this subpart is reinstated.

F. The emission eligibility limits for reduced record keeping under this part are:

(1) single HAP emissions, 2.5 tons per year;

(2) total for all HAP emissions, 6.25 tons per year;

(3) PM emissions, 25 tons per year;

(4) PM-10 emissions, 25 tons per year for an attainment area and 0 tons per year for a nonattainment area;

(5) VOC emissions, 25 tons per year;

(6) SO_2 emissions, 25 tons per year;

(7) NO_x emissions, 25 tons per year;

(8) CO emissions, 25 tons per year;

(9) Pb emissions, 0.05 tons per year; and

(10) CO_2 emissions, 25,000 tons per year.

[For text of items G and H, see Minnesota Rules]

Subp. 4. **Calculating actual emissions.** The owner or operator of a stationary source may use a calculation worksheet provided by the commissioner for calculating actual emissions under this part or may use the calculation methods under items A to E. The owner or operator must calculate actual emissions for each emissions unit, except that similar emissions units may be aggregated for emission calculation purposes. The owner or operator of a stationary source must use the calculation method in item B instead of the calculation method in item A if the data described in item B are available for the stationary source. The alternative methods described in items C, D, and E may be used by the owner or operator

without advance notification to the commissioner. The commissioner must reject data submitted using the methods described in items B to E if the conditions set forth for the method are not fully met. To prevent double counting of emissions, the owners and operators must select one calculation method under this subpart for each emissions unit at the stationary source. Fugitive dust emissions must be included in the calculations under this subpart only if the stationary source is in a category listed in part 7007.0200, subpart 2, item B, subitems (1) to (27).

[For text of items A to C, see Minnesota Rules]

D. A material balance method may be used to calculate greenhouse gases as CO_2e and VOC actual emissions. The owner or operator of a stationary source that uses material balance to calculate greenhouse gases as CO_2e and VOC actual emissions must determine total greenhouse gases as CO_2e and VOC actual emissions (E) using the equation in this item. A separate calculation must be made for each individual gas comprising the pollutant greenhouse gases and the results converted to CO_2e. The amount of CO_2e from each individual gas comprising the pollutant greenhouse gases must be added together for the total tons per year of CO_2e.

E = (a - b - c) x (1 - d), where

a = the amount of VOC or each individual gas comprising the pollutant greenhouse gases entering the process or the amount of carbon dioxide, nitrous oxide, or methane generated, plus any VOC or greenhouse gas that is recycled or reused in the process. A signed statement from the supplier or the material safety data sheet must be submitted stating the maximum amount of VOC or each individual gas comprising the pollutant greenhouse gases in any material that was used in the process. A VOC or greenhouse gas that is recycled or reused means a VOC or greenhouse gas that undergoes reclamation or reuse, as defined in part 7045.0020.

b = the amount of VOC or each individual gas comprising the pollutant greenhouse gases incorporated permanently into the product. This includes VOCs or each individual gas comprising the pollutant greenhouse gases chemically transformed in production. It does not include latent VOC or each individual gas comprising the pollutant greenhouse gases remaining in the product that will at some time be released to the atmosphere. An explanation of this calculation must also be submitted.

c = the amount of VOC or each individual gas comprising the pollutant greenhouse gases, if any, leaving the process as waste, or otherwise not incorporated into the product and not emitted to the air.

d = the control efficiency (percent expressed as a decimal fraction of 1.00) determined according to part 7011.0070.

[For text of item E, see Minnesota Rules]

[For text of subpart 5, see Minnesota Rules]

Subp. 6. **General requirements; control equipment not listed in part 7011.0070.**

A. The owner or operator may operate control equipment not listed in part 7011.0070 before conducting a performance test and establishing an emission factor, but the owner or operator must calculate actual emissions assuming an uncontrolled emission factor for the period of operation before the date the performance test is conducted.

B. If the stationary source qualified in the permit application, in whole or in part, or demonstrates compliance, in whole or in part, by using an emission factor determined through a performance test that reflects the use of control equipment that is not listed in part 7011.0070, the owner or operator must:

(1) operate the control equipment whenever operating the emission units controlled by the control equipment in compliance with this item. The control equipment must at all times be operated in the range established by the control equipment manufacturer's

specifications for each control equipment parameter that is required to be monitored by the approved test plan during the performance test, or within the operating parameters set by the commissioner as the result of the most recent performance test conducted under parts 7017.2001 to 7017.2060, if those are more restrictive. The control equipment must have been manufactured by a control equipment manufacturer as defined in part 7011.0060, subpart 3. The monitoring parameters must indicate that the control equipment is operating under the same conditions as during the performance test. If the commissioner determines such monitoring parameters do not exist, then an emission factor may not be established through a performance test under this part;

(2) maintain the control equipment according to part 7011.0075, subpart 2;

(3) operate the monitoring equipment for each parameter required to be monitored as part of the approved test at all times the control equipment is required to operate;

(4) record each parameter required to be monitored at least every 24 hours when in operation or more frequently, if the commissioner determines that more frequent monitoring is required to determine the control equipment is operating under the same conditions as during the performance test;

(5) report to the commissioner any recorded reading outside the specification or range of specification of any monitored parameter required by the approved test plan in accordance with the deadlines in part 7007.0800, subpart 6, item B, subitem (2), except that owners or operators must make this report only if a deviation occurred in the reporting period;

(6) conduct additional performance tests, upon request of the commissioner or the administrator, to verify the accuracy of the emission factor or for any of the reasons specified in part 7017.2020, subpart 1;

(7) in the event of a shutdown or breakdown of control or process equipment or deviations that would endanger human health or the environment, comply with part 7019.1000;

(8) recalculate the actual emissions if the owner or operator becomes aware of information indicating that the emission factor determined through the performance test is no longer representative; and

(9) if the emissions are discharged to the control equipment through a hood, maintain at the stationary source the evaluation of each hood and record each month the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method.

Subp. 7. **General requirements; control equipment listed in part 7011.0070.** If the stationary source qualified in the permit application, in whole or in part, by using control equipment efficiencies for control equipment listed under part 7011.0070, the owner or operator must comply with parts 7011.0060 to 7011.0080, except that the owner or operator of a hot mix asphalt plant must comply instead with part 7011.0917. If the calculations required by subpart 4 used control equipment efficiencies based on an alternative control efficiency under part 7011.0070, subpart 2, the owner or operator must also comply with the operating parameters of the performance test that established the alternative control efficiency.

Subp. 8. **Inventory of emission points.** If the calculation of actual emissions required by subpart 2, item E, for the application; by subpart 3, item E; or by subpart 3a, item E, for compliance verification exceeds five tons per year of sulfur dioxide or particulate matter less than ten microns, the owner or operator must maintain the information under items A to C at the stationary source for all emission units. If the commissioner requests any of the information in items A to C, the owner or operator must submit the information within 45 days of the request on a form provided by the commissioner:

A. the location of the emission points;

B. the potential emissions, as defined in part 7007.0150, subpart 4, in pounds per hour of sulfur dioxide and PM-10; and

C. the gas flow rate and temperature, stack height, and diameter.

Subp. 9. **Complying with registration permit general conditions.** An owner or operator operating under this part must:

A. comply with the requirements of part 7007.1110; and

B. comply with all other applicable requirements, including new source performance standards.

7007.1143 CAPPED PERMIT; GENERAL REQUIREMENTS.

[For text of subparts 1 to 5, see Minnesota Rules]

Subp. 6. **Operating in more than one location.** Upon application, an applicant may request that the capped permit allow a stationary source to be operated in more than one location. If more than one location is proposed in the permit application, the owner or operator must identify all geographic areas where the stationary source is authorized to operate during the course of the permit.

[For text of subparts 7 to 9, see Minnesota Rules]

7007.1144 CAPPED PERMIT; PUBLIC PARTICIPATION.

Subpart 1. **Notice of applications received.** The commissioner must post notice of receiving an application for a capped permit on the agency website for air permits at www.pca.state.mn.us/air/capped-air-emission-state-permit. A person may request to receive notification from the agency of applications received.

[For text of subparts 2 to 5, see Minnesota Rules]

7007.1146 CAPPED PERMIT; COMPLIANCE REQUIREMENTS.

[For text of subpart 1, see Minnesota Rules]

Subp. 2. **Record-keeping requirements.** The owners and operators of a stationary source issued a capped permit must comply with all requirements relevant to the stationary source in items A to G. The owners and operators of a stationary source issued a capped permit must comply with items H and I at all times.

A. If the stationary source determined eligibility in the permit application, in whole or in part, or demonstrates compliance, in whole or in part, by using a material balance that relies on the content of materials in the calculations in part 7007.1147, the owner or operator must:

[For text of subitems (1) and (2), see Minnesota Rules]

(3) if the owner or operator assumes a reduction of emissions in using the materials balance method under part 7007.1147, subpart 5, due to recycling or disposal of material off-site, keep records of the amount of disposed material, the amount of material shipped off-site for recycling, and the calculations done to determine the amount to subtract. Acceptable records include the material safety data sheets, invoices, shipping papers, and hazardous waste manifests; and

[For text of subitem (4), see Minnesota Rules]

[For text of items B to I, see Minnesota Rules]

[For text of subparts 3 to 5, see Minnesota Rules]

7007.1147 CAPPED PERMIT; CALCULATING ACTUAL EMISSIONS.

[For text of subparts 1 to 4, see Minnesota Rules]

Subp. 5. **Material balance method.** A material balance method may be used to calculate actual emissions. The owner or operator of a stationary source that uses material

balance to calculate actual emissions must determine total actual emissions (E) using the following equation:

E = (a-b-c) x (1-d), where:

a = the amount of the relevant pollutant, such as VOC, particulate matter, or HAP, entering the process, plus any relevant pollutant recycled and reused in the process. A signed statement from the supplier or the material safety data sheet (MSDS) must be submitted stating the maximum amount of the pollutant in any material that was used in the process. If a material content range is given on the MSDS or by the supplier, the highest number in the range must be used for this calculation. A VOC that is recycled and reused means a VOC that undergoes reclamation or reuse, as defined in part 7045.0020.

b = the amount of the relevant pollutant incorporated permanently into the product. This includes VOCs chemically transformed in production. It does not include latent VOC remaining in the product that will at some time be released to the atmosphere. It also includes any solids transferred to the product during a coating operation. Technical justification for this calculation must also be submitted.

c = the amount of the relevant pollutant, if any, leaving the process as waste, or otherwise not incorporated into the product and not emitted to the air and the technical justification for this calculation. If the actual amount of the relevant pollutant in the waste is unknown, then c = 0.

d = the control efficiency (percent expressed as a decimal fraction of 1.00) determined according to part 7011.0070.

[For text of subpart 6, see Minnesota Rules]

7007.1148 AMBIENT AIR QUALITY ASSESSMENT.

[For text of subparts 1 and 2, see Minnesota Rules]

Subp. 3. **SCREEN3 method.**

[For text of item A, see Minnesota Rules]

B. SCREEN3 User's Guide, EPA-454/B-95-004, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, September 1995, is incorporated by reference, is available at https://nepis.epa.gov, and is not subject to frequent change.

[For text of items C and D, see Minnesota Rules]

7007.1300 INSIGNIFICANT ACTIVITIES LIST.

[For text of subparts 1 to 4, see Minnesota Rules]

Subp. 5. **Threshold table; hazardous air pollutants.** The thresholds for hazardous air pollutants listed in the following table are for determining if an emissions unit qualifies as an insignificant activity under subpart 4, item C, subitem (1):

CAS#	Chemical Name	De Minimis Level (tons/year)
57147	1,1-Dimethyl hydrazine	0.008
79005	1,1,2- Trichloroethane	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	0.2
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
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'-Dichlorodiphenyldichloroethylene)	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
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	0.1
-	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 from 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, which applies to compounds that are not named specifically.

** - The "toxic equivalent factor" method in EPA/100/R-10/005 Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin and Dioxin-Like Compounds. A different de minimis level will be determined for each mixture depending on the equivalency factors used, which are compound specific. EPA/100/R-10/005 Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8- Tetrachlorodibenzo-*p*-dioxin and Dioxin-Like Compounds, United States Environmental Protection Agency (December 2010), is incorporated by reference, is available at https://nepis.epa.gov, and is not subject to frequent change.

a - De minimis values are zero. 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 Code of Federal Regulations, title 40, part 61, subparts B and I, and appendix E, and assigns a de minimis level based on an effective dose equivalent of 0.3 millirem per year for a seven-year exposure period that would result in a cancer risk of one per million. The individual radionuclides subject to de minimis levels are contained in Code of Federal Regulations, title 40, part 61.

7007.1450 MINOR AND MODERATE PERMIT AMENDMENTS.

[For text of subparts 1 to 6, see Minnesota Rules]

Subp. 7. **When permittee may make proposed modification or change.**

A. The permittee may make the modification or change proposed in a minor permit amendment application seven working days after the application is received by the agency.

B. The permittee may begin actual construction on a modification proposed in a moderate permit amendment application upon receiving a letter of approval from the agency authorizing the construction. However, the permittee may not conduct start-up of the modification until the amended permit has been issued.

[For text of subparts 8 and 9, see Minnesota Rules]

7007.3000 PREVENTING SIGNIFICANT DETERIORATION OF AIR QUALITY.

A. Code of Federal Regulations, title 40, part 52.21, as amended, entitled "Prevention of Significant Deterioration of Air Quality," is incorporated by reference, except that:

(1) the authorities identified in Code of Federal Regulations, title 40, part 52.21 (g), (s), (t), and (u), are not delegated to the commissioner and are retained by the administrator; and

(2) the commissioner must comply with parts 7007.0700, item B, and 7007.0850, subpart 2, in lieu of the requirements under Code of Federal Regulations, title 40, part 52.21 (q).

B. Any person who constructs, modifies, reconstructs, or operates an emissions unit, emission facility, or stationary source must meet the requirements of Code of Federal Regulations, title 40, part 52.21.

C. All applications and other information required pursuant to Code of Federal Regulations, title 40, part 52.21, from emissions units, emission facilities, and stationary sources located in Minnesota must be submitted to the commissioner.

7009.0010 DEFINITIONS.

Subpart 1. **Scope.** The definitions in this part apply to parts 7009.0010 to 7009.0080. The definitions in parts 7000.0100, 7005.0100, and 7007.0100 apply to this chapter unless the terms are otherwise defined in this part.

[For text of subparts 1a to 4, see Minnesota Rules]

7009.0090 NATIONAL AMBIENT AIR QUALITY STANDARDS.

The following national ambient air quality standards, established pursuant to section 109 of the Clean Air Act, are incorporated by reference. Interpretation of the standards and measurements made to determine compliance with these standards must be performed as specified in part 7009.0050:

[For text of items A to G, see Minnesota Rules]

7009.1010 DEFINITIONS.

Subpart 1. **Scope.** The definitions in this part apply to parts 7009.1000 to 7009.1110.

[For text of subparts 2 to 4, see Minnesota Rules]

Subp. 4a. [See repealer.]

[For text of subparts 5 to 10, see Minnesota Rules]

7011.0010 APPLICABILITY OF STANDARDS OF PERFORMANCE.

[For text of subpart 1, see Minnesota Rules]

Subp. 2. **New facility.** An owner or operator who constructs, modifies, or reconstructs an emission facility must comply with the new source performance standards, if applicable, and the standards of performance for a new emission facility set forth in the state air pollution control rules. However, if the administrator has determined a state standard of performance to be of equal or superior environmental protection compared to the new source performance standards, then the owner or operator need only comply with the state standard of performance.

[For text of subparts 3 to 5, see Minnesota Rules]

7011.0070 LISTED CONTROL EQUIPMENT AND CONTROL EQUIPMENT EFFICIENCIES.

[For text of subparts 1 to 1b, see Minnesota Rules]

Subp. 2. **Alternative control equipment and capture efficiencies; control efficiencies for hazardous air pollutants.** The owner or operator of a stationary source may use an alternative control equipment efficiency or capture efficiency or both for the control equipment listed in subpart 1, if the actual control efficiency or capture efficiency has been verified by a performance test approved by the commissioner under parts 7017.2001 to 7017.2060. The owner or operator of a stationary source may use a control equipment efficiency for listed control equipment for a hazardous air pollutant, if the control efficiency has been verified by a performance test approved by the commissioner under parts 7017.2001to 7017.2060. The request for the alternative control efficiency or capture efficiency or both may be made through a permit application for a part 70, state, registration, capped, or general permit, or in a required notice or application submitted under parts 7007.1150 to 7007.1500, by including the verification or approval letter and the required operating parameters in the application or notice. The owner or operator of a stationary source must attain at all times the alternative control efficiency or capture efficiency or both for a piece of listed control equipment at the stationary source established under this subpart.

[For text of subparts 3 and 4, see Minnesota Rules]

7011.0120 ADJUSTING OPACITY STANDARD.

[For text of subpart 1, see Minnesota Rules]

Subp. 2. **Atmospheric dispersion modeling.** If the data submitted under subpart 1 indicates that an adjustment of the opacity standard may cause or contribute to a violation of an ambient air quality standard, the commissioner must require the owner or operator to conduct atmospheric dispersion modeling and include the results of the modeling in the application for a permit modification. However, a stationary source that has potential emissions of particulate matter of less than 25 tons per year is not required to conduct modeling. Modeling must be performed according to " Guideline on Air Quality Models," EPA-450/2-78-027R, United States Environmental Protection Agency (July 1986), as

amended by supplemental updates, or methods that the commissioner finds to be comparably reliable. The guideline is incorporated by reference, is available at https://nepis.epa.gov, and is subject to frequent change.

[For text of subpart 3, see Minnesota Rules]

7011.0735 TABLE 2.

Source Gas Volume, DSCFM[a]	Concentration GR/DSCF[b]
7,000 or less	0.100
8,000	0.096
9,000	0.092
10,000	0.089
20,000	0.071
30,000	0.062
40,000	0.057
50,000	0.053
60,000	0.050
80,000	0.045
100,000	0.042
120,000	0.040
140,000	0.038
160,000	0.036
180,000	0.035
200,000	0.034
300,000	0.030
400,000	0.027
500,000	0.025

600,000	0.024
800,000	0.021
1,000,000 or more	0.020

Interpolation of the data in this part for airflow rates between 7,000 dscfm and 1,000,000 dscfm must use the equation:

$c = 1.7627 \times FR_{corrected}^{-0.3241}$

where:

c = concentration limit in gr/dscf

$FR_{corrected}$ = gas volume in dscfm

[a]Dry standard cubic feet per minute

[b]Grains per dry standard cubic foot.

7011.1201 DEFINITIONS.

[For text of subparts 1 to 10, see Minnesota Rules]

Subp. 11. **Class C waste combustor.** "Class C waste combustor" means that the total of the design capacities for all waste combustor units at a stationary source is 15×10^6 Btu/hr or more and less than 93.75×10^6 Btu/hr, the waste combustor units combust primarily mixed municipal solid waste or RDF, and construction of the waste combustor was commenced on or before August 30, 1999.

[For text of subparts 12 and 13, see Minnesota Rules]

Subp. 14. **Class II waste combustor.** "Class II waste combustor" means that the design capacity for a waste combustor unit is 15×10^6 Btu/hr or more and less than 93.75×10^6 Btu/hr, the waste combustor unit burns mixed municipal solid waste, and construction

of the unit is commenced after August 30, 1999, or modification or reconstruction is commenced after June 6, 2001.

[For text of subparts 15 to 50, see Minnesota Rules]

7011.1215 APPLICABILITY OF STANDARDS OF PERFORMANCE FOR WASTE COMBUSTORS.

[For text of subparts 1 to 2c, see Minnesota Rules]

Subp. 3. **Crematoria; pathological and animal carcass waste combustors.** Crematoria, pathological waste combustors, and waste combustors used solely for the disposal of animal carcasses are exempt from the requirements of parts 7011.1215 to 7011.1294, and shall meet the conditions of this subpart.

[For text of items A to C, see Minnesota Rules]

[For text of subparts 4 to 6, see Minnesota Rules]

7011.1225 STANDARDS OF PERFORMANCE FOR WASTE COMBUSTORS.

[For text of subpart 1, see Minnesota Rules]

Subp. 2. **Class I waste combustors.** A class I waste combustor must not emit gases that exceed the standards of performance shown in part 7011.1230.

Subp. 2a. **Class II waste combustors.** For each waste combustor unit, an owner or operator of a class II waste combustor must not cause to be emitted into the atmosphere gases in excess of the standards of performance under part 7011.1229.

[For text of subparts 3 to 5, see Minnesota Rules]

7011.1229 PERFORMANCE STANDARDS FOR CLASS II WASTE COMBUSTORS.

Subpart 1. **Scope.** The owner or operator of a class II waste combustor must comply with:

A. the emission limits, notification, monitoring, testing, record-keeping, and reporting requirements of the new source performance standards incorporated in part 7011.1293;

B. subpart 2; and

C. the following requirements:

(1) parts 7011.1240, subpart 1; 7011.1281; 7011.1282; 7011.1283; and 7011.1284 if the owner or operator chooses to comply with the operator certification requirements of Code of Federal Regulations, title 40, section 60.54b, as amended, by obtaining certification through the agency;

(2) the general waste combustor facility requirements under part 7011.1245;

(3) the industrial solid waste management plan requirements under part 7011.1250;

(4) the reporting and response requirements for exceeding continuously monitored emissions under part 7011.1260, subpart 7;

(5) the reporting and response requirements under part 7011.1265, subpart 11, if an exceedance is measured during the conduct of a performance test; and

(6) the testing or monitoring frequency for a waste composition study according to part 7011.1270, subpart 6.

Subp. 2. **Emission limits.** The table in this subpart governs emission limitations for a class II waste combustor. For acid gas limitations, either the applicable percent reduction or the parts per million by volume emission limitation, whichever is less stringent, is the emission limitation for the waste combustor.

Size	Class II
Particulate matter	

Filterable	0.015 gr/dscf
The sum of filterable and organic condensable	0.020 gr/dscf
PCDD/PCDF	
(total)	30 ng/dscm
Acid gases	
HCl	90% control or 25 ppm
SO_2	80% control or 30 ppm
Carbon monoxide	
Modular	50 ppm
Mass burn or fluidized bed	100 ppm
RDF stoker	150 ppm
Opacity	10%
NO_x	NA
Mercury (short-term)	
Modular	100 µg/dscm or 85% removal
Mass Burn	100 µg/dscm or 85% removal
RDF (90-day test interval)	50 µg/dscm or 85% removal
FBC	100 µg/dscm or 85% removal
Mercury (long-term)	
Modular	60 µg/dscm or 85% removal
Mass burn	60 µg/dscm or 85% removal
RDF (90-day test interval)	30 µg/dscm or 85% removal
FBC	60 µg/dscm or 85% removal
RDF (12-month test interval)	30 µg/dscm or 85% removal

7011.1235 REQUIREMENTS OF CLASS IV WASTE COMBUSTORS.

[For text of subparts 1 to 2a, see Minnesota Rules]

Subp. 3. [See repealer.]

7011.1255 PLAN TO SEPARATE SOLID WASTES CONTAINING MERCURY.

Subpart 1. **Preparing mercury waste separation plan.** If a mercury waste separation plan is required by part 7007.0501, the waste combustor owner or operator must prepare a plan to identify, separate, and collect before combustion solid wastes which contain mercury.

[For text of subpart 2, see Minnesota Rules]

Subp. 3. **Periodically revising plan.** In each application for reissuance of a permit, or every five years for class IV waste combustors, the owner or operator of the combustor must revise the plan to improve identification, separation, and collection before combustion of mercury from the solid waste stream. The updated plan must identify improvements that have been made to the plan to increase identification, separation, and collection before combustion of mercury from the solid waste stream.

7011.1265 REQUIRED PERFORMANCE TESTS, METHODS, AND PROCEDURES.

[For text of subparts 1 and 2, see Minnesota Rules]

Subp. 3. **Performance test methods for other air contaminants.** If not specified in this subpart, the owner or operator must use test methods in Code of Federal Regulations, title 40, part 60, Appendix A, or part 61, Appendix B, as amended, or other methods determined by the commissioner in writing to be equivalent. For class A waste combustors, other methods used for performance testing must be approved by the Environmental Protection Agency.

A. For hydrogen chloride, the percentage reduction in the potential hydrogen chloride emissions ($\%P_{HCl}$) is computed using the following formula:

$$\%P_{HCl} = \frac{(E_i - E_o)}{E_i}$$

where E_i is the potential hydrogen chloride emission rate measured at the control device inlet, corrected to seven percent O_2, and E_o is the hydrogen chloride emission rate measured at the outlet of the acid gas control device, corrected to seven percent O_2.

Code of Federal Regulations, title 40, part 60, Appendix A, Method 26 or 26A, or title 40, part 63, Appendix A, Method 320, as amended, must be used for determining the hydrogen chloride emission rate. The minimum sampling time is one hour. An oxygen or carbon dioxide measurement must be obtained simultaneously with each Method 26 test run for hydrogen chloride. The average of the hydrogen chloride emission concentration or percent reduction is used to determine compliance.

[For text of items B to D, see Minnesota Rules]

[For text of subparts 4 to 11, see Minnesota Rules]

7011.1270 PERFORMANCE TEST, WASTE COMPOSITION STUDY, AND ASH SAMPLING FREQUENCY.

Subpart 1. **Generally.** The owner or operator of a waste combustor must conduct the performance tests required in part 7011.1265, subpart 5, based on the schedules in this part.

Subp. 2. **Class A waste combustors.**

A. The owners or operators of class A waste combustors must conduct performance tests:

(1) once within the normal start-up;

(2) once annually after the test in subitem (1), but not more than 12 months following the initial performance test, except that fugitive emissions from ash handling need only to be tested once within normal start-up as required in subitem (1);

(3) annually on all units until all annual performance tests for all units for a two-year period indicate a PCDD/PCDF emission concentration less than or equal to 15 ng/dscm, corrected to seven percent O_2, or as provided in item B; and

(4) for mercury emissions, every three months for class A waste combustors that are not burning RDF or as provided under items D and E.

B. If all PCDD/PCDF performance tests for all units for a two-year period indicate that PCDD/PCDF emissions are less than or equal to 15 ng/dscm corrected to seven percent O_2 from each unit, then the owner or operator may choose to test one unit for PCDD/PCDF once annually after the test in item A, subitem (2), but not more than 12 months following the previous performance test. Thereafter, the owner or operator may continue to test a different unit for PCDD/PCDF each year, in sequence.

C. The owner or operator must specify what the PCDD/PCDF performance testing schedule is each time a pretest notification is given under part 7017.2030.

D. The owner or operator of a class A waste combustor may implement testing for mercury not less than once every 12 months if the facility has demonstrated that mercury emissions have been below 50 percent of the facility's permitted long-term limit for three consecutive years.

E. The owners or operators of class A waste combustors combusting RDF may choose to conduct performance tests for mercury every 12 months. If a test shows that an emission limit for mercury from a waste combustor combusting RDF is exceeded, the commissioner must require testing every three months thereafter until compliance with the standard is demonstrated.

F. The owner or operator of a class A waste combustor must complete a waste composition study every five years.

Subp. 3. **Class II and C waste combustors.**

A. The owners or operators of class II and C waste combustors must conduct performance tests:

(1) once within the normal start-up, except as provided in subitem (3);

(2) once annually after the test in subitem (1), but not more than 12 months following the initial performance test, except as provided in subitem (3) or as provided in item B; and

(3) for mercury emissions, every three months for class C waste combustors that are not burning RDF or as provided in items C and D.

B. Fugitive emissions from ash handling do not need to be tested more frequently than the initial test required in item A, subitem (1). If three annual performance tests for a three-year period show compliance with standards in part 7011.1225, the owner or operator may continue to conduct annual testing or may choose to conduct performance tests every 2-1/2 years, except as required by item A, subitem (3). At a minimum, a performance test must be conducted every 2-1/2 years, but no more than 30 months following the previous compliance test. If a performance test indicates noncompliance with applicable standards, the owner or operator must resume annual testing for three years for that pollutant for which noncompliance was demonstrated. If three annual performance tests for the three-year period show compliance with standards in part 7011.1225, the owner or operator may again conduct performance testing every 2-1/2 years.

C. The owner or operator of a class C waste combustor that is not burning RDF may implement testing for mercury not less than once every three years or according to federal applicable requirements, whichever is more stringent, if the facility has demonstrated that mercury emissions have been below 50 percent of the facility's permitted long-term limit for three consecutive years. However, if a mercury performance test shows mercury

emissions greater than 50 percent of the facility's permitted mercury limit, the owner or operator must resume annual mercury stack sampling until emissions are below 50 percent of the facility's permitted mercury limit. Once the facility demonstrates that mercury emissions are again below 50 percent of the facility's permitted limit, the facility may resume testing every three years, upon notifying the commissioner in writing.

D. The owners or operators of waste combustors combusting RDF may choose to conduct performance tests for mercury emissions every 12 months. If a test shows that emission limits for mercury from a waste combustor combusting RDF are exceeded, the commissioner must require performance testing every three months until compliance is demonstrated.

E. For waste combustors accepting municipal solid waste, the owner or operator must complete a waste composition study every five years.

Subp. 4. **Class III and D waste combustors.**

A. The owners or operators of class III and D waste combustors must conduct performance tests:

(1) once within the normal start-up;

(2) every 2-1/2 years after the test in subitem (1), but not more than 30 months following the initial performance test;

(3) for class III waste combustors, every three months for emissions of mercury or as provided in item B;

(4) for class D waste combustors, every 2-1/2 years for emissions of mercury; and

(5) for ash, in accordance with part 7045.0131, every 30 months for toxicity by toxic characteristic leach procedure for arsenic, barium, cadmium, chromium, lead, mercury, selenium, and nickel.

B. The owner or operator of a class III waste combustor may implement testing for mercury not less than once every three years or according to federal applicable requirements, whichever is more stringent, if the facility has demonstrated that mercury emissions have been below 50 percent of the facility's permitted long-term limit for three consecutive years. However, if a mercury performance test shows mercury emissions greater than 50 percent of the facility's permitted mercury limit, the owner or operator must resume annual mercury stack sampling until emissions are below 50 percent of the facility's permitted mercury limit. Once the facility demonstrates that mercury emissions are again below 50 percent of the facility's permitted limit, the facility may resume testing every three years, upon notifying the commissioner in writing.

C. The owners or operators of class III and D waste combustors must complete a waste composition study every five years.

Subp. 5. **Class IV waste combustors.** The owners or operators of class IV waste combustors must conduct performance tests:

A. ~~(1)~~ once within the normal start-up;

B. ~~(2)~~ every five years after the test in ~~subitem (1)~~ item A, but not more than 60 months following the initial performance test; and

C. ~~(3)~~ for ash, in accordance with part 7045.0131, every 60 months for toxic characteristic leach procedure for arsenic, barium, cadmium, chromium, lead, mercury, selenium, and nickel.

Subp. 6. **Class I waste combustors.**

A. The owners or operators of class I waste combustors that are not combusting RDF must conduct performance tests for mercury emissions every three months, except that a facility may implement testing for mercury not less than once every 12 months if the facility has demonstrated that mercury emissions have been below 50 percent of the facility's permitted long-term limit for three consecutive years.

B. The owners or operators of class I waste combustors that are combusting RDF may choose to conduct performance tests for mercury every 12 months. If a test shows that an emission limit for mercury from a waste combusting RDF is exceeded, the commissioner must require testing every three months thereafter until compliance with the standard is demonstrated.

C. The owners or operators of class I waste combustors must complete a waste composition study every five years.

7011.1295 INCORPORATION BY REFERENCE; FEDERAL PLAN REQUIREMENTS FOR SMALL MUNICIPAL WASTE COMBUSTOR UNITS.

Subpart 1. **Incorporation by reference.** Code of Federal Regulations, title 40, part 62, subpart JJJ, as amended, entitled "Federal Plan Requirements for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999," is incorporated by reference.

Subp. 2. **Exceeding emission limits.** Owners and operators of a small municipal waste combustor unit must comply with part 7011.1340.

7011.1340 EMISSION LIMITS; EXCEEDANCE REQUIREMENTS.

Subpart 1. **Applicability.** The owners or operators of an emissions unit subject to parts 7011.1291, 7011.1292, 7011.1293, 7011.1294, 7011.1295, 7011.1350, 7011.1355, 7011.1360, and 7011.1370 must comply with this part.

[For text of subparts 2 to 4, see Minnesota Rules]

7011.3470 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE STANDARDS; CALCINERS AND DRYERS IN THE MINERAL INDUSTRY.

Code of Federal Regulations, title 40, part 60, subpart UUU, as amended, entitled "Standards of Performance for Calciners and Dryers in Mineral Industries," is incorporated by reference.

7011.3515 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE STANDARDS; MUNICIPAL SOLID WASTE LANDFILLS EXISTING AFTER JULY 17, 2014.

[For text of subpart 1, see Minnesota Rules]

Subp. 2. **Incorporation by reference.** Code of Federal Regulations, title 40, part 60, subpart XXX, as amended, entitled "Standards of Performance for Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification after July 17, 2014," is incorporated by reference.

7011.3530 INCORPORATION BY REFERENCE; FEDERAL PLAN REQUIREMENTS FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION ON OR BEFORE JULY 17, 2014, AND HAVE NOT BEEN MODIFIED OR RECONSTRUCTED SINCE JULY 17, 2014.

Subpart 1. **Scope.** The requirements of this part apply to the owner or operator of a landfill that began construction on or before July 17, 2014. Landfills that began construction, modification, or reconstruction after July 17, 2014, are subject to part 7011.3515.

Subp. 2. **Incorporation by reference.** Code of Federal Regulations, title 40, part 62, subpart OOO, as amended, entitled "Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014" is incorporated by reference.

7017.0200 INCORPORATION BY REFERENCE; COMPLIANCE ASSURANCE MONITORING.

Code of Federal Regulations, title 40, sections 64.1 to 64.10, as amended, entitled "Compliance Assurance Monitoring," are incorporated by reference.

7017.1060 PRECERTIFICATION TEST REQUIREMENTS.

Subpart 1. **Certification test plan required.** Before a certification test, the owner or operator of the emission facility must submit to the commissioner a test plan that contains all the information required in subpart 2. The certification test plan must be postmarked or received at least 30 days before the certification test date. No certification test may be conducted until a test plan has been submitted to and approved by the commissioner.

[For text of subpart 2, see Minnesota Rules]

Subp. 3. **Certification pretest meeting.** The owner or operator of the emission facility must consult with agency staff to discuss the proposed certification test. The meeting may be in person or by telephone, except when either the commissioner or the owner or operator requires an in-person meeting at one of the agency's offices. Unless a shorter period is approved in writing by the commissioner, the pretest consultation must be held at least seven days before the certification test date. The commissioner must reject the results of a certification test if:

A. the owner or operator of the emission facility refused to participate in a pretest meeting; and

B. the commissioner finds that the lack of consultation resulted in a certification test that did not meet the requirements of the test plan approved by the commissioner under subpart 1.

7019.1000 NOTIFICATIONS OF DEVIATIONS ENDANGERING HUMAN HEALTH OR THE ENVIRONMENT; SHUTDOWNS AND BREAKDOWNS.

Subpart 1. **Notification of deviations that endanger human health or the environment.** The owner or operator of an emission facility, in the event of any deviation, as defined in part 7007.0100, subpart 8a, that could endanger human health or the environment, must notify, orally or by e-mail, the commissioner or must telephone the state duty officer at 800-422-0798 or 651-649-5451 immediately after discovery of the deviation or immediately after when the deviation reasonably should have been discovered by the owner or operator. Within two working days of the discovery, the owner or operator must submit to the commissioner a written description of the deviation stating:

A. the cause of the deviation;

B. the exact dates of the period of the deviation, if the deviation has been corrected;

C. whether or not the deviation has been corrected;

D. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and

E. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.

Subp. 2. **Breakdown notification.** The owner or operator of an emission facility, emissions unit, or stationary source must notify the commissioner within 24 hours of a breakdown of more than one hour of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required if:

A. an applicable requirement as defined in part 7007.0100, subpart 7, or compliance document as defined in part 7017.2005, subpart 2, does not require operation of the control equipment;

[For text of item B, see Minnesota Rules]

C. the facility directly and continuously monitors the emissions with a continuous emissions monitor or similar direct monitoring device that demonstrates emissions do not exceed the applicable limit of any regulated pollutant during the breakdown.

At the time of notification or as soon as possible thereafter, the owner or operator must inform the commissioner of the cause of the breakdown and the estimated duration. The owner or operator must notify the commissioner when the breakdown is over.

Subp. 3. **Shutdown notification.** The owner or operator of an emission facility, emissions unit, or stationary source must notify the commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, the owner or operator must notify the commissioner as soon as possible after the shutdown. However, notification is not required if:

A. an applicable requirement as defined in part 7007.0100, subpart 7, or compliance document as defined in part 7017.2005, subpart 2, allows the shutdown of, or does not require operation of, the control equipment;

[For text of item B, see Minnesota Rules]

C. the facility directly and continuously monitors the emissions with a continuous emissions monitor or similar direct monitoring device that demonstrates emissions do not exceed the applicable limit of any regulated pollutant during the shutdown.

At the time of notification, the owner or operator must inform the commissioner of the cause of the shutdown and the estimated duration. The owner or operator must notify the commissioner when the shutdown is over.

Subp. 4. **Operation changes.** In any shutdown, breakdown, or deviation covered by subpart 1, 2, or 3, the owner or operator must immediately or as soon as possible considering plant and personnel safety take all practical steps to modify operations to reduce the emission of any regulated air pollutant. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment are permitted to operate.

Subp. 5. **Effect of rule.** Nothing in this part:

A. allows operation of an emission facility, emissions unit, or stationary source that may endanger human health or the environment;

[For text of items B to E, see Minnesota Rules]

Subp. 6. [See repealer.]

[For text of subpart 7, see Minnesota Rules]

7019.3040 CONTINUOUS EMISSION MONITOR (CEM) DATA.

A. If an emission reporting facility or a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), has collected emissions data through use of a CEM in compliance with the preconditions in subitems (1) and (2), the owner or operator must report that data to the commissioner in the facility's emission inventory. The emission inventory submitted must be based on all the CEM data. The requirements in subitems (1) and (2) must be met:

[For text of subitems (1) and (2), see Minnesota Rules]

B. An emission inventory submitted according to item A must include:

[For text of subitem (1), see Minnesota Rules]

(2) an explanation of how the emissions were calculated based on the CEM data. Except for facilities subject to part 7017.1020, for periods when the CEM is down and the emissions unit is operating, missing emissions data must be substituted with CEM data recorded during a representative period of operation of the emissions unit, and, if applicable, of the control equipment operation during the same calendar year for which the inventory is being submitted. The CEM must have recorded data for at least 90 percent of the hours the emission unit was operated for the calendar year for which the inventory is being submitted. If substitute CEM data meeting these conditions is not available, emissions during periods of CEM downtime must be calculated using the next highest available method on the hierarchy of methods listed in part 7019.3030; and

(3) for facilities subject to part 7017.1020, substitute CEM data in accordance with Code of Federal Regulations, title 40, part 75.

7019.3060 VOLATILE ORGANIC COMPOUND (VOC) MATERIAL BALANCE.

If the methods in part 7019.3040 or 7019.3050 are unavailable to the owner or operator of an emission reporting facility or a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), the facility may calculate VOC emissions using the material balance method described in this part. This method may be used in conjunction with or instead of emission factors and enforceable limitations methods described in parts 7019.3080 and 7019.3090, where applicable. A person using material balance to calculate VOC emissions must determine the total VOC emissions (E) as follows:

$$E = (A - B - C) * (1 - CE)$$

where:

A = the amount of VOC entering the process. The amount of VOC used in this calculation must be the amount certified by the supplier, the maximum amount stated on the material safety data sheet, or the amount determined by reference method 24.

B = the amount of VOC incorporated into the product. This includes VOCs chemically transformed in production. An explanation of this calculation must also be submitted.

C = the amount of VOC, if any, leaving the process as waste, or otherwise not incorporated into the product and not emitted to the air. If the actual VOC content of the waste is unknown, then C = 0.

CE = the control efficiency, or the product of capture efficiency and collection or destruction efficiency, of any device used to capture and/or control VOC emissions, expressed as a decimal fraction of 1.00. The control efficiency must be based on efficiency factors, as defined in part 7005.0100, subpart 9b, or must be based on the control efficiency verified by a performance test conducted according to parts 7017.2001 to 7017.2060 and 7019.3050. The overall efficiency of a pollution control system that uses a hood, as defined in part 7011.0060, subpart 2, as the emission capture device must be based on a capture efficiency of 60 percent. If an alternative capture efficiency has been determined by a performance test conducted according to parts 7017.2001 to 7017.2060 and 7019.3050, that capture efficiency must be used in the calculation of actual emissions.

7019.3065 MERCURY MATERIAL BALANCE.

If the methods in parts 7019.3040 and 7019.3050 are unavailable to the owner or operator of an emission reporting facility, the owner or operator of a mercury emission source may calculate mercury air emissions using the material balance method described in this part. This method may be used in conjunction with or instead of emission factors and enforceable limitations methods described in parts 7019.3080 and 7019.3090, where applicable. A person using material balance to calculate mercury emissions must determine the total mercury air emissions (E) as follows:

E = (A - B - C) * (1 - CE)

Where:

A = the total amount of mercury entering the process. The amount of mercury used in this calculation must be the amount certified by the supplier, the maximum amount stated on a material safety data sheet, or the maximum amount determined by sample analysis using a reference method.

B = the sum of the amount of mercury incorporated into manufactured products. The owner or operator must submit an explanation of how this quantity was determined.

C = the sum of the amount of mercury leaving the process by a mechanism other than through controlled stack gases or in a product, as when material leaves the process as a waste, is recycled, or is approved for beneficial reuse. The mercury leaving the process by such a mechanism must be established by sample analysis using a reference method. If the actual mercury content of the mercury leaving the process is unknown, then C = 0.

CE = the control efficiency, or the product of capture efficiency and collection or destruction efficiency, of any air pollution control device used to capture or control mercury air emissions, expressed as a decimal fraction of 1.00. The control efficiency must be based on efficiency factors, as defined in part 7005.0100, subpart 9b, or must be based on the control efficiency verified by a performance test conducted according to parts 7017.2001 to 7017.2060.

7019.3070 SO_2 MATERIAL BALANCE.

If the methods in parts 7019.3040 and 7019.3050 are unavailable to the owner or operator of an emission reporting facility, the owner or operator may calculate sulfur dioxide emissions using the SO_2 material balance method described in this part. To use this method, the owner or operator must measure the sulfur content of the fuel and assume that all the sulfur in the fuel is oxidized to sulfur dioxide. This method may be used in conjunction with

or instead of emission factors and enforceable limitations methods described in parts 7019.3080 and 7019.3090, where applicable. The sulfur content of each batch of fuel received must be certified by the supplier or an independent laboratory. The sulfur content must be determined using American Society for Testing and Materials (ASTM) methods. The sulfur dioxide emissions must be determined by using the following equation:

$$SO_2 = \%S/100 \times F/2000 \times 2$$

where:

SO_2 = Sulfur dioxide emissions from a batch of fuel.

%S = Weight percent sulfur in the fuel being burned.

F = Amount of fuel burned by weight in pounds.

2000 = Pounds per ton.

2 or 64/32 = Pounds of sulfur dioxide per pound of sulfur in one pound-mole.

The total sulfur dioxide emissions for the year must be the sum total of the individual batch totals.

7019.3080 EMISSION FACTORS.

A. If the methods in parts 7019.3040 and 7019.3050 are unavailable to the owner or operator of an emission reporting facility or a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), the owner or operator may calculate the facility's emissions using emission factors as defined in part 7005.0100, subpart 10a, and as described in this part. This method may be used in conjunction with or instead of material balance and enforceable limitations methods described in parts 7019.3060, 7019.3070, and 7019.3090, where applicable. Calculations of actual emissions must be based on operating data multiplied by an emission factor. The owner or operator must include operating data necessary to apply

the emission factor used in the calculation of emissions in this method in the emission inventory. Operating data means the data necessary to apply the emission factor to calculate emissions. For example, tons of material handled is the necessary operating data for an emissions factor expressed as "tons of pollutant/ton of material handled."

B. Control equipment efficiency must be based on efficiency factors as defined in part 7005.0100, subpart 9b, or on the efficiency verified by a performance test conducted according to parts 7017.2001 to 7017.2060 and 7019.3050. Calculations of actual emissions from an emission unit through a pollution control system that uses a hood, as defined in part 7011.0060, subpart 2, as the emission capture device must be based on a capture efficiency of 80 percent. If an alternative capture efficiency has been determined by a performance test conducted according to parts 7017.2001 to 7017.2060 and 7019.3050, the owner or operator must use that capture efficiency in the calculation of actual emissions.

7019.3090 ENFORCEABLE LIMITATIONS.

If the methods in part 7019.3040 or 7019.3050 are unavailable to an owner or operator of an emission reporting facility or a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), the owner or operator may calculate actual emissions using any enforceable permit limitation or applicable requirement limitation. This method may be used in conjunction with or instead of material balance and emission factor methods described in parts 7019.3060 to 7019.3080, where applicable. Calculations of actual emissions must be based on operating data multiplied by the limitation. The owner or operator must include operating data and a sample calculation used in the calculation of emissions in this method in the emission inventory. "Operating data" means the data upon which the emission limitation is based. For example, dscf (dry standard cubic feet) for an emission limitation expressed as "gr/dscf" (grains per dry standard cubic feet).

7019.3100 FACILITY PROPOSAL.

A. The owner or operator of an emission reporting facility may propose an alternative method for calculating actual emissions if the owner or operator can demonstrate to the satisfaction of the commissioner either:

[For text of subitems (1) and (2), see Minnesota Rules]

B. The proposal must include:

[For text of subitems (1) to (3), see Minnesota Rules]

C. The owner or operator must submit the proposal to the commissioner by September 1 of the year for which the emissions are being calculated. The commissioner must approve the emission reporting facility's proposal if the commissioner finds that the facility has made the demonstration required under item A. If the commissioner rejects the proposal, the commissioner must do so by November 30 of the year for which the emissions are being calculated. Approval of a method expires five years after the year for which emissions were first calculated.

D. The commissioner must revoke approval of the method if, after the first year's emission inventory submittal, the owner or operator or the commissioner has determined that the method described under this part no longer accurately calculates each unit's actual emissions. If the commissioner revokes the approval, the commissioner must do so by November 30 of the year for which the emissions are being calculated.

RENUMBERING INSTRUCTION. A. In part 7011.1228, the reference to part 7011.1270, item A, subitem (1), is changed to part 7011.1270, subpart 2, item A, subitem (1).

B. In part 7011.1230, subparts 1 and 2, the references to part 7011.1270, item E, are changed to part 7011.1270, subpart 6.

C. In part 7011.3500, the reference to part 7011.3525 is changed to part 7011.3530.

REPEALER. Minnesota Rules, parts 7007.0100, subparts 3, 9b, 9c, 9d, 9e, and 9f; 7007.1102; 7007.1105; 7007.1107; 7009.1010, subpart 4a; 7011.1210; 7011.1235, subpart 3; 7011.3525; and 7019.1000, subpart 6, are repealed.