

April 1, 2022

VIA EMAIL ONLY

Nancy Breems
Secretary of State, Elections Division
180 State Office Building
100 Rev Dr Martin Luther King Jr Blvd
St. Paul, Minnesota 55155-1299
official.documents@state.mn.us

**Re: *In the Matter of the Matter of the Proposed Rule Amendments
Governing Air Quality, Minnesota Rules Chapters 7002, 7005, 7007,
7009, 7011, 7017, and 7019***
OAH 71-9003-37193; Revisor R-4678

Dear Ms. Breems:

Enclosed for filing is an electronic copy of the above-entitled adopted rules.

Please send the agency copy of the rules to:

Mary H. Lynn
Principal Planner
Minnesota Pollution Control Agency
520 Lafayette Rd N
Saint Paul, MN 55155
mary.lynn@state.mn.us

If you have any questions regarding this matter, please contact Denise Collins at (651) 361-7875, denise.collins@state.mn.us or via facsimile at (651) 539-0310.

Sincerely,



Michelle Severson
Legal Assistant

Enclosures

cc: Mary H. Lynn (via email)

Document Number: 222714
Filed: April 1, 2022
Office of the Minnesota
Secretary of State Steve Simon

1.1 **Minnesota Pollution Control Agency**

1.2 **Adopted Permanent Rules: Air Quality Housekeeping Amendments**

1.3 **7002.0019 AIR QUALITY PERMIT APPLICATION FEES AND ADDITIONAL**
 1.4 **FEES.**

1.5 Subpart 1. **Application points.** The points assessed for permit application types
 1.6 designated in this subpart are multiplied by the dollar per point value as determined in part
 1.7 7002.0018 to calculate the application fee.

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

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

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

3.1	K.	Plantwide applicability limit (PAL)	20
3.2		Points are applied for each prevention of significant deterioration (PSD)	
3.3		pollutant for which a plantwide applicability limit is established.	
3.4	L.	Air emission risk analysis (AERA) review	15
3.5	M.	Variance request under part 7000.7000	35
3.6	N.	Confidentiality request under part 7000.1300	2
3.7	O.	Environmental assessment worksheet (EAW) review	
3.8		Points are assigned as follows:	
3.9		Part 4410.4300, subparts 18, items A and B; and 29	15
3.10		Part 4410.4300, subparts 8, items A and B; 10, items A, B, C, and D;	35
3.11		16, items A and D; 17, items A to C and E to G; and 18, items C, D, E,	
3.12		and F	
3.13		Part 4410.4300, subparts 4; 5, item A, subitems (1) and (2); 13; 15; 16,	70
3.14		items B and C; and 17, item D	
3.15		A fee for EAW review is charged only if the project falls into a mandatory	
3.16		category specified in part 4410.4300, the agency is the designated responsible	
3.17		governmental unit (RGU), and an air or water permit is required for the	
3.18		project. If a facility requires both an air and water permit, the points for an	
3.19		EAW review are charged only once and multiplied by the lower of the dollar	
3.20		per point value for an air or water permit.	

3.21 **7002.0025 ANNUAL EMISSION FEE RATES.**

3.22 **Subpart 1. Calculation of fee.**

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

3.27 B. Notwithstanding item A, the owner or operator of any emission reporting
 3.28 facility or any facility issued an option B registration permit under part 7007.1120 that
 3.29 chooses to be assessed a fee under item C, subitem (1), with less than one ton of total actual
 3.30 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:

$$\text{\$X} = [\text{F} - [\text{R} + (\text{\$25} \times \text{N})]] / (\text{T} - \text{L})$$

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).

7.1 B. The emission factor listed in Factor Information Retrieval (FIRE) Data System,
7.2 Version 6.25, United States Environmental Protection Agency, Office of Air Quality Planning
7.3 and Standards, as amended. The data system is incorporated by reference, is available at
7.4 <https://cfpub.epa.gov/webfire>, and is subject to frequent change. Where more than one
7.5 emission factor is listed, emission factor means the one approved by the commissioner using
7.6 best engineering judgment and based on one or more of the considerations in item C, subitem
7.7 (2).

7.8 *[For text of item C, see Minnesota Rules]*

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

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

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

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

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

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

7.23 *[For text of item JJJ, see Minnesota Rules]*

8.1 **7007.0100 DEFINITIONS.**

8.2 Subpart 1. **Scope.**

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

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

8.6 *[For text of subpart 2, see Minnesota Rules]*

8.7 Subp. 3. [See repealer.]

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

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

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

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

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

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

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

9.1 Subp. 9b. [See repealer.]

9.2 Subp. 9c. [See repealer.]

9.3 Subp. 9d. [See repealer.]

9.4 Subp. 9e. [See repealer.]

9.5 Subp. 9f. [See repealer.]

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

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

9.9 **7007.0250 SOURCES REQUIRED TO OBTAIN STATE PERMIT.**

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

9.11 Subp. 6. **Waste combustors.**

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

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

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

10.1 **7007.0500 CONTENT OF PERMIT APPLICATION.**

10.2 Subpart 1. **Application requirements.**

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

10.9 B. Small business stationary sources, as defined in Minnesota Statutes, section
10.10 116.96, subdivision 6, may seek assistance in preparing permit applications under the small
10.11 business air quality compliance assistance act in Minnesota Statutes, sections 116.95 to
10.12 116.99.

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

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

10.15 **7007.0800 PERMIT CONTENT.**

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

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

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

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

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

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

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

11.9 *[For text of item D, see Minnesota Rules]*

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

11.11 **7007.0850 PERMIT APPLICATION NOTICE AND COMMENT.**

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

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

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

11.18 (1) The commissioner must give notice:

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

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

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

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

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

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

12.5 (b) the name and address of the permittee;

12.6 (c) the name and address of the agency;

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

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

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

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

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

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

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

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

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

13.8 (a) a record of the commenters;

13.9 (b) issues raised by the commenters;

13.10 (c) a record of written comments received; and

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

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

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

13.21 D. (1) If the commissioner determines that a proposed minor or moderate
13.22 amendment to a permit involves issues that generate or are likely to generate significant
13.23 material adverse comment from the public, based on previous adverse public comment on
13.24 the proposed amendment or related issues, the commissioner must comply with the
13.25 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

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

15.4 Subp. 4. **Additional procedures for permits containing Title I conditions.** The
15.5 commissioner must also comply with all other federal requirements for public participation
15.6 applicable to permits and permit amendments that include Title I conditions, including
15.7 requirements in Code of Federal Regulations, title 40, sections 51.102, 51.161, and
15.8 51.166(Q), as amended, to the extent applicable.

15.9 **7007.0950 EPA REVIEW AND OBJECTION.**

15.10 Subpart 1. **Review by EPA.**

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

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

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

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

15.20 Subp. 2. **EPA objection.**

15.21 A. In the case of a part 70 permit, the commissioner must not issue a permit or
15.22 permit amendment if the administrator objects to its issuance in writing within 45 days of
15.23 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

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

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

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

17.11 **7007.1110 REGISTRATION PERMIT; GENERAL REQUIREMENTS.**

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

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

17.15 A. the source qualifies for a sector-based state general permit available under part
17.16 7007.1100, unless specifically allowed under the general permit; or

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

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

17.21 Subp. 15a. **Relocating.**

17.22 A. This subpart does not apply if the registration permit already authorizes
17.23 operation in more than one location under subpart 20 and the proposed relocation is within
17.24 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

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

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

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

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

21.10 TABLE 1

21.11 FUEL USED (units burned/year)-[specification]	21.12 SULFUR LIMIT	21.13 MULTIPLI- CATION FACTOR (MF)
21.14		
21.15 anthracite coal (tons)-[ASTM D 388(Vol 05.05)]	2.38%	4.64E-02
21.16 bituminous coal (tons)-[ASTM D 388(Vol 05.05)]	2.10%	4.10E-02
21.17 sub bituminous coal (tons)-[ASTM D 388 (Vol 05.05)]	1.66%	2.91E-02
21.18 lignite A coal (tons)-[ASTM D 388(Vol 05.05)]	1.26%	1.89E-02
21.19 petroleum coke (tons)-[ASTM C 1160(Vol 04.05)]	2.33%	4.55E-02
21.20 untreated domestic wood and bark (tons)-[ASTM D 1165(Vol 04.09)]	21.21 n/a	8.40E-03
21.22 kerosene (gallons)-[ASTM D 3699(Vol 05.03)]	0.50%	3.59E-05
21.23 No. 1 and No. 2 distillate (gallons)-[ASTM D 396(Vol 05.01)]	0.50%	3.59E-05
21.24 No. 4 distillate (gallons)-[ASTM D 396(Vol 05.01)]	1.80%	1.40E-04

22.1	No. 5 and No. 6 residual (gallons)-[ASTM D 396(Vol 05.01)]	1.80%	1.46E-04
22.2	liquefied petroleum gas (LPG) (gallons)-[ASTM D 1835(Vol 05.01 and 05.05)]	n/a	1.05E-05
22.3			
22.4	dry or commercial pipeline natural gas (cubic feet)-this must be	n/a	1.40E-07
22.5	a mixture of ethane, methane, not more than five percent propane		
22.6	and not more than one percent butane		

22.7 **B. Calculation 2. Reciprocating Internal Combustion Engine Emission Units.**

22.8 A stationary source with one or more reciprocating internal combustion (RIC) engines must,
 22.9 for each RIC engine, use either calculation 2A or 2B. Stationary sources with RIC engine
 22.10 emission units burning fuels not listed in Table 2, however, must use calculation 2B.

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

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

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

22.17 **TABLE 2**

22.18	FUEL USED (units burned/year)-[specification]	SULFUR	MULTIPLI-
22.19		LIMIT	CATION
22.20			FACTOR
22.21			(MF)
22.22	No. 1 and No. 2 diesel, and kerosene (gallons)-[ASTM 975(Vol 05.01)]		3.09E-04
22.23			
22.24	liquefied petroleum gas (LPG) (gallons)-[ASTM D 1835(Vol 05.01 and 05.05)]	n/a	6.95E-05
22.25			
22.26	dry or commercial pipeline natural gas (cubic feet)-[as defined in Table 1]	n/a	1.70E-06
22.27			

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]

24.1 **7007.1130 REGISTRATION PERMIT OPTION D.**

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

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

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

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

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

24.17 A stationary source in which the only hazardous air pollutant (HAP) emissions are
24.18 VOC emissions and that has actual VOC emissions less than five tons per year is not required
24.19 to maintain records and perform the calculations of HAPs emissions under subitems (1) to
24.20 (3).

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

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

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

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

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

25.9 (3) recalculate and record by the last day of each month the 12-month rolling
25.10 sum of SO₂ emissions for the previous 12 months, the date the calculation was made, and
25.11 the calculation itself using the calculation method in subpart 4.

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

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

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

25.20 I. If the stationary source determined eligibility in the permit application, in whole
25.21 or in part, by calculating actual emissions as CO₂e of hydrofluorocarbons, perfluorocarbons,
25.22 nitrous oxide, and sulfur hexafluoride, purchased or used (whichever was stated in the permit
25.23 application), the owner or operator must:

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

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

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

26.8 (3) calculate and record, by the last day of each month, the 12-month rolling
26.9 sum of actual emissions as CO₂e of hydrofluorocarbons, perfluorocarbons, nitrous oxide,
26.10 and sulfur hexafluoride purchased or used (whichever was stated in the permit application)
26.11 for the previous 12 months, the date the calculation was made, and the calculation itself;
26.12 and

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

26.19 J. If the stationary source determined eligibility in the permit application, in whole
26.20 or in part, by calculating actual emissions as CO₂e of carbon dioxide, nitrous oxide, or
26.21 methane resulting from a chemical process such as fermentation, wastewater treatment, or
26.22 decomposition, the owner or operator must:

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

27.1 (2) calculate and record, by the last day of each month, the 12-month rolling
27.2 sum of actual emissions as CO₂e of carbon dioxide, nitrous oxide, or methane for the previous
27.3 12 months, the date the calculation was made, and the calculation itself; and

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

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

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

27.16 E. By April 1 of each calendar year, the owner or operator must calculate and
27.17 record, pursuant to subpart 4, the sum of actual emissions from the stationary source, and
27.18 the calculation itself for the previous calendar year. This calculation must include all
27.19 emissions units at the stationary source, except for insignificant activities under part
27.20 7007.1300, subparts 2 and 3, and the information required by subpart 4, item B, subitem
27.21 (3), if continuous emissions monitor (CEM) data is used in the calculation. The sum of
27.22 actual emissions for each pollutant from the stationary source must not exceed the emission
27.23 eligibility limits in item F for any pollutant. If the emission eligibility limit in item F is
27.24 exceeded for any pollutant, then the stationary source is no longer eligible under this subpart
27.25 and must comply with subpart 3 and have actual emissions for each pollutant below the

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

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

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

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

28.6 (3) PM emissions, 25 tons per year;

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

28.9 (5) VOC emissions, 25 tons per year;

28.10 (6) SO₂ emissions, 25 tons per year;

28.11 (7) NO_x emissions, 25 tons per year;

28.12 (8) CO emissions, 25 tons per year;

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

28.14 (10) CO₂ emissions, 25,000 tons per year.

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

28.16 Subp. 4. **Calculating actual emissions.** The owner or operator of a stationary source
28.17 may use a calculation worksheet provided by the commissioner for calculating actual
28.18 emissions under this part or may use the calculation methods under items A to E. The owner
28.19 or operator must calculate actual emissions for each emissions unit, except that similar
28.20 emissions units may be aggregated for emission calculation purposes. The owner or operator
28.21 of a stationary source must use the calculation method in item B instead of the calculation
28.22 method in item A if the data described in item B are available for the stationary source. The
28.23 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 CO₂e and VOC actual emissions. The owner or operator of a stationary source that uses material balance to calculate greenhouse gases as CO₂e and VOC actual emissions must determine total greenhouse gases as CO₂e 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 CO₂e. The amount of CO₂e from each individual gas comprising the pollutant greenhouse gases must be added together for the total tons per year of CO₂e.

$E = (a - b - c) \times (1 - d)$, 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

31.1 specifications for each control equipment parameter that is required to be monitored by the
31.2 approved test plan during the performance test, or within the operating parameters set by
31.3 the commissioner as the result of the most recent performance test conducted under parts
31.4 7017.2001 to 7017.2060, if those are more restrictive. The control equipment must have
31.5 been manufactured by a control equipment manufacturer as defined in part 7011.0060,
31.6 subpart 3. The monitoring parameters must indicate that the control equipment is operating
31.7 under the same conditions as during the performance test. If the commissioner determines
31.8 such monitoring parameters do not exist, then an emission factor may not be established
31.9 through a performance test under this part;

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

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

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

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

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

32.1 (7) in the event of a shutdown or breakdown of control or process equipment
32.2 or deviations that would endanger human health or the environment, comply with part
32.3 7019.1000;

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

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

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

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

33.1 A. the location of the emission points;

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

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

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

33.7 A. comply with the requirements of part 7007.1110; and

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

33.10 **7007.1143 CAPPED PERMIT; GENERAL REQUIREMENTS.**

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

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

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

33.18 **7007.1144 CAPPED PERMIT; PUBLIC PARTICIPATION.**

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

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

34.1 **7007.1146 CAPPED PERMIT; COMPLIANCE REQUIREMENTS.**

34.2 *[For text of subpart 1, see Minnesota Rules]*

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

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

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

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

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

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

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

34.21 **7007.1147 CAPPED PERMIT; CALCULATING ACTUAL EMISSIONS.**

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

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

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

35.3 $E = (a-b-c) \times (1-d)$, where:

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

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

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

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

35.22 *[For text of subpart 6, see Minnesota Rules]*

35.23 **7007.1148 AMBIENT AIR QUALITY ASSESSMENT.**

35.24 *[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

37.1	106467 1,4-Dichlorobenzene(p)	3
37.2	123911 1,4-Dioxane (1,4-Diethyleneoxide)	6
37.3	53963 2-Acetylaminofluorine	0.005
37.4	532274 2-Chloroacetophenone	0.06
37.5	79469 2-Nitropropane	1
37.6	540841 2,2,4-Trimethylpentane	5
37.7	1746016 2,3,7,8-Tetrachlorodibenzo-p-dioxin	6E-07
37.8	584849 2,4-Toluene diisocyanate	0.1
37.9	51285 2,4-Dinitrophenol	1
37.10	121142 2,4-Dinitrotoluene	0.02
37.11	94757 2,4-D, salts, esters (2,4-Dichlorophenoxy acetic acid)	10
37.12	95807 2,4-Toluene diamine	0.02
37.13	95954 2,4,5-Trichlorophenol	1
37.14	88062 2,4,6-Trichlorophenol	6
37.15	91941 3,3-Dichlorobenzidene	0.2
37.16	119904 3,3'-Dimethoxybenzidine	0.1
37.17	119937 3,3'-Dimethyl benzidine	0.008
37.18	92671 4-Aminobiphenyl	1
37.19	92933 4-Nitrobiphenyl	1
37.20	100027 4-Nitrophenol	5
37.21	101144 4,4-Methylene bis(2-chloroaniline)	0.2
37.22	101779 4,4'-Methylenedianiline	1
37.23	534521 4,6-Dinitro-o-cresol, and salts	0.1
37.24	75070 Acetaldehyde	9
37.25	60355 Acetamide	1
37.26	75058 Acetonitrile	4
37.27	98862 Acetophenone	1
37.28	107028 Acrolein	0.04
37.29	79061 Acrylamide	0.02

38.1	79107 Acrylic acid	0.6
38.2	107131 Acrylonitrile	0.3
38.3	107051 Allyl chloride	1
38.4	62533 Aniline	1
38.5	71432 Benzene	2
38.6	92875 Benzidine	0.0003
38.7	98077 Benzotrichloride	0.006
38.8	100447 Benzyl chloride	0.1
38.9	57578 beta-Propiolactone	0.1
38.10	92524 Biphenyl	10
38.11	117817 Bis(2-ethylhexyl)phthalate(DEHP)	5
38.12	542881 Bis(chloromethyl)ether	0.0003
38.13	75252 Bromoform	10
38.14	156627 Calcium cyanamide	10
38.15	133062 Captan	10
38.16	63252 Carbaryl	10
38.17	75150 Carbon disulfide	1
38.18	56235 Carbon tetrachloride	1
38.19	463581 Carbonyl sulfide	5
38.20	120809 Catechol	5
38.21	133904 Chloramben	1
38.22	57749 Chlordane	0.01
38.23	7782505 Chlorine	0.1
38.24	79118 Chloroacetic acid	0.1
38.25	108907 Chlorobenzene	10
38.26	510156 Chlorobenzilate	0.4
38.27	67663 Chloroform	0.9
38.28	107302 Chloromethyl methyl ether	0.1
38.29	126998 Chloroprene	1

39.1	1319773 Cresols/Cresylic acid (isomers and mixture)	1
39.2	95487 o-Cresol	1
39.3	108394 m-Cresol	1
39.4	106445 p-Cresol	1
39.5	98828 Cumene	10
39.6	334883 Diazomethane	1
39.7	132649 Dibenzofuran	5
39.8	72559 DDE (p,p'-Dichlorodipenyldichloroethylene)	0.01
39.9	84742 Dibutylphthalate	10
39.10	111444 Dichloroethyl ether (Bis(2-chloroethyl)ether)	0.06
39.11	62737 Dichlorvos	0.2
39.12	11422 Diethanolamine	5
39.13	64675 Diethyl sulfate	1
39.14	60117 Dimethyl aminoazobenzene	1
39.15	79447 Dimethyl carbamoyl chloride	0.02
39.16	68122 Dimethyl formamide	1
39.17	131113 Dimethyl phthalate	10
39.18	77781 Dimethyl sulfate	0.1
39.19	106898 Epichlorohydrin	2
39.20	140885 Ethyl acrylate	1
39.21	100414 Ethyl benzene	10
39.22	51796 Ethyl carbamate (Urethane)	0.8
39.23	75003 Ethyl chloride	10
39.24	106934 Ethylene dibromide (Dibromoethane)	0.1
39.25	107062 Ethylene dichloride (1,2-Dichloroethane)	0.8
39.26	107211 Ethylene glycol	10
39.27	151564 Ethylene imine (Aziridine)	0.003
39.28	75218 Ethylene oxide	0.1
39.29	96457 Ethylene thiourea	0.6

40.1	75343 Ethylidene dichloride (1,1-Dichloroethane)	1
40.2	50000 Formaldehyde	2
40.3	76448 Heptachlor	0.02
40.4	118741 Hexachlorobenzene	0.01
40.5	87683 Hexachlorobutadiene	0.9
40.6	77474 Hexachlorocyclopentadiene	0.1
40.7	67721 Hexachloroethane	5
40.8	822060 Hexamethylene,-1,6-diisocyanate	0.02
40.9	680319 Hexamethylphosphoramidate	0.01
40.10	110543 Hexane	10
40.11	302012 Hydrazine	0.004
40.12	7647010 Hydrochloric acid	10
40.13	7664393 Hydrogen fluoride	0.1
40.14	123319 Hydroquinone	1
40.15	78591 Isophorone	10
40.16	58899 Lindane (hexachlorocyclohexane, gamma)	0.01
40.17	108316 Maleic anhydride	1
40.18	67561 Methanol	10
40.19	72435 Methoxychlor	10
40.20	74839 Methyl bromide (Bromomethane)	10
40.21	74873 Methyl chloride (Chloromethane)	10
40.22	71556 Methyl chloroform (1,1,1-Trichloroethane)	10
40.23	60344 Methyl hydrazine	0.06
40.24	74884 Methyl iodide (Iodomethane)	1
40.25	108101 Methyl isobutyl ketone	10
40.26	624839 Methyl isocyanate	0.1
40.27	80626 Methyl methacrylate	10
40.28	1634044 Methyl tert-butyl ether	10
40.29	12108133 Methylcyclopentadienyl manganese	0.1

41.1	75092 Methylene chloride (Dichloromethane)	10
41.2	101688 Methylene diphenyl diisocyanate	0.1
41.3	91203 Naphthalene	10
41.4	98953 Nitrobenzene	1
41.5	62759 N-Nitrosodimethylamine	0.001
41.6	69892 N-Nitrosomorpholine	1
41.7	684935 N-Nitroso-N-methylurea	0.0002
41.8	121697 N,N-Dimethylaniline	1
41.9	90040 o-Anisidine	1
41.10	95534 o-Toluidine	4
41.11	56382 Parathion	0.1
41.12	82688 Pentachloronitrobenzene (Quintobenzene)	0.3
41.13	87865 Pentachlorophenol	0.7
41.14	108952 Phenol	0.1
41.15	75445 Phosgene	0.1
41.16	7803512 Phosphine	5
41.17	7723140 Phosphorous	0.1
41.18	85449 Phthalic anhydride	5
41.19	1336363 Polychlorinated biphenyls (Aroclors)	0.009
41.20	106503 p-Phenylenediamine	10
41.21	123386 Propionaldehyde	5
41.22	114261 Propoxur (Baygone)	10
41.23	78875 Propylene dichloride (1,2-Dichloropropane)	1
41.24	75569 Propylene oxide	5
41.25	91225 Quinoline	0.006
41.26	106514 Quinone	5
41.27	100425 Styrene	1
41.28	96093 Styrene oxide	1
41.29	127184 Tetrachloroethylene (Perchloroethylene)	10

42.1	7550450 Titanium tetrachloride	0.1
42.2	108883 Toluene	10
42.3	8001352 Toxaphene (chlorinated camphene)	0.01
42.4	79016 Trichloroethylene	10
42.5	121448 Triethylamine	10
42.6	1582098 Trifluralin	9
42.7	108054 Vinyl acetate	1
42.8	593602 Vinyl bromide (bromoethene)	0.6
42.9	75014 Vinyl chloride	0.2
42.10	75354 Vinylidene chloride (1,1-Dichloroethylene)	0.4
42.11	1330207 Xylenes (isomers and mixture)	10
42.12	108383 m-Xylenes	10
42.13	95476 o-Xylenes	10
42.14	106423 p-Xylenes	10
42.15	- Arsenic and inorganic arsenic compounds	0.005
42.16	7784421 Arsine	0.1
42.17	- Antimony compounds (except those specifically listed)*	5
42.18	1309644 Antimony trioxide	1
42.19	1345046 Antimony trisulfide	0.1
42.20	7783702 Antimony pentafluoride	0.1
42.21	28300745 Antimony potassium tartrate	1
42.22	- Beryllium compounds (except Beryllium salts)	0.008
42.23	- Beryllium salts	0.00002
42.24	- Cadmium compounds	0.01
42.25	130618 Cadmium oxide	0.01
42.26	- Chromium compounds (except Hexavalent and Trivalent)	5
42.27	- Hexavalent Chromium compounds	0.002
42.28	- Trivalent Chromium compounds	5
42.29	10025737 Chromic chloride	0.1

43.1	744084 Cobalt metal (and compounds, except those specifically	0.1
43.2	listed)*	
43.3	10210681 Cobalt carbonyl	0.1
43.4	62207765 Fluomine	0.1
43.5	- Coke oven emissions	0.03
43.6	- Cyanide compounds (except those specifically listed)*	5
43.7	143339 Sodium cyanide	0.1
43.8	151508 Potassium cyanide	0.1
43.9	- Glycol ethers (except those specifically listed)*	5
43.10	110805 2-Ethoxy ethanol	10
43.11	111762 Ethylene glycol monobutyl ether	10
43.12	108864 2-Methoxy ethanol	10
43.13	- Lead and compounds (except those specifically listed)*	0.01
43.14	75741 Tetramethyl lead	0.01
43.15	78002 Tetraethyl lead	0.01
43.16	7439965 Manganese and compounds (except those specifically listed)*	0.8
43.17	12108133 Methylcyclopentadienyl manganese	0.1
43.18	- Mercury compounds (except those specifically listed)*	0.01
43.19	10045940 Mercuric nitrate	0.01
43.20	748794 Mercuric chloride	0.01
43.21	62384 Phenyl mercuric acetate	0.01
43.22	- Elemental Mercury	0.01
43.23	- Mineral fiber compounds (except those specifically listed)*	a
43.24	1332214 Asbestos	a
43.25	- Erionite	a
43.26	- Silica (crystalline)	a
43.27	- Talc (containing asbestos from fibers)	a
43.28	- Glass wool	a
43.29	- Rock wool	a

44.1	- Slag wool	a
44.2	- Ceramic fibers	a
44.3	- Nickel compounds (except those specifically listed)*	1
44.4	13463393 Nickel Carbonyl	0.1
44.5	12035722 Nickel refinery dust	0.08
44.6	- Nickel subsulfide	0.04
44.7	- Polycyclic organic matter-POM (except those specifically	0.01
44.8	listed)*	
44.9	56553 Benz(a)anthracene	0.01
44.10	50328 Benzo(a)pyrene	0.01
44.11	205992 Benzo(b)fluoranthene	0.01
44.12	57976 7,12-Dimethylbenz(a)anthracene	0.01
44.13	225514 Benz(c)acridine	0.01
44.14	218019 Chrysene	0.01
44.15	53703 Dibenz(ah)anthracene	0.01
44.16	189559 1,2:7,8-Dibenzopyrene	0.01
44.17	193395 Indeno(1,2,3-cd)pyrene	0.01
44.18	- Dioxins & Furans (TCDD equivalent)**	-
44.19	7782492 Selenium and compounds (except those specifically listed)*	0.1
44.20	7488564 Selenium sulfide (mono and di)	0.1
44.21	7783075 Hydrogen selenide	0.1
44.22	10102188 Sodium selenite	0.1
44.23	13410010 Sodium selenate	0.1
44.24	99999918 Radionuclides (including radon)	b

44.25 * - For this chemical group, specific compounds or subgroups are named specifically in this
 44.26 table. For the remainder of the chemicals of the chemical group, a single de minimis value
 44.27 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]

47.1 **7009.0090 NATIONAL AMBIENT AIR QUALITY STANDARDS.**

47.2 The following national ambient air quality standards, established pursuant to section
47.3 109 of the Clean Air Act, are incorporated by reference. Interpretation of the standards and
47.4 measurements made to determine compliance with these standards must be performed as
47.5 specified in part 7009.0050:

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

47.7 **7009.1010 DEFINITIONS.**

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

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

47.10 Subp. 4a. [See repealer.]

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

47.12 **7011.0010 APPLICABILITY OF STANDARDS OF PERFORMANCE.**

47.13 *[For text of subpart 1, see Minnesota Rules]*

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

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

47.22 **7011.0070 LISTED CONTROL EQUIPMENT AND CONTROL EQUIPMENT**
47.23 **EFFICIENCIES.**

47.24 *[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 7017.2001 to 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

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

49.4 *[For text of subpart 3, see Minnesota Rules]*

49.5 **7011.0735 TABLE 2.**

49.6	Source Gas Volume, DSCFM ^a	Concentration GR/DSCF ^b
49.7	7,000	
49.8	or less	0.100
49.9	8,000	0.096
49.10	9,000	0.092
49.11	10,000	0.089
49.12	20,000	0.071
49.13	30,000	0.062
49.14	40,000	0.057
49.15	50,000	0.053
49.16	60,000	0.050
49.17	80,000	0.045
49.18	100,000	0.042
49.19	120,000	0.040
49.20	140,000	0.038
49.21	160,000	0.036
49.22	180,000	0.035
49.23	200,000	0.034
49.24	300,000	0.030
49.25	400,000	0.027
49.26	500,000	0.025

50.1	600,000	0.024
50.2	800,000	0.021
50.3	1,000,000	
50.4	or more	0.020

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

50.7 $c = 1.7627 \times FR_{\text{corrected}}^{-0.3241}$

50.8 where:

50.9 c = concentration limit in gr/dscf

50.10 $FR_{\text{corrected}}$ = gas volume in dscfm

50.11 ^aDry standard cubic feet per minute

50.12 ^bGrains per dry standard cubic foot.

50.13 **7011.1201 DEFINITIONS.**

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

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

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

50.21 Subp. 14. **Class II waste combustor.** "Class II waste combustor" means that the
 50.22 design capacity for a waste combustor unit is 15×10^6 Btu/hr or more and less than 93.75
 50.23 $\times 10^6$ Btu/hr, the waste combustor unit burns mixed municipal solid waste, and construction

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

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

51.4 **7011.1215 APPLICABILITY OF STANDARDS OF PERFORMANCE FOR WASTE**
51.5 **COMBUSTORS.**

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

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

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

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

51.13 **7011.1225 STANDARDS OF PERFORMANCE FOR WASTE COMBUSTORS.**

51.14 *[For text of subpart 1, see Minnesota Rules]*

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

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

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

51.21 **7011.1229 PERFORMANCE STANDARDS FOR CLASS II WASTE COMBUSTORS.**

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

52.1 A. the emission limits, notification, monitoring, testing, record-keeping, and
52.2 reporting requirements of the new source performance standards incorporated in part
52.3 7011.1293;

52.4 B. subpart 2; and

52.5 C. the following requirements:

52.6 (1) parts 7011.1240, subpart 1; 7011.1281; 7011.1282; 7011.1283; and
52.7 7011.1284 if the owner or operator chooses to comply with the operator certification
52.8 requirements of Code of Federal Regulations, title 40, section 60.54b, as amended, by
52.9 obtaining certification through the agency;

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

52.11 (3) the industrial solid waste management plan requirements under part
52.12 7011.1250;

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

52.15 (5) the reporting and response requirements under part 7011.1265, subpart
52.16 11, if an exceedance is measured during the conduct of a performance test; and

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

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

52.23 Size Class II

52.24 Particulate matter

53.1	Filterable	0.015 gr/dscf
53.2	The sum of filterable and organic	
53.3	condensable	0.020 gr/dscf
53.4	PCDD/PCDF	
53.5	(total)	30 ng/dscm
53.6	Acid gases	
53.7	HCl	90% control or 25 ppm
53.8	SO ₂	80% control or 30 ppm
53.9	Carbon monoxide	
53.10	Modular	50 ppm
53.11	Mass burn or fluidized bed	100 ppm
53.12	RDF stoker	150 ppm
53.13	Opacity	10%
53.14	NO _x	NA
53.15	Mercury (short-term)	
53.16	Modular	100 µg/dscm or 85% removal
53.17	Mass Burn	100 µg/dscm or 85% removal
53.18	RDF (90-day test interval)	50 µg/dscm or 85% removal
53.19	FBC	100 µg/dscm or 85% removal
53.20	Mercury (long-term)	
53.21	Modular	60 µg/dscm or 85% removal
53.22	Mass burn	60 µg/dscm or 85% removal
53.23	RDF (90-day test interval)	30 µg/dscm or 85% removal
53.24	FBC	60 µg/dscm or 85% removal
53.25	RDF (12-month test interval)	30 µg/dscm or 85% removal
53.26	7011.1235 REQUIREMENTS OF CLASS IV WASTE COMBUSTORS.	
53.27	<i>[For text of subparts 1 to 2a, see Minnesota Rules]</i>	
53.28	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:

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

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 O₂, 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 O₂ 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.

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

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

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

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

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

57.10 B. Fugitive emissions from ash handling do not need to be tested more frequently
57.11 than the initial test required in item A, subitem (1). If three annual performance tests for a
57.12 three-year period show compliance with standards in part 7011.1225, the owner or operator
57.13 may continue to conduct annual testing or may choose to conduct performance tests every
57.14 2-1/2 years, except as required by item A, subitem (3). At a minimum, a performance test
57.15 must be conducted every 2-1/2 years, but no more than 30 months following the previous
57.16 compliance test. If a performance test indicates noncompliance with applicable standards,
57.17 the owner or operator must resume annual testing for three years for that pollutant for which
57.18 noncompliance was demonstrated. If three annual performance tests for the three-year period
57.19 show compliance with standards in part 7011.1225, the owner or operator may again conduct
57.20 performance testing every 2-1/2 years.

57.21 C. The owner or operator of a class C waste combustor that is not burning RDF
57.22 may implement testing for mercury not less than once every three years or according to
57.23 federal applicable requirements, whichever is more stringent, if the facility has demonstrated
57.24 that mercury emissions have been below 50 percent of the facility's permitted long-term
57.25 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]

61.1 **7011.3470 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
61.2 **STANDARDS; CALCINERS AND DRYERS IN THE MINERAL INDUSTRY.**

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

61.6 **7011.3515 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
61.7 **STANDARDS; MUNICIPAL SOLID WASTE LANDFILLS EXISTING AFTER**
61.8 **JULY 17, 2014.**

61.9 *[For text of subpart 1, see Minnesota Rules]*

61.10 Subp. 2. **Incorporation by reference.** Code of Federal Regulations, title 40, part 60,
61.11 subpart XXX, as amended, entitled "Standards of Performance for Municipal Solid Waste
61.12 Landfills that Commenced Construction, Reconstruction, or Modification after July 17,
61.13 2014," is incorporated by reference.

61.14 **7011.3530 INCORPORATION BY REFERENCE; FEDERAL PLAN**
61.15 **REQUIREMENTS FOR MUNICIPAL SOLID WASTE LANDFILLS THAT**
61.16 **COMMENCED CONSTRUCTION ON OR BEFORE JULY 17, 2014, AND HAVE**
61.17 **NOT BEEN MODIFIED OR RECONSTRUCTED SINCE JULY 17, 2014.**

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

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

62.1 **7017.0200 INCORPORATION BY REFERENCE; COMPLIANCE ASSURANCE**
62.2 **MONITORING.**

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

62.5 **7017.1060 PRECERTIFICATION TEST REQUIREMENTS.**

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

62.11 *[For text of subpart 2, see Minnesota Rules]*

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

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

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

63.1 **7019.1000 NOTIFICATIONS OF DEVIATIONS ENDANGERING HUMAN**
63.2 **HEALTH OR THE ENVIRONMENT; SHUTDOWNS AND BREAKDOWNS.**

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

63.11 A. the cause of the deviation;

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

63.13 C. whether or not the deviation has been corrected;

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

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

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

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

64.4 *[For text of item B, see Minnesota Rules]*

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

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

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

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

64.21 *[For text of item B, see Minnesota Rules]*

64.22 C. the facility directly and continuously monitors the emissions with a continuous
64.23 emissions monitor or similar direct monitoring device that demonstrates emissions do not
64.24 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:

68.1 $E = (A - B - C) * (1 - CE)$

68.2 Where:

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

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

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

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

68.20 **7019.3070 SO₂ MATERIAL BALANCE.**

68.21 If the methods in parts 7019.3040 and 7019.3050 are unavailable to the owner or
68.22 operator of an emission reporting facility, the owner or operator may calculate sulfur dioxide
68.23 emissions using the SO₂ material balance method described in this part. To use this method,
68.24 the owner or operator must measure the sulfur content of the fuel and assume that all the
68.25 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).

71.1 **7019.3100 FACILITY PROPOSAL.**

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

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

71.6 B. The proposal must include:

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

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

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

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

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

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

- 72.1 **REPEALER.** Minnesota Rules, parts 7007.0100, subparts 3, 9b, 9c, 9d, 9e, and 9f;
72.2 7007.1102; 7007.1105; 7007.1107; 7009.1010, subpart 4a; 7011.1210; 7011.1235, subpart
72.3 3; 7011.3525; and 7019.1000, subpart 6, are repealed.

Office of the Revisor of Statutes

Administrative Rules



TITLE: Adopted Permanent Rules: Air Quality Housekeeping Amendments

AGENCY: Minnesota Pollution Control Agency

REVISOR ID: R-4678

MINNESOTA RULES: Chapters 7002, 7005, 7007, 7009, 7011, 7017, and 7019

INCORPORATIONS BY REFERENCE: [See attached]

The attached rules are approved for
filing with the Secretary of State

Cindy K. Maxwell

Cindy K. Maxwell
Assistant Deputy Revisor

INCORPORATIONS BY REFERENCE:

Part 7005.0100, subparts 9b and 10a: 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), 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.

Part 7005.0100, subpart 10a: Factor Information Retrieval (FIRE) Data System, Version 6.25, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, as amended, is incorporated by reference, is available at <https://cfpub.epa.gov/webfire>, and is subject to frequent change.

Part 7005.0100, subpart 45: United States Environmental Protection Agency's Complete List of VOC Exemption rules, as amended, 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.

Part 7007.1125, subpart 4: 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.

Part 7007.1148, subpart 3: 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.

Part 7007.1300, subpart 5: 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.

Part 7011.0120, subpart 2: Guideline on Air Quality Models, EPA-450/2-78-027R, United States Environmental Protection Agency (July 1986), as amended by supplemental updates, is incorporated by reference, is available at <https://nepis.epa.gov>, and is subject to frequent change.