

Office of the Revisor of Statutes

Administrative Rules



TITLE: Adopted Permanent Rules: Federal Performance and Other Air Quality Standards

AGENCY: Pollution Control Agency

REVISOR ID: R-4452

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

INCORPORATIONS BY REFERENCE: [See attached]



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

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Assistant Deputy Revisor

202009

INCORPORATIONS BY REFERENCE:

Part 7011.0561, subpart 10:

The Annual Book of American Society for Testing and Materials International (ASTM) methods D2234/D2234M (Standard Practice for Collection of a Gross Sample of Coal), D2013/D2013M (Standard Practice for Preparing Coal Samples for Analysis), D5865 (Standard Test Method for Gross Calorific Value of Coal and Coke), D3173 (Standard Test Method for Moisture in the Analysis Sample of Coal and Coke), and D6722 (Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis). These methods are published in the Annual Book of ASTM Standards, Volume 05.06, Gaseous Fuels; Coal and Coke; Catalysts; Bioenergy and Industrial Chemicals from Biomass (2017). These documents are available through the Minitex interlibrary loan system and are subject to frequent change.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA SW-846, Method 7471 Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique). The document is available at <https://www.epa.gov/hw-sw846/sw-846-compendium> and is subject to frequent change.

Part 7011.0865:

California Environmental Protection Agency, Air Resources Board, Vapor Recovery Certification Procedure CP-201, Certification Procedure for Vapor Recovery Systems at Dispensing Facilities, April 23, 2015. This publication is available at <https://ww2.arb.ca.gov/our-work/programs/vapor-recovery/vapor-recovery-certification-and-test-procedures> and is not subject to frequent change.

Part 7011.1205:

Annual Book of American Society for Testing and Materials Standards (ASTM), Volume 05.06, Gaseous Fuels; Coal and Coke; Catalysts; Bioenergy and Industrial Chemicals from Biomass (2017). This publication is available through the Minitex interlibrary loan system and is not subject to frequent change.

Test Methods for Evaluating Solid Waste, SW-846, United States Environmental Protection Agency. This publication is available at <https://www.epa.gov/hw-sw846/sw-846-compendium> and is subject to frequent change.

Standard for the Qualification and Certification of Resource Recovery Facility Operators, ASME QRO-1-2005 (2005, reaffirmed 2015); Power Test Codes, Steam Generating Units, PTC 4.1-1974 (reaffirmed 1991); and Application: Part II of Fluid Meters, 6th Edition 1971, Interim Supplement 19.5 on Instruments and Apparatus (1972). This material is available from the American Society of Mechanical Engineers (ASME), 345 East 47th Street, New York, New York 10017, or through the Minitex interlibrary loan system and is not subject to frequent change.

Part 7011.9925, subpart 3:

ASTM D737-18, Standard Test Method for Air Permeability of Textile Fabrics (2018), published by ASTM International. This publication is available through the Minitex interlibrary loan system and is not subject to frequent change.

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1.1 **Pollution Control Agency**

1.2 **Adopted Permanent Rules: Federal Performance and Other Air Quality Standards**

1.3 **7005.0100 DEFINITIONS.**

1.4 Subpart 1. **Scope.** As used in chapters 7007, 7008, 7009, 7011, 7017, 7019, 7025,
1.5 7027, and 7030 and parts 7023.0100 to 7023.0120, the terms in this part have the meanings
1.6 given them except as expressly provided in a specific rule.

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

1.8 Subp. 1b. **Administrator.** "Administrator" means the administrator of the United
1.9 States Environmental Protection Agency or the administrator's designee.

1.10 Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency. The
1.11 commissioner is the designee of the agency.

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

1.13 Subp. 3. **Alternative method.** "Alternative method" means a method of sampling and
1.14 analyzing for an air pollutant that is not a reference or equivalent method but that has been
1.15 demonstrated to the commissioner's satisfaction to, in specific cases, produce results adequate
1.16 for its determination of compliance.

1.17 Subp. 3a. **Begin actual construction.** "Begin actual construction" means initiation
1.18 of permanent, physical, on-site construction, reconstruction, or modification activities on
1.19 an emissions unit. Activities include installing building supports and foundations, laying
1.20 underground pipework, and constructing permanent storage structures. Activities do not
1.21 include site clearing and grading or entering into binding agreements or contractual
1.22 obligations. Regarding a change in method of operating, this term refers to those on-site
1.23 activities, other than preparatory activities, that mark the initiation of the change. Owners
1.24 or operators that undertake these activities before obtaining any required permits do so at
1.25 their own risk; a permit may not be issued or may not contain the terms the applicant desires.

2.1 *[For text of subparts 3b to 4b, see Minnesota Rules]*

2.2 Subp. 4c. **Cementitious material.** "Cementitious material" means a powdered
2.3 substance that consists of any combination of the following:

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

2.5 Subp. 4d. **Concrete.** "Concrete" means a material that consists of a coarse and fine
2.6 aggregate bound by a paste of cementitious material and water, with admixtures added to
2.7 achieve various properties and that sets into a hard and rigid substance.

2.8 *[For text of subparts 4e to 4g, see Minnesota Rules]*

2.9 Subp. 5. **Construction.** "Construction" means fabricating, erecting, or installing an
2.10 emission facility, emissions unit, or stationary source. Construction also includes excavating,
2.11 blasting, removing rock and soil, and backfilling unless the commissioner determines that
2.12 these activities are of minimal cost, do not significantly alter the site, and are not permanent
2.13 in nature. Construction does not include site clearing or grading.

2.14 *[For text of subparts 6 to 7a, see Minnesota Rules]*

2.15 Subp. 8. **Control equipment.** "Control equipment" means an "air contaminant
2.16 treatment facility" or a "treatment facility" as defined in Minnesota Statutes, section 116.06,
2.17 subdivision 3.

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

2.19 Subp. 9a. [See repealer.]

2.20 *[For text of subparts 9b to 10d, see Minnesota Rules]*

2.21 Subp. 10e. **Environmental Protection Agency or EPA.** "Environmental Protection
2.22 Agency" or "EPA" means the United States Environmental Protection Agency.

3.1 Subp. 11. **Equivalent method.** "Equivalent method" means a method of sampling
3.2 and analyzing for an air pollutant when the method has been demonstrated to the
3.3 commissioner's satisfaction to have, under specified conditions, a consistent and
3.4 quantitatively known relationship to the reference methods in Code of Federal Regulations,
3.5 title 40, part 60, appendix A, as amended; part 61, appendix B, as amended; and part 51,
3.6 appendix M, as amended.

3.7 Subp. 11a. **Existing facility.** "Existing facility" means an emission facility at which
3.8 construction, modification, or reconstruction began before the effective date of the applicable
3.9 state air pollution control rule.

3.10 Subp. 11b. **Federally enforceable.** "Federally enforceable" means enforceable by the
3.11 administrator of the United States Environmental Protection Agency. Federally enforceable
3.12 limitations, conditions, and requirements include requirements in or developed according
3.13 to Code of Federal Regulations, title 40, parts 60, 61, and 63, requirements within any
3.14 applicable state implementation plan, and any permit requirements established according
3.15 to Code of Federal Regulations, title 40, section 51.166 or 52.21, or Code of Federal
3.16 Regulations, title 40, part 51, subpart I.

3.17 *[For text of subparts 11c to 23b, see Minnesota Rules]*

3.18 Subp. 24. **Minneapolis-Saint Paul Air Quality Control Region.** "Minneapolis-Saint
3.19 Paul Air Quality Control Region" means the area encompassed by the boundaries of the
3.20 following counties: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington.
3.21 See Code of Federal Regulations, title 40, part 81.27.

3.22 *[For text of subparts 24a and 25, see Minnesota Rules]*

3.23 Subp. 25a. **National emission standard for hazardous air pollutants.** "National
3.24 emission standard for hazardous air pollutants" means a standard adopted by the administrator
3.25 of the United States Environmental Protection Agency under the Clean Air Act, United

4.1 States Code, title 42, section 7412, as amended, including standards still in effect according
4.2 to the savings clause that was enacted by the 1990 Clean Air Act amendments and codified
4.3 at United States Code, title 42, section 7412(q).

4.4 Subp. 25b. **New facility.** "New facility" means an emission facility on which
4.5 construction, modification, or reconstruction began after the effective date of the applicable
4.6 new source performance standard or the applicable state air pollution control rule.

4.7 Subp. 26. **New source performance standard.** "New source performance standard"
4.8 means a standard of performance adopted by the administrator of the United States
4.9 Environmental Protection Agency under the Clean Air Act, United States Code, title 42,
4.10 section 7411, as amended.

4.11 *[For text of subpart 27, see Minnesota Rules]*

4.12 Subp. 28. **One-hour period.** "One-hour period" means any 60-minute period beginning
4.13 on the hour.

4.14 *[For text of subparts 29 to 30b, see Minnesota Rules]*

4.15 Subp. 31. **Particulate matter.** "Particulate matter" means material, except water, that
4.16 exists at standard conditions in a finely divided form as a liquid or solid as measured by an
4.17 applicable reference method, or an equivalent or alternative method.

4.18 *[For text of subparts 31a to 34, see Minnesota Rules]*

4.19 Subp. 35. **Person.** "Person" has the meaning given in Minnesota Statutes, section
4.20 116.06, subdivision 17.

4.21 *[For text of subparts 35a to 36, see Minnesota Rules]*

4.22 Subp. 36a. **Secondary emissions.** "Secondary emissions" means emissions that would
4.23 occur as a result of the construction or operation of a major stationary source or major
4.24 modification, but do not come from the major stationary source or major modification itself.

5.1 Secondary emissions include emissions from any off-site support facility that would not be
5.2 constructed or increase its emissions except as a result of the construction or operation of
5.3 the major stationary source or major modification. Secondary emissions do not include any
5.4 emissions that come directly from a mobile source, such as emissions from the tailpipe of
5.5 a motor vehicle, from a train, or from a vessel in transit.

5.6 In calculating the net increase in emissions from a particular physical change or change
5.7 in the method of operation, secondary emissions must not be included unless they are
5.8 specific, well defined, quantifiable, and impact the same general area as the stationary source
5.9 or modification that causes the secondary emissions.

5.10 *[For text of subparts 37 to 41, see Minnesota Rules]*

5.11 Subp. 42. **Standard of performance.** "Standard of performance" means a restriction
5.12 on the amount of air pollutants that may be emitted by an emission facility.

5.13 *[For text of subpart 42a, see Minnesota Rules]*

5.14 Subp. 42b. [See repealer.]

5.15 Subp. 42c. **Stationary source.** "Stationary source" means an assemblage of all
5.16 emissions units and emission facilities that belong to the same industrial grouping, are
5.17 located at one or more contiguous or adjacent properties, and are under the control of the
5.18 same person (or persons under common control). Emissions units or emission facilities must
5.19 be considered as part of the same industrial grouping if they belong to the same major group
5.20 as described in the Standard Industrial Classification Manual, incorporated by reference
5.21 under part 7045.0065.

5.22 *[For text of subparts 43 and 44, see Minnesota Rules]*

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

6.1 *[For text of items A to JJJ, see Minnesota Rules]*

6.2 **7007.0300 SOURCES NOT REQUIRED TO OBTAIN A PERMIT.**

6.3 Subpart 1. **No permit required.** The owners and operators of the following stationary
6.4 sources are not required to obtain a permit under parts 7007.0100 to 7007.1850:

6.5 *[For text of item A, see Minnesota Rules]*

6.6 B. notwithstanding parts 7007.0200 and 7007.0250, any stationary source that
6.7 would be covered by a permit solely because it is subject to one or more of the following
6.8 new source performance standards:

6.9 *[For text of subitems (1) to (4), see Minnesota Rules]*

6.10 (5) Code of Federal Regulations, title 40, part 60, subpart IIII, Standards of
6.11 Performance for Stationary Compression Ignition Internal Combustion Engines (incorporated
6.12 by reference at part 7011.2305), if all engines subject to this standard at the stationary source
6.13 each have a displacement less than 30 liters per cylinder and did not rely on performance
6.14 testing of the affected unit to demonstrate compliance with the standard;

6.15 (6) Code of Federal Regulations, title 40, part 60, subpart JJJJ, Standards of
6.16 Performance for Stationary Spark Ignition Internal Combustion Engines (incorporated by
6.17 reference at part 7011.2310), if all engines did not rely on performance testing of the affected
6.18 unit to demonstrate compliance with the standard; and

6.19 (7) Code of Federal Regulations, title 40, part 60, subpart QQQQ, Standards
6.20 of Performance for New Residential Hydronic Heaters and Forced Air Furnaces (incorporated
6.21 by reference at part 7011.2960);

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

6.23 Subp. 2. [Repealed, 21 SR 165]

7.1 **7007.0800 PERMIT CONTENT.**

7.2 Subpart 1. **Scope.** The commissioner must include the permit conditions specified in
7.3 this part in all permits, except where the requirement states that it applies only to part 70
7.4 permits or only to state permits. The permit must specify and reference the origin of and
7.5 the authority for each term or condition and identify any difference in form from the
7.6 requirement giving rise to the condition. Nothing in this part limits the commissioner's
7.7 authority to put additional or more-stringent terms in a permit, to conduct inspections, or
7.8 to request information.

7.9 Subp. 2. **Emission limitations and standards.** The permit must:

7.10 *[For text of items A and B, see Minnesota Rules]*

7.11 C. state that, where another applicable requirement of the act is more stringent
7.12 than any applicable requirement of regulations adopted under Title IV of the act (Acid
7.13 Deposition Control), both provisions are incorporated into the permit and are enforceable
7.14 by the administrator; and

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

7.16 Subp. 3. **Emissions units covered by permit.** The permit must cover any emissions
7.17 unit within the stationary source for which there is an applicable requirement, and any unit
7.18 that the commissioner believes should be covered to protect human health and the
7.19 environment. However, if a stationary source is not a major source and the sole reason it is
7.20 required to have a permit is because it is subject to federal standards described under part
7.21 7007.0250, subpart 2, then the permit must only cover emissions units regulated by those
7.22 federal standards. The permit must include applicable requirements for fugitive emissions
7.23 in the same manner as stack emissions, regardless of whether the source category in question
7.24 is included in the list of sources contained in the definition of major source in part 7007.0200,
7.25 subpart 2.

8.1 Subp. 4. **Monitoring.** The commissioner must include the monitoring requirements
8.2 in this subpart in all permits.

8.3 A. The permit must require the permittee to comply with all emissions monitoring
8.4 and analysis procedures or test methods required under the applicable requirements, including
8.5 any procedures and methods adopted under section 114(a)(3) or 504(b) of the act.

8.6 B. For part 70 permits, where the applicable requirements do not require periodic
8.7 testing or instrumental or noninstrumental monitoring (which may consist of record keeping
8.8 designed to serve as monitoring), the permit must require the permittee to conduct periodic
8.9 monitoring sufficient to determine whether the stationary source is in compliance with
8.10 applicable requirements. The monitoring requirements must be designed to yield reliable
8.11 data from the relevant period that are representative of the stationary source's operation and
8.12 must require the permittee to use terms, test methods, units, averaging periods, and other
8.13 statistical conventions that are consistent with the emissions limitations and standards
8.14 contained in the permit and with other applicable requirements. Record-keeping provisions
8.15 may be sufficient to meet the requirements of this item.

8.16 C. For state permits, where periodic testing or instrumental or noninstrumental
8.17 monitoring (which may consist of record keeping designed to serve as monitoring) is not
8.18 required by item A, the permit must include monitoring requirements sufficient to determine
8.19 whether a stationary source is in compliance with applicable requirements, if the
8.20 commissioner finds that the monitoring is warranted by:

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

8.22 D. As necessary, the permit must require the permittee to install, use, and maintain
8.23 monitoring equipment or use monitoring methods.

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

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

9.6 *[For text of subitems (1) to (4), see Minnesota Rules]*

9.7 (5) the results of the analyses; and

9.8 (6) the operating conditions existing at the time of sampling or measurement;

9.9 B. a requirement that the permittee maintain records describing any modification
9.10 made at the stationary source under parts 7007.1250 and 7007.1350, as required by those
9.11 provisions, but not otherwise regulated under the permit, and the emissions resulting from
9.12 those changes;

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

9.19 D. a requirement that the permittee retain copies of deviation reports required by
9.20 subpart 6 for five years, or longer if requested by the commissioner, from the date the report
9.21 is submitted to the commissioner.

10.1 **Subp. 6. Reporting.**

10.2 A. The permit must require the permittee to submit to the commissioner the reports
10.3 described in this subpart. The permit must require that all reports be certified by a responsible
10.4 official, consistent with part 7007.0500, subpart 3.

10.5 B. Deviation reporting time frames are described in subitems (1) and (2).

10.6 (1) For deviations that endanger human health or the environment, the permit
10.7 must require the permittee to notify the commissioner as required in part 7019.1000, subpart
10.8 1.

10.9 (2) For all other deviations, the permit must require the permittee to submit
10.10 a deviation report, on a form approved by the commissioner, at least semiannually. The
10.11 report is due whether or not a deviation occurred during the reporting period. The midyear
10.12 deviations report, covering deviations that occurred from January 1 to June 30, is due by
10.13 July 30 each year and the end-of-year deviations report, covering deviations that occurred
10.14 from July 1 to December 31, is due by January 30 each year.

10.15 C. All part 70 permits must require the permittee to submit progress reports at
10.16 least every six months for any stationary source required to have a compliance schedule
10.17 under part 7007.0500, subpart 2, item K, subitem (5). The progress reports must contain
10.18 the deadlines for achieving the activities, milestones, or compliance required in the
10.19 compliance schedule and dates when the activities, milestones, or compliance were actually
10.20 achieved. If any deadlines in the schedule of compliance were not or will not be met, the
10.21 report must note that, explain why, and include any preventive or corrective measures that
10.22 have been or will be adopted as a result.

10.23 D. The permit must require submitting an annual compliance certification by
10.24 January 31 each year. The certification must be on a form approved by the commissioner
10.25 and must contain the following:

- 11.1 (1) the facility name and permit number;
- 11.2 (2) identification of the calendar year that the report covers;
- 11.3 (3) identification of deviation reports covering the calendar year including
- 11.4 the name of report (i.e., DRF-1 or DRF-2), the period covered by the report, and the date
- 11.5 of the cover letter accompanying the report;
- 11.6 (4) identification of any noncompliance with applicable requirements or a
- 11.7 permit condition that has not been identified in deviation reports covering the calendar year;
- 11.8 (5) a certification that meets the requirements of part 7007.0500, subpart 3;
- 11.9 (6) the signature and title of a responsible official; and
- 11.10 (7) additional requirements as may be specified under sections 114(a)(3) and
- 11.11 504(b) of the act.

11.12 E. To make the compliance certifications under item D, the owner or operator is

11.13 allowed to use the following:

- 11.14 (1) a monitoring protocol approved for the source according to Code of
- 11.15 Federal Regulations, title 40, part 64, as amended; and
- 11.16 (2) any other monitoring method incorporated into a permit issued under this
- 11.17 chapter.

11.18 F. For deviations caused by emergencies, as defined in part 7007.1850, the

11.19 permittee may assert an affirmative defense only if it meets all the requirements of part

11.20 7007.1850.

11.21 **Subp. 7. Stationary sources with allowances.**

11.22 A. For affected sources, the commissioner must include a permit condition

11.23 prohibiting emissions exceeding any allowances that the owners and operators of a stationary

12.1 source lawfully hold under Title IV of the act or the regulations adopted thereunder, except
12.2 as provided in items B to D.

12.3 B. No permit amendment is required for increases in emissions that are authorized
12.4 by allowances acquired under the acid rain program, provided that the increases do not
12.5 require a permit amendment under any other applicable requirement.

12.6 C. There is no limit on the number of allowances held by the owners and operators
12.7 of a stationary source. The owners and operators of a stationary source must not, however,
12.8 use allowances as a defense to noncompliance with any other applicable requirement.

12.9 D. Any lawfully held allowance must be accounted for according to the procedures
12.10 established in Code of Federal Regulations, title 40, part 73, as amended.

12.11 Subp. 8. **Fee requirement.** The permit must require payment of annual fees by owners
12.12 or operators of a stationary source required to pay annual fees due under part 7002.0025.

12.13 Subp. 9. **Additional compliance requirements.** All permits must contain the following
12.14 elements with respect to compliance:

12.15 A. inspection and entry requirements that require that, upon presentation of
12.16 credentials and other documents as may be required by law, the permittee must allow the
12.17 commissioner, or the commissioner's authorized representative or agent, to:

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

12.19 (4) sample or monitor any substances or parameters at any location:

12.20 (a) at reasonable times, to ensure compliance with the permit or applicable
12.21 requirements; or

12.22 (b) as otherwise authorized by the act or state law;

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

13.1 C. provisions establishing the permit shield described in part 7007.1800.

13.2 Nothing in this subpart limits the commissioner's authority under Minnesota Statutes,
13.3 section 116.091, section 114 of the act (Record keeping, Inspections, Monitoring, and Entry),
13.4 or other law.

13.5 Subp. 10. **Emissions trading.**

13.6 A. If requested by a permit applicant, the commissioner must include provisions
13.7 allowing the permittee to trade emissions increases and decreases that occur within the
13.8 permitted facility. No Title I modification may be made using this provision, and the trade
13.9 may not result in the exceedance of any facility-wide emission limit in the permit. The
13.10 commissioner must make trading available to the permittee only if the commissioner
13.11 determines that the following are true:

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

13.13 (2) the stationary source's total emissions can be limited equally well, and
13.14 compliance with applicable requirements may still be ensured, by allowing the proposed
13.15 trading scenario; and

13.16 *[For text of subitem (3), see Minnesota Rules]*

13.17 B. The permit must require the permittee to provide the commissioner in writing
13.18 at least seven working days before making the emissions trade the written notification
13.19 described in this item. The notice must:

13.20 (1) state when the trade will be made;

13.21 (2) describe the change in emissions that will result; and

13.22 (3) describe how these increases and decreases in emissions will comply with
13.23 the terms and conditions of the permit.

14.1 The permittee and the commissioner must each append the notice to their copy of the
14.2 stationary source's permit.

14.3 Subp. 11. **Alternative operating scenarios.** The commissioner must include in the
14.4 permit terms and conditions allowing for reasonably anticipated alternative operating
14.5 scenarios identified by the stationary source in its application. The terms and conditions
14.6 must:

14.7 *[For text of item A, see Minnesota Rules]*

14.8 B. ensure that the operation under each alternative operating scenario complies
14.9 with all applicable requirements and the requirements of parts 7007.0100 to 7007.1850.

14.10 Subp. 12. **Operation in more than one location.** If requested by the applicant, the
14.11 permit may allow a stationary source to be operated in more than one location during the
14.12 course of the permit. No affected source is allowed this option. If more than one location
14.13 is authorized, the permit must include the following:

14.14 *[For text of item A, see Minnesota Rules]*

14.15 B. conditions that will ensure compliance with all applicable requirements at all
14.16 authorized locations;

14.17 C. requirements that the owner or operator notify the commissioner at least ten
14.18 days in advance of each change in location, providing the exact location where the source
14.19 will operate for all part 70 permits and at least 48 hours in advance of each change in location
14.20 for all other state permits; and

14.21 D. conditions that ensure compliance with all other provisions of parts 7007.0100
14.22 to 7007.1850.

14.23 Subp. 13. **Permit duration.** Each permit must specify the duration of the permit or
14.24 state that the permit is nonexpiring.

15.1 Subp. 14. **Operation of control equipment.** If the commissioner determines that the
15.2 provisions would substantially improve the likelihood of future permit compliance, the
15.3 permit may specify operating and maintenance requirements for each piece of control
15.4 equipment located at the stationary source or require the permittee to maintain an operation
15.5 and maintenance plan on site.

15.6 Subp. 15. **Terms to include in reissuance.** The permit must indicate the terms that
15.7 must be included in any reissuance of the permit under part 7007.0450, subpart 3.

15.8 Subp. 16. **General conditions.** A permit issued by the commissioner under parts
15.9 7007.0100 to 7007.1850 must include the general conditions in items A to O, either expressly
15.10 or by reference to this subpart.

15.11 *[For text of item A, see Minnesota Rules]*

15.12 B. The permittee must comply with all conditions of the permit. Any permit
15.13 noncompliance constitutes a violation of state law and, if the provision is federally
15.14 enforceable, of the act. Violation is grounds for:

15.15 (1) enforcement action by the commissioner or the EPA;

15.16 (2) permit termination, revocation and reissuance, or amendment; or

15.17 (3) denial of a permit reissuance application.

15.18 C. It is not a defense for a permittee in an enforcement action that it would have
15.19 been necessary to halt or reduce the permitted activity to maintain compliance with the
15.20 conditions of this permit.

15.21 D. This permit may be reopened and amended or revoked for cause as provided
15.22 in parts 7007.1600 to 7007.1700. The filing of a request by the permittee for a permit
15.23 amendment, revocation and reissuance, or termination or filing of a notification of planned

16.1 changes or anticipated noncompliance does not stay any permit condition, except as
16.2 specifically provided in part 7007.1450, subpart 7.

16.3 E. This permit does not convey any property rights of any sort or any exclusive
16.4 privilege.

16.5 F. The permittee must furnish to the commissioner, within a reasonable time, any
16.6 information that the commissioner may request in writing to determine whether cause exists
16.7 for reopening and amending or revoking the permit or to determine compliance with the
16.8 permit. Upon request, the permittee must also furnish to the commissioner copies of records
16.9 required to be kept by the permittee.

16.10 G. The commissioner's issuance of a permit does not release the permittee from
16.11 any liability, penalty, or duty imposed by Minnesota or federal statutes or rules or local
16.12 ordinances, except the obligation to obtain the permit or as specifically provided in the
16.13 permit shield provision and part 7007.1800.

16.14 H. The commissioner's issuance of a permit does not prevent the future adoption
16.15 by the commissioner of pollution control rules, standards, or orders more stringent than
16.16 those now in existence and does not prevent the enforcement of these rules, standards, or
16.17 orders against the permittee.

16.18 I. The commissioner's issuance of a permit does not obligate the commissioner
16.19 to enforce local laws, rules, or plans beyond that authorized by Minnesota statutes.

16.20 J. The permittee must at all times properly operate and maintain the facilities and
16.21 systems of treatment and control and the appurtenances related to them that are installed or
16.22 used by the permittee to achieve compliance with the conditions of the permit. Proper
16.23 operation and maintenance includes effective performance, adequate funding, adequate
16.24 operator staffing and training, and adequate laboratory and process controls, including
16.25 appropriate quality assurance procedures.

17.1 K. The permittee may not knowingly make a false or misleading statement,
17.2 representation, or certification in a record, report, plan, or other document required to be
17.3 submitted to the commissioner by the permit. The permittee must immediately upon discovery
17.4 report to the commissioner an error or omission in these records, reports, plans, or other
17.5 documents. The permittee may not falsify, tamper with, render inaccurate, or fail to install
17.6 any monitoring device or method required to be maintained or followed by the permit.

17.7 L. The permittee must, when requested by the commissioner, submit within a
17.8 reasonable time any information and reports that are relevant to pollution or the activities
17.9 authorized under the permit.

17.10 M. If the permittee discovers, through any means, including notification by the
17.11 commissioner, that noncompliance with a condition of the permit has occurred, the permittee
17.12 must immediately take all reasonable steps to minimize the adverse impact on human health
17.13 or the environment resulting from the noncompliance.

17.14 *[For text of item N, see Minnesota Rules]*

17.15 O. The permit authorizes the permittee to perform the activities described in the
17.16 permit under the conditions of the permit. In issuing the permit, the state and commissioner
17.17 assume no responsibility for damages to persons, property, or the environment caused by
17.18 the activities of the permittee in the conduct of the permittee's actions, including those
17.19 activities authorized, directed, or undertaken under the permit. To the extent the state and
17.20 commissioner may be liable for the activities of state employees, the liability is explicitly
17.21 limited to that provided in the Tort Claims Act, Minnesota Statutes, section 3.736.

17.22 **7011.0050 GENERAL PROVISIONS OF FEDERAL STANDARDS**
17.23 **INCORPORATED BY REFERENCE.**

17.24 Subpart 1. **General.** For purposes of interpreting, applying, and enforcing federal
17.25 regulations that are incorporated by reference into this chapter:

18.1 A. Code of Federal Regulations, title 40, sections 60.1, 60.2, 60.3, 60.5, 60.6,
18.2 60.12, 60.14, 60.15, 60.17, and 60.18, as amended, are incorporated by reference;

18.3 B. Code of Federal Regulations, title 40, sections 63.1, 63.2, 63.3, 63.4, 63.5,
18.4 63.6, 63.11, and 63.14, as amended, are incorporated by reference; and

18.5 C. Code of Federal Regulations, title 40, sections 61.02, 61.03, 61.05, 61.06,
18.6 61.07, 61.08, 61.12, 61.15, 61.18, and 61.19, as amended, are incorporated by reference,
18.7 except that the authorities identified in Code of Federal Regulations, title 40, section 61.12
18.8 (d)(1), are not delegated to the commissioner and are retained by the administrator.

18.9 Subp. 2. **Required information.** All requests, reports, applications, submittals, and
18.10 other communications to the administrator that are incorporated by reference into this chapter
18.11 must be submitted to the commissioner unless otherwise specified in Code of Federal
18.12 Regulations or state rule.

18.13 Subp. 3. **Authorities.** References to the administrator in the incorporated federal
18.14 regulations refer to the commissioner, except when authorities are specifically identified in
18.15 Code of Federal Regulations or state rule as nondelegable.

18.16 **7011.0540 DERATE.**

18.17 The owner or operator of indirect heating equipment who elects to achieve compliance
18.18 with an applicable standard of performance by derating must:

18.19 A. advise the commissioner in writing of the intent to achieve compliance by
18.20 derating and the capacity level at which the owner or operator intends to operate this
18.21 equipment;

18.22 B. agree to a permit condition in the required operating permit that prohibits
18.23 operating the equipment over the derate level;

19.1 C. install a boiler steam flow meter to continuously record, indicate, and integrate
19.2 boiler steam flow, and must:

19.3 (1) submit a written report to the commissioner within ten days of any excess
19.4 steam flow occurrence above the specified derate load;

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

19.6 (3) submit written yearly reports to the commissioner confirming that no
19.7 excesses have occurred during normal operations; and

19.8 (4) retain and make available for inspection by the commissioner or the
19.9 commissioner's authorized employees or agents steam flow charts for a minimum of two
19.10 years after the date of measurement; and

19.11 D. submit an effective method of physical limitation of boiler load for approval
19.12 by the commissioner before authorization of a boiler derate. The limitation may include a
19.13 tieback signal from the steam flow meter to the combustion control system cutting back
19.14 fuel input at the derate load, a maximum limit stop on the fuel input control drive or valve,
19.15 or other equivalent physical means.

19.16 **7011.0553 INCORPORATION BY REFERENCE; NITROGEN OXIDES EMISSION**
19.17 **REDUCTION REQUIREMENTS FOR AFFECTED SOURCES.**

19.18 Affected sources, as defined in part 7007.0100, subpart 4, must comply with Code of
19.19 Federal Regulations, title 40, part 76, as amended, entitled "Acid Rain Nitrogen Oxides
19.20 Emission Reduction Program," which is incorporated by reference.

19.21 **7011.0555 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
19.22 **STANDARDS; FOSSIL-FUEL-FIRED STEAM GENERATORS.**

19.23 Code of Federal Regulations, title 40, part 60, subpart D, as amended, entitled "Standards
19.24 of Performance for Fossil-Fuel-Fired Steam Generators," is incorporated by reference.

20.1 **7011.0560 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
20.2 **STANDARDS; ELECTRIC UTILITY STEAM GENERATING UNITS.**

20.3 Code of Federal Regulations, title 40, part 60, subpart Da, as amended, entitled
20.4 "Standards of Performance for Electric Utility Steam Generating Units," is incorporated by
20.5 reference, except that the authorities identified in Code of Federal Regulations, title 40,
20.6 section 60.45Da, are not delegated to the commissioner and are retained by the administrator.

20.7 **7011.0561 CONTROL OF MERCURY FROM ELECTRIC GENERATING UNITS.**

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

20.9 Subp. 10. **Incorporations by reference.** For purposes of this part, the methods listed
20.10 in items A and B are incorporated by reference, as amended. These documents are subject
20.11 to frequent change:

20.12 A. The Annual Book of American Society for Testing and Materials International
20.13 (ASTM) methods D2234/D2234M (Standard Practice for Collection of a Gross Sample of
20.14 Coal), D2013/D2013M (Standard Practice for Preparing Coal Samples for Analysis), D5865
20.15 (Standard Test Method for Gross Calorific Value of Coal and Coke), D3173 (Standard Test
20.16 Method for Moisture in the Analysis Sample of Coal and Coke), and D6722 (Standard Test
20.17 Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion
20.18 Analysis). These methods are published in the Annual Book of ASTM Standards, Volume
20.19 05.06, Gaseous Fuels; Coal and Coke; Catalysts; Bioenergy and Industrial Chemicals from
20.20 Biomass (2017). These documents are available through the Minitex interlibrary loan system;
20.21 and

20.22 B. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA
20.23 SW-846, Method 7471 Mercury in Solid or Semisolid Waste (Manual Cold Vapor
20.24 Technique). The document is available at
20.25 <https://www.epa.gov/hw-sw846/sw-846-compendium>.

21.1 **7011.0562 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
21.2 **STANDARDS; GREENHOUSE GAS EMISSIONS FOR ELECTRIC GENERATING**
21.3 **UNITS.**

21.4 Code of Federal Regulations, title 40, part 60, subpart TTTT, as amended through July
21.5 1, 2018, entitled "Standards of Performance for Greenhouse Gas Emissions for Electric
21.6 Generating Units" is incorporated by reference.

21.7 **7011.0563 INCORPORATION BY REFERENCE; EMISSION STANDARDS; COAL-**
21.8 **AND OIL-FIRED ELECTRIC UTILITY STEAM GENERATORS.**

21.9 Code of Federal Regulations, title 40, part 63, subpart UUUUU, as amended through
21.10 July 1, 2018, entitled "National Emission Standards for Hazardous Air Pollutants: Coal-
21.11 and Oil-Fired Electric Utility Steam Generating Units," is incorporated by reference.

21.12 **7011.0565 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
21.13 **STANDARDS; STEAM GENERATING UNITS.**

21.14 Code of Federal Regulations, title 40, part 60, subpart Db, as amended, entitled
21.15 "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units,"
21.16 is incorporated by reference.

21.17 **7011.0570 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
21.18 **STANDARDS; SMALL STEAM GENERATING UNITS.**

21.19 Code of Federal Regulations, title 40, part 60, subpart Dc, as amended, entitled
21.20 "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating
21.21 Units," is incorporated by reference.

21.22 **7011.0830 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
21.23 **STANDARDS; PORTLAND CEMENT PLANTS.**

21.24 Code of Federal Regulations, title 40, part 60, subpart F, as amended, entitled "Standards
21.25 of Performance for Portland Cement Plants," is incorporated by reference.

22.1 **7011.0865 INCORPORATIONS BY REFERENCE; DOCUMENTS.**

22.2 *[For text of item A, see Minnesota Rules]*

22.3 B. California Environmental Protection Agency, Air Resources Board, Vapor
22.4 Recovery Certification Procedure CP-201, Certification Procedure for Vapor Recovery
22.5 Systems at Dispensing Facilities, April 23, 2015. This publication is available at
22.6 <https://ww2.arb.ca.gov/our-work/programs/vapor-recovery/vapor-recovery-certification-and-test-procedures>.

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

22.8 **7011.0909 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
22.9 **STANDARDS; HOT MIX ASPHALT PLANTS.**

22.10 Code of Federal Regulations, title 40, part 60, subpart I, as amended, entitled "Standards
22.11 of Performance for Hot Mix Asphalt Facilities," is incorporated by reference.

22.12 **7011.0950 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
22.13 **STANDARDS; ASPHALT PROCESSING AND ASPHALT ROOFING**
22.14 **MANUFACTURE.**

22.15 Code of Federal Regulations, title 40, part 60, subpart UU, as amended, entitled
22.16 "Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture," is
22.17 incorporated by reference.

22.18 **7011.1005 STANDARDS OF PERFORMANCE FOR DRY BULK AGRICULTURAL**
22.19 **COMMODITY FACILITIES.**

22.20 Subpart 1. **Owner or operator duties.** The owner or operator of a commodity facility
22.21 must:

22.22 *[For text of item A, see Minnesota Rules]*

22.23 B. maintain air pollution control equipment in proper operating condition and use
22.24 the air pollution control systems as designed.

23.1 Subp. 2. **Federal requirements.** The owner, operator, or other person who conducts
23.2 activities at a grain terminal elevator or grain storage elevator, of which construction,
23.3 modification, or reconstruction commenced, as defined in Code of Federal Regulations,
23.4 title 40, section 60.2, after August 3, 1978, must meet the requirements of Code of Federal
23.5 Regulations, title 40, part 60, subpart DD, as amended, entitled "Standards of Performance
23.6 for Grain Elevators," which is incorporated by reference, except that authorities identified
23.7 in Code of Federal Regulations, title 40, section 60.302(d)(3), are not delegated to the
23.8 commissioner and are retained by the administrator.

23.9 Subp. 3. **Prohibited discharges.** A commodity facility that is not required to be
23.10 controlled under subpart 2 must be controlled if the facility meets one of the descriptions
23.11 listed in part 7011.1015 where the table indicates "control required." For a facility where
23.12 control is required under part 7011.1015, no owner, operator, or other person who conducts
23.13 activities at the facility may allow:

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

23.15 D. a discharge of particulate matter from control equipment that exhibits greater
23.16 than ten percent opacity; or

23.17 *[For text of item E, see Minnesota Rules]*

23.18 Subp. 4. **Capture systems and control equipment.** The owner or operator of a
23.19 commodity facility not required to control emissions under subpart 2 or 3 is not required to
23.20 install capture systems and control equipment but must unload, handle, clean, dry, and load
23.21 commodities to minimize fugitive emissions to a level consistent with RACT. If a capture
23.22 system is used, the particulate matter must be conveyed through control equipment that has
23.23 a collection efficiency of not less than 80 percent by weight.

23.24 *[For text of subpart 5, see Minnesota Rules]*

24.1 **7011.1150 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
24.2 **STANDARDS; COAL PREPARATION AND PROCESSING PLANTS.**

24.3 Code of Federal Regulations, title 40, part 60, subpart Y, as amended, entitled "Standards
24.4 of Performance for Coal Preparation and Processing Plants," is incorporated by reference.

24.5 **7011.1201 DEFINITIONS.**

24.6 *[For text of subparts 1 to 48, see Minnesota Rules]*

24.7 Subp. 49. **Wood heater.** "Wood heater" means an enclosed wood-burning appliance
24.8 capable of and intended for space heating and domestic water heating. These devices include
24.9 adjustable burn rate wood heaters, single burn rate wood heaters, and pellet stoves. Wood
24.10 heaters may or may not include air ducts to deliver some portion of the heat produced to
24.11 areas other than the space where the wood heater is located. Wood heaters include:

24.12 A. free-standing wood heaters: wood heaters that are installed on legs, on a
24.13 pedestal, or suspended from the ceiling. These products generally are safety listed under
24.14 UL-1482, UL-737, or ULC-S627;

24.15 B. fireplace insert wood heaters: wood heaters intended to be installed in masonry
24.16 fireplace cavities or in other enclosures. These appliances generally are safety listed under
24.17 UL-1482, UL-737, or ULC-S628; and

24.18 C. built-in wood heaters: wood heaters that are intended to be recessed into the
24.19 wall. These appliances generally are safety listed under UL-1482, UL-737, UL-127, or
24.20 ULC-S610.

24.21 *[For text of subpart 50, see Minnesota Rules]*

24.22 **7011.1205 INCORPORATION BY REFERENCE; DOCUMENTS.**

24.23 For the purpose of parts 7007.0501, 7007.0801, and 7011.1201 to 7011.1294, the
24.24 documents in items A to C are incorporated by reference. Unless otherwise stated, these
24.25 documents are not subject to frequent change:

25.1 A. Annual Book of American Society for Testing and Materials Standards (ASTM),
25.2 Volume 05.06, Gaseous Fuels; Coal and Coke; Catalysts; Bioenergy and Industrial Chemicals
25.3 from Biomass (2017). This publication is available through the Minitex interlibrary loan
25.4 system;

25.5 B. Test Methods for Evaluating Solid Waste, SW-846, United States Environmental
25.6 Protection Agency. This publication is available at
25.7 <https://www.epa.gov/hw-sw846/sw-846-compendium> and is subject to frequent change;
25.8 and

25.9 C. The following material is available from the American Society of Mechanical
25.10 Engineers (ASME), 345 East 47th Street, New York, New York 10017 or through the
25.11 Minitex interlibrary loan system:

25.12 (1) Standard for the Qualification and Certification of Resource Recovery
25.13 Facility Operators, ASME QRO-1-2005 (2005, reaffirmed 2015);

25.14 (2) Power Test Codes, Steam Generating Units, PTC 4.1-1974 (reaffirmed
25.15 1991); and

25.16 (3) Application: Part II of Fluid Meters, 6th Edition 1971, Interim Supplement
25.17 19.5 on Instruments and Apparatus (1972).

25.18 **7011.1225 STANDARDS OF PERFORMANCE FOR WASTE COMBUSTORS.**

25.19 **Subpart 1. Class A or C waste combustor.**

25.20 A. A Class A or C waste combustor must not emit gases that exceed the applicable
25.21 standards of performance in parts 7011.1227 and 7011.1228. Emissions, except opacity,
25.22 must be calculated under standard conditions corrected to seven percent oxygen on a dry
25.23 volume basis. An owner or operator of a mixed municipal solid waste or RDF waste
25.24 combustor may determine compliance with the emission limitations using carbon dioxide
25.25 measurements corrected to an equivalent of seven percent oxygen.

26.1 B. A Class A or C waste combustor must not emit visible emissions of combustion
26.2 ash from an ash conveying system, or buildings or enclosures of ash conveying systems,
26.3 including conveyor transfer points, that exceed five percent of the observation period (i.e.
26.4 9 minutes per three-hour period), as determined by Code of Federal Regulations, title 40,
26.5 part 60, Appendix A, Method 22, as amended. This limit does not apply to visible emissions
26.6 discharged inside buildings or enclosures of ash conveying systems.

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

26.9 Subp. 3. **Class III waste combustors.** A Class III waste combustor must not emit
26.10 gases that contain particulate matter, PCDD/PCDF, mercury, carbon monoxide, or opacity
26.11 that exceeds the standards of performance in part 7011.1231. Emissions must be calculated
26.12 under standard conditions, corrected to seven percent oxygen on a dry volume basis. An
26.13 owner or operator may determine compliance with the emission limitations using carbon
26.14 dioxide measurements corrected to an equivalent of seven percent oxygen. The relationship
26.15 between carbon dioxide and oxygen must be established at each compliance test.

26.16 Subp. 4. [Repealed, 39 SR 386]

26.17 Subp. 5. **Class IV waste combustors.** A Class IV waste combustor must not emit
26.18 gases that contain particulate matter, carbon monoxide, or opacity that exceeds the
26.19 concentrations in part 7011.1233. Emissions must be calculated under standard conditions,
26.20 corrected to seven percent oxygen on a dry volume basis. An owner or operator may
26.21 determine compliance with the emission limitations using carbon dioxide measurements
26.22 corrected to an equivalent of seven percent oxygen. The relationship between carbon dioxide
26.23 and oxygen must be established at each compliance test.

27.1 **7011.1228 NITROGEN OXIDES LIMITS FOR CLASS A WASTE COMBUSTORS.**

27.2 The nitrogen oxides emission limits in Table A apply to each waste combustor unit at
 27.3 a Class A waste combustor facility. The owner or operator must use the procedures of part
 27.4 7011.1260 for determining compliance with the nitrogen oxides emission limits of Table
 27.5 A.

27.6 Alternatively, an owner or operator may average nitrogen oxide emissions across the
 27.7 waste combustor facility according to the procedures in Code of Federal Regulations, title
 27.8 40, section 60.33b(d)(1), as amended. Waste combustor units for which emissions averaging
 27.9 is used must not exceed the nitrogen oxide emission limits in Table B.

27.10 **TABLE A**

27.11 Municipal Waste Combustor Technology	27.12 Nitrogen Oxides Emission Limit (parts per million by volume)
27.13 Mass burn waterwall	205
27.14 Mass burn rotary waterwall	205
27.15 Refuse-derived fuel combustor	250
27.16 Fluidized bed combustor	180

27.17 **TABLE B**

27.18 Municipal Waste Combustor Technology	27.19 Nitrogen Oxides Emission Limit (parts per million by volume)
27.20 Mass burn waterwall	180
27.21 Refuse-derived fuel combustor	230
27.22 Fluidized bed combustor	220

27.23 Before a waste combustor owner or operator may implement emissions averaging, the
 27.24 owner or operator must identify units that are included in the nitrogen oxides emissions
 27.25 averaging plan in either the compliance report required by part 7017.2035 that contains the
 27.26 results of the units' initial performance tests required by part 7011.1270, item A, subitem
 27.27 (1), or the annual report required in part 7011.1285, as applicable before implementing the

28.1 averaging plan. The units included in the averaging plan may be redesignated every calendar
28.2 year. Partial year averaging is allowable upon written commissioner approval.

28.3 **7011.1230 STANDARDS OF PERFORMANCE FOR CLASS I MUNICIPAL WASTE**
28.4 **COMBUSTORS.**

28.5 Subpart 1. **Scope.** The owner or operator of a Class I waste combustor must comply
28.6 with the emission limits, notification, monitoring, testing, record-keeping, and reporting
28.7 requirements of the new source performance standards incorporated in parts 7011.1291 to
28.8 7011.1294, except as provided in subpart 2. In addition, the owner or operator must comply
28.9 with:

28.10 A. parts 7011.1240, subpart 1; 7011.1281; 7011.1282; 7011.1283; and 7011.1284,
28.11 if the owner or operator chooses to comply with the operator certification requirements of
28.12 Code of Federal Regulations, title 40, section 60.54b, as amended, by obtaining certification
28.13 through the Minnesota Pollution Control Agency;

28.14 B. the general waste combustor facility requirements of part 7011.1245;

28.15 C. the industrial solid waste management plan requirements of part 7011.1250;

28.16 *[For text of items D to F, see Minnesota Rules]*

28.17 Subp. 2. **Mercury emission limitations.** Instead of the mercury emission limits
28.18 contained in Code of Federal Regulations, title 40, sections 60.52b(a)(5), 60.58b(d)(2)(ix),
28.19 and 60.58b(d)(2)(x), as amended, the owner or operator of a Class I waste combustor must
28.20 comply with the mercury emission limits described in this subpart and the testing and
28.21 reporting requirements of parts 7011.1265, subpart 2; and 7011.1270, item E.

28.22 Class I

28.23 Mercury (short-term)

28.24 For all waste combustors except those 80 µg/dscm or 85% removal
28.25 combusting RDF in spreader stokers

29.1 Waste combustor units combusting RDF 50 µg/dscm or 85% removal
29.2 in spreader stokers (90-day test interval)

29.3 Mercury (long-term)

29.4 For all waste combustors except those 60 µg/dscm or 85% removal
29.5 combusting RDF in spreader stokers

29.6 Waste combustor units combusting RDF 30 µg/dscm or 85% removal
29.7 in spreader stokers (90-day test interval)

29.8 Waste combustor units combusting RDF 30 µg/dscm or 85% removal
29.9 in spreader stokers (12-month test interval)

29.10 **7011.1260 CONTINUOUS MONITORING.**

29.11 Subpart 1. **Combustion chamber temperature monitor.** The owner or operator of
29.12 a Class D, III, or IV waste combustor must install and operate temperature monitors that
29.13 continuously read and record the temperature at the point in the combustion unit one second
29.14 downstream of the entrance of the last overfire or secondary air injection. The owner or
29.15 operator may elect to place temperature monitors at another point downstream from the
29.16 entrance of the last overfire or secondary air injection if the owner or operator conducts
29.17 mapping of the operating combustion chambers to develop temperature isopleths and
29.18 correlates these temperatures to the downstream temperature monitors. The averaging period
29.19 for combustion chamber temperatures must be four-hour arithmetic block averages calculated
29.20 from four one-hour arithmetic averages. Each one-hour arithmetic average must consist of
29.21 at least ten data points equally spaced in time.

29.22 Subp. 2. **Particulate matter control device temperature monitors.** The owner or
29.23 operator of a waste combustor must install, calibrate, maintain, and operate temperature
29.24 monitors that continuously read and record the temperatures of the flue gas at the inlet of
29.25 each particulate matter control device.

29.26 Subp. 3. **Continuous monitors.** The owner or operator of a waste combustor must
29.27 install, calibrate, maintain, and operate a continuous monitoring system when burning solid

30.1 waste. Monitoring systems that continuously read and record the following outputs must
30.2 be installed:

30.3 A. in Class III, A, C, or D waste combustors:

30.4 (1) for carbon monoxide at the waste combustor outlet;

30.5 (2) for steam flow or an alternative unit load measurement parameter as
30.6 described in part 7011.1265, subpart 4a, in waste combustors that recover heat with a boiler;

30.7 *[For text of subitems (3) and (4), see Minnesota Rules]*

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

30.9 C. in all classifications of waste combustors subject to sulfur dioxide emission
30.10 limits for sulfur dioxide. For those facilities for which compliance is determined by the
30.11 percent reduction of emissions, monitors must be installed at the inlets and outlets of the
30.12 air pollution control system.

30.13 Subp. 4. **Averaging periods.** Except as provided in this subpart and subparts 4a and
30.14 5, parts 7017.1002 to 7017.1220 apply to continuous monitoring data collection, reduction,
30.15 and averaging periods.

30.16 *[For text of items A and B, see Minnesota Rules]*

30.17 C. At waste combustors other than mass burn rotary waterwall combustors or
30.18 RDF waste combustors for carbon monoxide, a four-hour block average. For mass burn
30.19 rotary waterwall combustors or RDF stokers, the averaging period for carbon monoxide
30.20 must be a daily 24-hour arithmetic average measured between 12 midnight and the following
30.21 midnight. The four-hour and 24-hour average must be calculated from one-hour arithmetic
30.22 averages. At least four points equally spaced in time shall be used to calculate each one-hour
30.23 average. During periods of calibration, quality assurance audits, and routine maintenance,
30.24 only two data points during the hour, at least 15 minutes apart, are required to calculate an

31.1 hourly average. Each one-hour average must be corrected to seven percent oxygen on an
31.2 hourly basis using the one-hour arithmetic average of the oxygen or carbon dioxide
31.3 continuous emissions monitoring system.

31.4 D. For sulfur dioxide, the geometric average of the one-hour arithmetic average
31.5 emission concentration during each 24-hour daily period measured from midnight to
31.6 midnight. At least four data points equally spaced in time shall be used to calculate each
31.7 one-hour arithmetic average. During periods of calibration, quality assurance audits, and
31.8 routine maintenance, only two data points during the hour, at least 15 minutes apart, are
31.9 required to calculate an hourly average. Each one-hour average must be corrected to seven
31.10 percent oxygen on an hourly basis using the one-hour arithmetic average of the oxygen or
31.11 carbon dioxide continuous emissions monitoring system.

31.12 E. For nitrogen oxides, the arithmetic average of the one-hour arithmetic average
31.13 emission concentration during each 24-hour daily period measured from midnight to
31.14 midnight. At least four data points equally spaced in time must be used to calculate each
31.15 one-hour arithmetic average. During periods of calibration, quality assurance audits, and
31.16 routine maintenance, only two data points during the hour, at least 15 minutes apart, are
31.17 required to calculate an hourly average. Each one-hour average must be corrected to seven
31.18 percent oxygen on an hourly basis using the one-hour arithmetic average of the oxygen or
31.19 carbon dioxide continuous emissions monitoring system.

31.20 *[For text of items F and G, see Minnesota Rules]*

31.21 **Subp. 4a. Calculation of sulfur dioxide and nitrogen oxide emissions.**

31.22 A. Compliance with the sulfur dioxide emission limit and percent reduction must
31.23 be determined by using a continuous emission monitor to measure sulfur dioxide and
31.24 calculating a 24-hour daily geometric mean emission concentration and daily geometric
31.25 mean percent reduction using Code of Federal Regulations, title 40, part 60, Appendix A,
31.26 Method 19, section 5.4, as amended, to determine the daily geometric average percent

32.1 reduction in the potential sulfur dioxide emission concentration. For waste combustors that
32.2 do not operate continuously, compliance must be determined using a daily geometric mean
32.3 of all hourly average values for the hours during the day that the facility is operated.

32.4 B. Compliance with the nitrogen oxides emission standards must be determined
32.5 by using a continuous emission monitor for measuring nitrogen oxides and calculating a
32.6 24-hour daily arithmetic average emission concentration using Code of Federal Regulations,
32.7 title 40, part 60, Appendix A, Method 19, section 4.1, as amended. For waste combustors
32.8 that do not operate continuously, compliance must be determined using an arithmetic mean
32.9 of all hourly average values for the hours during the day that the facility is operated.

32.10 Subp. 5. **Installation and operation of continuous monitors.** The owner or operator
32.11 of a waste combustor with continuous monitors must comply with parts 7017.1002 to
32.12 7017.1220, except as provided in items A to I.

32.13 A. Following the initial compliance test as required under part 7011.1270, the
32.14 owner or operator of a waste combustor must submit the initial compliance report required
32.15 under part 7011.1285, subpart 5.

32.16 B. Continuous monitors must be operated to measure and record data for at least
32.17 75 percent of the hours per day for 90 percent of the days of the calendar quarter that the
32.18 waste combustor is operating and combusting solid waste.

32.19 C. All valid monitoring data must be used to calculate emission rates, emission
32.20 reductions, and operating parameters, even if the conditions of item B are not met.

32.21 D. When continuous emissions data for sulfur dioxide removal efficiency, sulfur
32.22 dioxide or nitrogen oxide emission rates, or carbon monoxide are not obtained because of
32.23 monitor breakdowns, repairs, calibration checks, and zero and span adjustments, emission
32.24 data calculations to determine compliance must be made using the following methods:

33.1 (1) for sulfur dioxide removal efficiency or sulfur dioxide or nitrogen oxide
33.2 emission concentrations, Code of Federal Regulations, title 40, part 60, Appendix A, Method
33.3 19, as amended, to provide valid emission data to meet the requirements of item B. Other
33.4 monitoring systems or other data collection methods may be used as approved by the
33.5 commissioner; and

33.6 (2) for carbon monoxide, Code of Federal Regulations, title 40, part 60,
33.7 Appendix A, Method 10, as amended, to provide valid emission data to meet the requirements
33.8 of item B. Other monitoring systems or other data collection methods may be used as
33.9 approved by the commissioner.

33.10 E. Zero drift and span drift checks of emission monitoring systems must be
33.11 conducted in accordance with Code of Federal Regulations, title 40, section 60.13, as
33.12 amended.

33.13 F. Span values for continuous monitors must be as described in subitems (1) to
33.14 (4). Dual scale monitors may be used to monitor emissions beyond the ranges specified in
33.15 subitems (1) to (4).

33.16 (1) The span value of the sulfur dioxide continuous monitors at the inlet to
33.17 the sulfur dioxide control device must be 125 percent of the maximum estimated hourly
33.18 potential sulfur dioxide emissions of the waste combustor unit, and the span value of the
33.19 monitor at the outlet of the sulfur dioxide control device must be 50 percent of the maximum
33.20 estimated hourly potential sulfur dioxide emissions of the waste combustor unit.

33.21 (2) The span value of the nitrogen oxides continuous monitors must be 125
33.22 percent of the maximum estimated hourly potential nitrogen oxides emissions of the waste
33.23 combustor unit.

33.24 (3) The span value of the oxygen or carbon dioxide monitor must be 25
33.25 percent oxygen or carbon dioxide.

34.1 (4) The span value of the carbon monoxide monitor must be 125 percent of
34.2 the maximum estimated hourly potential carbon monoxide emissions of the waste combustor
34.3 unit.

34.4 G. Quarterly accuracy determinations, daily calibration drift tests, and annual
34.5 relative accuracy test audits must be performed according to Code of Federal Regulations,
34.6 title 40, part 60, Appendix F, as amended, for sulfur dioxide, nitrogen oxides, carbon
34.7 monoxide, and oxygen or carbon dioxide, except that section 5.1.1 (relative accuracy test
34.8 audit) does not apply to the oxygen monitor.

34.9 H. The procedures under Code of Federal Regulations, title 40, section 60.13, as
34.10 amended, must be followed for installation, evaluation, and operation of continuous emissions
34.11 monitoring systems for sulfur dioxide, nitrogen oxides, opacity, and oxygen or carbon
34.12 dioxide.

34.13 I. The oxygen or carbon dioxide monitor must conform to Performance
34.14 Specification 3 in Code of Federal Regulations, title 40, part 60, Appendix B, as amended,
34.15 except that section 2.3 does not apply.

34.16 Subp. 6. **Recording data from continuous monitoring.** The owner or operator of a
34.17 waste combustor must maintain a permanent record of continuously measured parameters.
34.18 The record of monitoring must contain:

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

34.20 Subp. 7. **Exceedances of continuously monitored emission limits.** If accurate and
34.21 valid data results collected from continuous monitors for sulfur dioxide, nitrogen oxides,
34.22 or carbon monoxide data exceed emission limits established in part 7011.1225 or in the
34.23 waste combustor's permit after normal start-up, the waste combustor owner or operator must
34.24 take the following actions:

35.1 A. The exceedance must be reported to the commissioner as soon as reasonably
35.2 possible, giving consideration to matters of plant or worker safety or access to
35.3 communications.

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

35.5 C. If the waste combustor cannot be returned to compliance within 72 hours of
35.6 the exceedance occurring, the waste combustor must be shut down. If the modifications to
35.7 return the waste combustor to compliance require amending the air emission facility permit,
35.8 the waste combustor must shut down within 72 hours of the exceedance.

35.9 D. When repairs or modifications have been completed, the waste combustor
35.10 owner or operator must demonstrate to the commissioner that the waste combustor is in
35.11 compliance. The waste combustor may be started up after the owner or operator notifies
35.12 the commissioner in writing of the date the owner or operator plans to start up the waste
35.13 combustor and the date that compliance testing is scheduled. Notification must be given at
35.14 least ten days in advance of the compliance test date.

35.15 **7011.1265 REQUIRED PERFORMANCE TESTS, METHODS, AND PROCEDURES.**

35.16 Subpart 1. **Performance test methods and procedures.** An owner or operator of a
35.17 waste combustor required to conduct performance tests for a waste combustor must use the
35.18 performance test methods and procedures specified in parts 7017.2001 to 7017.2060 except
35.19 as modified in this part. Not operating a sorbent injection system for the sole purpose of
35.20 testing to demonstrate compliance with the percent reduction standards for sulfur dioxide
35.21 and hydrogen chloride is not a modification under part 7007.0100, subpart 14.

35.22 Subp. 2. **Performance test methods for criteria pollutants.** An owner or operator
35.23 of a waste combustor required to conduct performance tests for particulate matter, sulfur
35.24 dioxide, or nitrogen oxides must use the test methods under items A to D.

A. For particulate matter, except for Class I, II, A, and C waste combustors, the minimum sample volume must be 1.7 dscm, and the probe and filter holder heating systems in the sample train must be set to provide a gas temperature no greater than 160 degrees Celsius, plus or minus 14 degrees. For Class III and IV waste combustors, the minimum sample volume must be 0.85 dscm. Owners or operators may request approval for smaller sampling times or volumes from the commissioner before testing, when necessitated by process variables or site-specific limitations. An oxygen or carbon dioxide measurement must be obtained simultaneously with each Method 5 test run for particulate matter. Particulate matter emissions, expressed in gr/dscf, must be corrected to seven percent oxygen by using the following formula:

$$c_7 = \frac{14c}{(21 - \%O_2)}$$

where: c_7 is the concentration of particulate matter corrected to seven percent oxygen;

c is the concentration of particulate matter as measured by Code of Federal Regulations, title 40, part 60, Appendix A-3, Method 5, and Code of Federal Regulations, title 40, part 51, Appendix M, Method 202, and

$\%O_2$ is the percentage of oxygen as measured by Code of Federal Regulations, title 40, part 60, Appendix A-2, Method 3, as amended.

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

B. For opacity emissions, Code of Federal Regulations, title 40, part 60, Appendix A, Method 9, as amended, must be used to determine compliance with opacity limits.

C. For Class IV waste combustors carbon monoxide emissions, compliance with the emission limit must be determined by using Code of Federal Regulations, title 40, part 60, Appendix A, Method 10, as amended.

37.1 D. For fugitive ash emissions, Code of Federal Regulations, title 40, part 60,
37.2 Appendix A, Method 22, as amended, must be used. The minimum observation time is a
37.3 series of three one-hour observations. The observation period must include times when the
37.4 facility is transferring ash from the waste combustor unit to the area where ash is stored or
37.5 loaded into containers or trucks. The average duration of visible emissions per hour must
37.6 be calculated from the three one-hour observations. The average must be used to determine
37.7 compliance with the emission limit.

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

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

$$\begin{array}{l} 37.16 \qquad \qquad \qquad (E_i - E_o) \\ 37.17 \qquad \%P_{HCl} = \frac{\qquad \qquad \qquad}{\qquad \qquad \qquad} \\ 37.18 \qquad \qquad \qquad E_i \end{array}$$

37.19 where E_i is the potential hydrogen chloride emission rate measured at the control device
37.20 inlet, corrected to seven percent O₂, and E_o is the hydrogen chloride emission rate measured
37.21 at the outlet of the acid gas control device, corrected to seven percent O₂.

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

38.1 B. For PCDD/PCDF emissions, Code of Federal Regulations, title 40, part 60,
38.2 Appendix A, Method 23, as amended, must be used to determine compliance with the
38.3 PCDD/PCDF emission limits. For Class II and A facilities, the minimum sample time is
38.4 four hours per test run. For Class III, C, and D facilities, the minimum sample time is three
38.5 hours per test run. An oxygen or carbon dioxide measurement must be obtained
38.6 simultaneously with each Method 23 test run for PCDD/PCDF. The average of the
38.7 PCDD/PCDF test runs is used to determine compliance.

38.8 C. For mercury, lead, and cadmium emissions, Code of Federal Regulations, title
38.9 40, part 60, Appendix A, Method 29, as amended, must be used for measuring emissions
38.10 of lead, cadmium, and mercury. The minimum sample volume is 1.7 dscm. An oxygen or
38.11 carbon dioxide measurement must be obtained simultaneously with each Method 29 test
38.12 run for lead and cadmium. The average of the lead or cadmium emission concentrations
38.13 from three test runs or more must be used to determine compliance. The procedures in item
38.14 D must be used to determine compliance with the mercury emission limits.

38.15 D. To determine the mercury concentration, the arithmetic average of three or
38.16 more samples at the outlet of the air pollution control device must be used. The minimum
38.17 sample volume is 1.7 dscm. The maximum sample run time is two hours. An oxygen or
38.18 carbon dioxide measurement must be obtained simultaneously with each Method 29 test
38.19 run for mercury.

38.20 To determine the percent reduction of mercury, concurrent sampling for mercury at
38.21 the inlet and outlet of the air pollution control system must be performed at each occurrence
38.22 of mercury emissions performance testing.

38.23 Owners and operators of RDF combustors may choose to conduct mercury emissions
38.24 testing either every 90 days or every 12 months. If the owner or operator of an RDF
38.25 combustor chooses to conduct testing every 90 days, the requirements of subitems (1) and

39.1 (2) apply. If the RDF combustor chooses to test every 12 months, the requirements of
39.2 subitem (3) apply.

39.3 (1) Procedures to determine compliance with the short-term mercury emission
39.4 concentration limit are described in unit (a). If the waste combustor does not show compliance
39.5 as determined in unit (a), compliance must be determined as described in units (b) and (c).

39.6 *[For text of unit (a), see Minnesota Rules]*

39.7 (b) If the average computed in unit (a) exceeds the short-term mercury
39.8 emission concentration limit, the removal efficiency for each run must be computed as
39.9 follows:

39.10
$$\%Hg_{\text{removal efficiency}} = [Hg_{\text{in}} - Hg_{\text{out}}]/HG_{\text{in}} \times 100$$

39.11 Where: $Hg_{\text{removal efficiency}}$ is the removal efficiency of each sample run, HG_{in} is the
39.12 mercury concentration measured at the inlet of the air pollution control device, and Hg_{out} is
39.13 the mercury concentration measured at the outlet.

39.14 (c) The waste combustor is in compliance with the short-term mercury
39.15 emission limit if the arithmetic average of each of the removal efficiencies as computed in
39.16 unit (b) is greater than or equal to 85 percent.

39.17 (2) Procedures to determine compliance with the long-term mercury emission
39.18 concentration limit are described in unit (a). If the waste combustor does not show compliance
39.19 as determined in unit (a), compliance must be determined as described in unit (b).

39.20 (a) To determine compliance with the mercury emission concentration
39.21 limit, the arithmetic average of all mercury emission concentrations measured in a compliance
39.22 test available for the previous calendar year must be used. Initial compliance with the
39.23 long-term mercury concentration limit must be determined upon completion of the first
39.24 calendar year. Subsequent compliance must be determined at each occurrence of mercury
39.25 emission performance testing.

40.1 (b) If the average that was computed in unit (a) exceeds the long-term
40.2 mercury emission concentration, the removal efficiency for each run must be computed by
40.3 the equation in subitem (1), unit (b). The waste combustor is in compliance with the long-term
40.4 mercury emission limit if the arithmetic average of each of the removal efficiencies is greater
40.5 than or equal to 85 percent.

40.6 (3) Owners or operators of waste combustors combusting RDF who choose
40.7 to conduct mercury emission testing every 12 months must use the procedures in this subitem
40.8 to determine compliance with mercury emission limits.

40.9 *[For text of unit (a), see Minnesota Rules]*

40.10 (b) If the average computed in unit (a) exceeds the 12-month mercury
40.11 emission concentration limit, the removal efficiency for each run must be computed by the
40.12 equation in subitem (1), unit (b). The waste combustor is in compliance with the 12-month
40.13 mercury emission limit if the arithmetic average of the removal efficiencies is greater than
40.14 85 percent.

40.15 Subp. 4. **Steam flow measurement method.** The method contained in ASME PTC
40.16 4.1, section 4, incorporated by reference in part 7011.1205, must be used for calculating
40.17 the steam flow required under part 7011.1260, subpart 3, item A, subitem (2). The
40.18 recommendations of Application: Part II of Fluid Meters, Interim Supplement 19.5 on
40.19 Instruments and Apparatus, chapter 4, incorporated by reference in part 7011.1205, must
40.20 be followed for design, construction, installation, calibration, and use of nozzles and orifices,
40.21 except that measurement devices such as flow nozzles and orifices are not required to be
40.22 recalibrated after they are installed. All signal conversion elements associated with steam
40.23 flow measurements must be calibrated according to the manufacturer's instructions before
40.24 each PCDD/PCDF test, and at least once per year. This annual calibration must be recorded
40.25 in the daily operating record as described in part 7011.1285, subpart 2.

40.26 *[For text of subpart 4a, see Minnesota Rules]*

41.1 Subp. 4b. **Procedures for correlating carbon dioxide and oxygen concentrations.** If
41.2 carbon dioxide is selected for use in diluent corrections, the relationship between oxygen
41.3 and carbon dioxide levels must be established during the initial performance test according
41.4 to the procedures and methods under items A to E.

41.5 A. The fuel factor equation in Code of Federal Regulations, title 40, part 60,
41.6 Appendix A, Method 3B, must be used to determine the relationship between oxygen and
41.7 carbon dioxide at a sampling location. Method 3, 3A, or 3B must be used to determine the
41.8 oxygen concentration at the same location as the carbon dioxide monitor.

41.9 B. Samples must be taken for at least 30 minutes in each hour.

41.10 C. Each sample must represent a one-hour average.

41.11 D. A minimum of three runs must be performed.

41.12 E. The relationship between carbon dioxide and oxygen concentrations that is
41.13 established must be submitted as part of the initial performance test report.

41.14 Subp. 5. **Performance tests required.** Performance tests must be conducted on waste
41.15 combustors to determine the emission concentrations of the following air contaminants:

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

41.17 D. any other air contaminant for which an emission limitation applies to the waste
41.18 combustor, except for opacity and those contaminants for which compliance is demonstrated
41.19 by using a continuous monitor.

41.20 Subp. 6. **Operation during performance testing.** The owner or operator of a waste
41.21 combustor must report operating conditions to the commissioner, including operating
41.22 parameters of the air pollution control equipment, flue gas temperatures, air flow rates, and
41.23 pressure drop across the combustion system.

42.1 Subp. 7. **Maximum demonstrated capacity.** For Class I, II, III, A, C, and D waste
42.2 combustors, maximum demonstrated capacity of each waste combustor unit must be
42.3 determined during the initial performance test for PCDD/PCDF and each subsequent
42.4 performance test during which compliance with the PCDD/PCDF emission limit in part
42.5 7011.1225 is achieved. For Class IV waste combustors, maximum demonstrated capacity
42.6 must be determined during the initial performance test and each subsequent performance
42.7 test during which compliance with emission limits is demonstrated.

42.8 Subp. 8. **Particulate matter control device temperature.** The owner or operator of
42.9 a waste combustor with postcombustion particulate matter control must determine and
42.10 record the four-hour arithmetic average gas stream temperature as measured at the inlet to
42.11 each particulate matter control device during the initial and each subsequent performance
42.12 test for PCDD/PCDFs demonstrating compliance with the PCDD/PCDF emission limit in
42.13 part 7011.1225.

42.14 Subp. 9. [Repealed, 22 SR 1975]

42.15 Subp. 10. **Solid waste composition.** Solid waste composition studies must be
42.16 conducted as described in part 7007.0501, subpart 2.

42.17 Subp. 11. **Exceedances of emission limits.** If accurate and valid data results of a
42.18 performance test demonstrate an exceedance of a standard of performance under part
42.19 7011.1225 or in the waste combustor's air emission facility permit after normal start-up,
42.20 the waste combustor owner or operator must take the actions in items A to D.

42.21 A. The owner or operator must immediately report the exceedance to the
42.22 commissioner and comply with the applicable reporting provisions of part 7007.0800,
42.23 subpart 6.

43.1 B. The owner or operator must take appropriate steps to return the waste combustor
43.2 to compliance and must demonstrate compliance within 60 days of the initial report of the
43.3 exceedance.

43.4 C. If the commissioner determines that compliance has not been achieved within
43.5 60 days of the initial report of exceedance, the waste combustor must be shut down.

43.6 D. If shutdown was required under item C, the waste combustor may be restarted
43.7 under the conditions specified by the commissioner. The owner or operator must notify the
43.8 commissioner in writing of the date on which the owner or operator plans to start up and to
43.9 begin compliance testing. Notification must be at least ten days in advance of the compliance
43.10 test date.

43.11 **7011.1291 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
43.12 **STANDARDS; LARGE MUNICIPAL WASTE COMBUSTORS.**

43.13 Subpart 1. **Incorporation by reference.** Code of Federal Regulations, title 40, part
43.14 60, subpart Eb, as amended, entitled "Standards of Performance for Large Municipal Waste
43.15 Combustors for Which Construction is Commenced After September 20, 1994 or for Which
43.16 Modification or Reconstruction is Commenced After June 19, 1996," is incorporated by
43.17 reference.

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

43.19 **7011.1292 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
43.20 **STANDARDS; HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS.**

43.21 Subpart 1. **Incorporation by reference.** Code of Federal Regulations, title 40, part
43.22 60, subpart Ec, as amended, entitled "Standards of Performance for New Stationary Sources:
43.23 Hospital/Medical/Infectious Waste Incinerators," is incorporated by reference.

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

44.1 **7011.1294 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
44.2 **STANDARDS; OTHER SOLID WASTE INCINERATION UNITS.**

44.3 Subpart 1. **Incorporation by reference.** Code of Federal Regulations, title 40, part
44.4 60, subpart EEEE, as amended, entitled "Standards of Performance for Other Solid Waste
44.5 Incineration Units for Which Construction is Commenced After December 9, 2004, or for
44.6 Which Modification or Reconstruction is Commenced on or After June 16, 2006," is
44.7 incorporated by reference.

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

44.9 **7011.1350 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
44.10 **STANDARDS; SEWAGE SLUDGE INCINERATORS.**

44.11 Subpart 1. **Incorporation by reference.** The following new source performance
44.12 standards are incorporated by reference:

44.13 A. Code of Federal Regulations, title 40, part 60, subpart O, as amended, entitled
44.14 "Standards of Performance for Sewage Treatment Plants," is incorporated by reference; and

44.15 B. Code of Federal Regulations, title 40, part 60, subpart LLLL, as amended,
44.16 entitled "Standards of Performance for New Sewage Sludge Incineration Units," is
44.17 incorporated by reference.

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

44.19 **7011.1355 INCORPORATION BY REFERENCE; EMISSION GUIDELINES AND**
44.20 **COMPLIANCE TIMES; EXISTING SEWAGE SLUDGE INCINERATOR UNITS.**

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

45.1 Subp. 2. **Incorporation by reference of federal emission guidelines and compliance**
45.2 **times for existing sewage sludge incinerators.**

45.3 A. The following requirements from Code of Federal Regulations, title 40, part
45.4 60, subpart MMMM, as amended, entitled "Emission Guidelines and Compliance Times
45.5 for Existing Sewage Sludge Incineration Units," are incorporated by reference:

45.6 *[For text of subitems (1) to (8), see Minnesota Rules]*

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

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

45.9 **7011.1365 INCORPORATION BY REFERENCE; EMISSION GUIDELINES AND**
45.10 **COMPLIANCE TIMES; EXISTING COMMERCIAL AND INDUSTRIAL SOLID**
45.11 **WASTE INCINERATORS.**

45.12 Code of Federal Regulations, title 40, part 60, subpart DDDD, as amended, entitled
45.13 "Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste
45.14 Incineration Units," is incorporated by reference with the following exceptions:

45.15 A. sections 60.2500 to 60.2570 are not incorporated by reference;

45.16 B. the deadlines for each increment of progress provided for in Table 1 of Code
45.17 of Federal Regulations, title 40, part 60, subpart DDDD, are:

45.18 (1) by September 29, 2015, for owners or operators to submit a final control
45.19 plan to the commissioner; and

45.20 (2) by September 29, 2017, for owners or operators of an affected unit to
45.21 demonstrate compliance with the emission guidelines adopted under this part;

45.22 C. owners or operators of commercial and industrial solid waste incineration units
45.23 that do not hold Title V operating permits must submit an application for a Title V permit
45.24 by September 29, 2015; and

46.1 D. "you" means the owner or operator of an affected commercial and industrial
46.2 solid waste incineration unit.

46.3 **7011.1370 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
46.4 **STANDARDS; NEW COMMERCIAL AND INDUSTRIAL SOLID WASTE**
46.5 **INCINERATORS.**

46.6 Subpart 1. **Incorporation by reference.** Code of Federal Regulations, title 40, part
46.7 60, subpart CCCC, as amended, entitled "Standards of Performance for Commercial and
46.8 Industrial Solid Waste Incineration Units," is incorporated by reference.

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

46.10 **7011.1400 DEFINITIONS APPLICABLE TO PETROLEUM REFINERIES.**

46.11 Subpart 1. **Scope.** The definitions in this part apply to parts 7011.1400 to 7011.1430.

46.12 Subp. 2. **Coke burn-off.** "Coke burn-off" means the coke removed from the surface
46.13 of the fluid catalytic cracking unit catalyst by combustion in the catalyst regenerator. The
46.14 rate of coke burn-off is calculated by the formula in part 7011.1430, subpart 5.

46.15 Subp. 2a. **Existing.** "Existing" means equipment on which construction, modification,
46.16 or reconstruction did not begin after June 11, 1973.

46.17 Subp. 3. **Fossil fuel.** "Fossil fuel" means natural gas, petroleum, coal, and wood and
46.18 any form of solid, liquid, or gaseous fuel derived from such materials.

46.19 Subp. 4. **Fuel gas.** "Fuel gas" means any gas that is generated by a petroleum refinery
46.20 process unit and that is combusted, including any gaseous mixture of a natural gas and fuel
46.21 gas that is combusted.

46.22 Subp. 5. **Fuel gas combustion device.** "Fuel gas combustion device" means any
46.23 equipment, such as process heaters, boilers, and flares, used to combust fuel gas but does
46.24 not include fluid coking units and fluid catalytic cracking unit incinerator-waste heat boilers
46.25 or facilities in which gases are combusted to produce sulfur or sulfuric acid.

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

47.2 Subp. 7. **High heating value.** "High heating value" means the number of (Btu/lb)
47.3 (cal/gm) of a fossil fuel as determined by the A.S.T.M. test methods described in part
47.4 7011.0500, subpart 8.

47.5 Subp. 8. **Indirect heating equipment.** "Indirect heating equipment" means a furnace,
47.6 boiler, or other unit of combustion equipment used in burning fossil fuel to produce steam,
47.7 hot water, hot air, or other hot liquid, gas, or solid, where the products of combustion do
47.8 not have direct contact with the heated medium. Indirect heating equipment includes all
47.9 fuel gas combustion devices that burn a liquid or solid fossil fuel but does not include fluid
47.10 catalytic cracking unit incinerator-waste heat boilers, fluid coking units, or facilities in
47.11 which gases are combusted to produce sulfur or sulfuric acid.

47.12 Subp. 8a. **New.** "New" means equipment on which construction, modification, or
47.13 reconstruction began after June 11, 1973.

47.14 *[For text of subpart 9, see Minnesota Rules]*

47.15 Subp. 10. **Petroleum refinery.** "Petroleum refinery" means a facility engaged in
47.16 producing gasoline, kerosene, distillate fuel oils, residual fuel oil, lubricants, or other products
47.17 by distilling petroleum or by redistilling, cracking, or reforming unfinished petroleum
47.18 derivatives. Petroleum refinery includes fluid catalytic cracking unit catalyst regenerators,
47.19 fluid catalytic cracking unit incinerator-waste heat boilers, fuel gas combustion devices,
47.20 and all indirect heating equipment associated with the refinery.

47.21 *[For text of subparts 11 to 14, see Minnesota Rules]*

47.22 **7011.1435 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
47.23 **STANDARDS; PETROLEUM REFINERIES.**

47.24 The following new source performance standards are incorporated by reference:

48.1 A. Code of Federal Regulations, title 40, part 60, subpart J, as amended, entitled
48.2 "Standards of Performance for Petroleum Refineries";

48.3 B. Code of Federal Regulations, title 40, part 60, subpart GGG, as amended,
48.4 entitled "Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
48.5 for which Construction, Reconstruction, or Modification Commenced After January 4,
48.6 1983, and on or Before November 7, 2006," except that the authorities identified in Code
48.7 of Federal Regulations, title 40, section 60.592(c), are not delegated to the commissioner
48.8 and are retained by the administrator;

48.9 C. Code of Federal Regulations, title 40, part 60, subpart QQQ, as amended,
48.10 entitled "Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater
48.11 Systems";

48.12 D. Code of Federal Regulations, title 40, part 60, subpart Ja, as amended, entitled
48.13 "Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction,
48.14 or Modification Commenced After May 14, 2007"; and

48.15 *[For text of item E, see Minnesota Rules]*

48.16 **7011.1510 MONITORING OPERATIONS.**

48.17 Subpart 1. **Records.** The owner or operator of any storage vessel, the construction or
48.18 modification of which began on or after June 11, 1973, that has a storage capacity of greater
48.19 than 40,000 gallons (151,412 liters) must for each storage vessel:

48.20 A. maintain a file of each type of petroleum liquid stored, the typical Reid vapor
48.21 pressure of each type of petroleum liquid stored, the dates of storage and withdrawals, and
48.22 the date on which the storage vessel is empty; and

48.23 B. determine and record the average monthly storage temperature and true vapor
48.24 pressure of the petroleum liquid stored at such temperature if:

49.1 (1) the petroleum liquid has a true vapor pressure, as stored, greater than 26
49.2 mm Hg (0.5 psia) but less than 78 mm Hg (1.5 psia) and is stored in a storage vessel other
49.3 than one equipped with a floating roof, a vapor recovery system, or their equivalents; or

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

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

49.6 Subp. 3. **Vapor pressure determination.** The true vapor pressure is determined by
49.7 the procedure in American Petroleum Institute Bulletin 2517. This procedure is dependent
49.8 upon determining the storage temperature and the Reid vapor pressure, which requires
49.9 sampling the petroleum liquids in the storage vessels. Unless the commissioner requires in
49.10 specific cases that the stored petroleum liquid be sampled, the true vapor pressure may be
49.11 determined by using the average monthly storage temperature and the typical Reid vapor
49.12 pressure. For those liquids for which certified specifications limiting the Reid vapor pressure
49.13 exist, that Reid vapor pressure may be used. For other liquids, supporting analytical data
49.14 must be made available on request of the commissioner when typical Reid vapor pressure
49.15 is used.

49.16 **7011.1520 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
49.17 **STANDARDS; STORAGE VESSELS.**

49.18 The following new source performance standards are incorporated by reference:

49.19 A. Code of Federal Regulations, title 40, part 60, subpart K, as amended, entitled
49.20 "Standards of Performance for Storage Vessels for Petroleum Liquids for Which
49.21 Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior
49.22 to May 19, 1978";

49.23 B. Code of Federal Regulations, title 40, part 60, subpart Ka, as amended, entitled
49.24 "Standards of Performance for Storage Vessels for Petroleum Liquids for Which
49.25 Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior

50.1 to July 23, 1984," except that the authorities identified in Code of Federal Regulations, title
50.2 40, section 60.114a, are not delegated to the commissioner and are retained by the
50.3 administrator; and

50.4 C. Code of Federal Regulations, title 40, part 60, subpart Kb, as amended, entitled
50.5 "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum
50.6 Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification
50.7 Commenced After July 23, 1984."

50.8 **7011.1550 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
50.9 **STANDARDS; BULK GASOLINE TERMINALS.**

50.10 Code of Federal Regulations, title 40, part 60, subpart XX, as amended, entitled
50.11 "Standards of Performance for Bulk Gasoline Terminals," is incorporated by reference.

50.12 **7011.1635 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
50.13 **STANDARDS; SULFURIC ACID PLANTS.**

50.14 Code of Federal Regulations, title 40, part 60, subpart H, as amended, entitled "Standards
50.15 of Performance for Sulfuric Acid Plants," is incorporated by reference.

50.16 **7011.1730 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
50.17 **STANDARDS; NITRIC ACID PLANTS.**

50.18 The following new source performance standards are incorporated by reference:

50.19 A. Code of Federal Regulations, title 40, part 60, subpart G, as amended, entitled
50.20 "Standards of Performance for Nitric Acid Plants"; and

50.21 B. Code of Federal Regulations, title 40, part 60, subpart Ga, as amended, entitled
50.22 "Standards of Performance for Nitric Acid Plants for Which Construction, Reconstruction,
50.23 or Modification Commenced After October 14, 2011."

51.1 **7011.1820 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
51.2 **STANDARDS; LEAD SMELTERS.**

51.3 The following new source performance standards are incorporated by reference:

51.4 A. Code of Federal Regulations, title 40, part 60, subpart L, as amended, entitled
51.5 "Standards of Performance for Secondary Lead Smelters"; and

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

51.7 **7011.1840 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
51.8 **STANDARDS; PRIMARY COPPER SMELTERS.**

51.9 Code of Federal Regulations, title 40, part 60, subpart P, as amended, entitled "Standards
51.10 of Performance for Primary Copper Smelters," is incorporated by reference.

51.11 **7011.1880 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
51.12 **STANDARDS; PRIMARY ZINC SMELTERS.**

51.13 Code of Federal Regulations, title 40, part 60, subpart Q, as amended, entitled "Standards
51.14 of Performance for Primary Zinc Smelters," is incorporated by reference.

51.15 **7011.1920 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
51.16 **STANDARDS; SECONDARY BRASS AND BRONZE PRODUCTION PLANTS.**

51.17 Code of Federal Regulations, title 40, part 60, subpart M, as amended, entitled
51.18 "Standards of Performance for Secondary Brass and Bronze Production Plants," is
51.19 incorporated by reference.

51.20 **7011.2020 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
51.21 **STANDARDS; STEEL PLANTS.**

51.22 The following new source performance standards are incorporated by reference:

51.23 A. Code of Federal Regulations, title 40, part 60, subpart N, as amended, entitled
51.24 "Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces
51.25 for Which Construction is Commenced After June 11, 1973";

52.1 B. Code of Federal Regulations, title 40, part 60, subpart Na, as amended, entitled
52.2 "Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking
52.3 Facilities for Which Construction is Commenced After January 20, 1983";

52.4 C. Code of Federal Regulations, title 40, part 60, subpart AA, as amended, entitled
52.5 "Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October
52.6 21, 1974 and On or Before August 17, 1983"; and

52.7 D. Code of Federal Regulations, title 40, part 60, subpart AAa, as amended, entitled
52.8 "Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen
52.9 Decarburization Vessels Constructed After August 17, 1983."

52.10 **7011.2050 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
52.11 **STANDARDS; PRIMARY ALUMINUM REDUCTION PLANTS.**

52.12 Code of Federal Regulations, title 40, part 60, subpart S, as amended, entitled "Standards
52.13 of Performance for Primary Aluminum Reduction Plants," is incorporated by reference.

52.14 **7011.2080 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
52.15 **STANDARDS; FERROALLOY PRODUCTION FACILITIES.**

52.16 Code of Federal Regulations, title 40, part 60, subpart Z, as amended, entitled "Standards
52.17 of Performance for Ferroalloy Production Facilities," is incorporated by reference.

52.18 **7011.2350 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
52.19 **STANDARDS; STATIONARY GAS TURBINES.**

52.20 Code of Federal Regulations, title 40, part 60, subpart GG, as amended, entitled
52.21 "Standards of Performance for Stationary Gas Turbines," is incorporated by reference,
52.22 except that authorities identified in Code of Federal Regulations, title 40, sections
52.23 60.332(a)(3) and 60.335(a), are not delegated to the commissioner and are retained by the
52.24 administrator.

53.1 **7011.2375 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
53.2 **STANDARDS; STATIONARY COMBUSTION TURBINES.**

53.3 Code of Federal Regulations, title 40, part 60, subpart KKKK, as amended, entitled
53.4 "Standards of Performance for Stationary Combustion Turbines," is incorporated by
53.5 reference.

53.6 **7011.2400 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
53.7 **STANDARDS; PHOSPHATE FERTILIZER INDUSTRY.**

53.8 The following new source performance standards are incorporated by reference:

53.9 A. Code of Federal Regulations, title 40, part 60, subpart T, as amended, entitled
53.10 "Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric
53.11 Acid Plants";

53.12 B. Code of Federal Regulations, title 40, part 60, subpart U, as amended, entitled
53.13 "Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid
53.14 Plants";

53.15 C. Code of Federal Regulations, title 40, part 60, subpart V, as amended, entitled
53.16 "Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate
53.17 Plants";

53.18 D. Code of Federal Regulations, title 40, part 60, subpart W, as amended, entitled
53.19 "Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate
53.20 Plants"; and

53.21 E. Code of Federal Regulations, title 40, part 60, subpart X, as amended, entitled
53.22 "Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple
53.23 Superphosphate Storage Facilities."

54.1 **7011.2450 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
54.2 **STANDARDS; KRAFT PULP MILLS.**

54.3 The following new source performance standards are incorporated by reference:

54.4 A. Code of Federal Regulations, title 40, part 60, subpart BB, as amended, entitled
54.5 "Standards of Performance for Kraft Pulp Mills"; and

54.6 B. Code of Federal Regulations, title 40, part 60, subpart BBa, as amended, entitled
54.7 "Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction,
54.8 Reconstruction, or Modification Commenced After May 23, 2013."

54.9 **7011.2500 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
54.10 **STANDARDS; GLASS MANUFACTURING PLANTS.**

54.11 Code of Federal Regulations, title 40, part 60, subpart CC, as amended, entitled
54.12 "Standards of Performance for Glass Manufacturing Plants," is incorporated by reference.

54.13 **7011.2550 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
54.14 **STANDARDS; SURFACE COATING OF METAL FURNITURE.**

54.15 Code of Federal Regulations, title 40, part 60, subpart EE, as amended, entitled
54.16 "Standards of Performance for Surface Coating of Metal Furniture," is incorporated by
54.17 reference.

54.18 **7011.2555 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
54.19 **STANDARDS; AUTOMOBILE AND LIGHT-DUTY TRUCK SURFACE COATING**
54.20 **OPERATIONS.**

54.21 Code of Federal Regulations, title 40, part 60, subpart MM, as amended, entitled
54.22 "Standards of Performance for Automobile and Light Duty Truck Surface Coating
54.23 Operations," is incorporated by reference.

55.1 **7011.2560 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
55.2 **STANDARDS; PRESSURE SENSITIVE TAPE AND LABEL SURFACE COATING**
55.3 **OPERATIONS.**

55.4 Code of Federal Regulations, title 40, part 60, subpart RR, as amended, entitled
55.5 "Standards of Performance for Pressure Sensitive Tape and Label Surface Coating
55.6 Operations," is incorporated by reference.

55.7 **7011.2565 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
55.8 **STANDARDS; INDUSTRIAL SURFACE COATING: LARGE APPLIANCES.**

55.9 Code of Federal Regulations, title 40, part 60, subpart SS, as amended, entitled
55.10 "Standards of Performance for Industrial Surface Coating: Large Appliances," is incorporated
55.11 by reference.

55.12 **7011.2570 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
55.13 **STANDARDS; METAL COIL SURFACE COATING.**

55.14 Code of Federal Regulations, title 40, part 60, subpart TT, as amended, entitled
55.15 "Standards of Performance for Metal Coil Surface Coating," is incorporated by reference.

55.16 **7011.2575 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
55.17 **STANDARDS; BEVERAGE CAN SURFACE COATING INDUSTRY.**

55.18 Code of Federal Regulations, title 40, part 60, subpart WW, as amended, entitled
55.19 "Standards of Performance for the Beverage Can Surface Coating Industry," is incorporated
55.20 by reference, except that the authorities identified in Code of Federal Regulations, title 40,
55.21 section 60.496(a)(1), and the last sentence of Code of Federal Regulations, title 40, section
55.22 60.493(b)(2)(i)(A), are not delegated to the commissioner and are retained by the
55.23 administrator.

56.1 **7011.2580 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
56.2 **STANDARDS; INDUSTRIAL SURFACE COATING: SURFACE COATING OF**
56.3 **PLASTIC PARTS FOR BUSINESS MACHINES.**

56.4 Code of Federal Regulations, title 40, part 60, subpart TTT, as amended, entitled
56.5 "Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts
56.6 for Business Machines," is incorporated by reference.

56.7 **7011.2600 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
56.8 **STANDARDS; LIME MANUFACTURING PLANTS.**

56.9 Code of Federal Regulations, title 40, part 60, subpart HH, as amended, entitled
56.10 "Standards of Performance for Lime Manufacturing Plants," is incorporated by reference.

56.11 **7011.2650 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
56.12 **STANDARDS; LEAD-ACID BATTERY MANUFACTURING PLANTS.**

56.13 Code of Federal Regulations, title 40, part 60, subpart KK, as amended, entitled
56.14 "Standards of Performance for Lead-Acid Battery Manufacturing Plants," is incorporated
56.15 by reference.

56.16 **7011.2700 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
56.17 **STANDARDS; METALLIC MINERAL PROCESSING PLANTS.**

56.18 Code of Federal Regulations, title 40, part 60, subpart LL, as amended, entitled
56.19 "Standards of Performance for Metallic Mineral Processing Plants," is incorporated by
56.20 reference.

56.21 **7011.2750 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
56.22 **STANDARDS; PHOSPHATE ROCK PLANTS.**

56.23 Code of Federal Regulations, title 40, part 60, subpart NN, as amended, entitled
56.24 "Standards of Performance for Phosphate Rock Plants," is incorporated by reference.

57.1 **7011.2800 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
57.2 **STANDARDS; AMMONIUM SULFATE MANUFACTURE.**

57.3 Code of Federal Regulations, title 40, part 60, subpart PP, as amended, entitled
57.4 "Standards of Performance for Ammonium Sulfate Manufacture," is incorporated by
57.5 reference.

57.6 **7011.2850 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
57.7 **STANDARDS; PUBLICATION ROTOGRAVURE PRINTING.**

57.8 Code of Federal Regulations, title 40, part 60, subpart QQ, as amended, entitled
57.9 "Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing,"
57.10 is incorporated by reference.

57.11 **7011.2900 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
57.12 **STANDARDS; SYNTHETIC ORGANIC CHEMICAL MANUFACTURING.**

57.13 The following new source performance standards are incorporated by reference:

57.14 A. Code of Federal Regulations, title 40, part 60, subpart VV, as amended, entitled
57.15 "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
57.16 Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced
57.17 After January 5, 1981, and on or Before November 7, 2006," except that the authorities
57.18 identified in Code of Federal Regulations, title 40, section 60.482-1(c)(2), are not delegated
57.19 to the commissioner and are retained by the administrator;

57.20 B. Code of Federal Regulations, title 40, part 60, subpart III, as amended, entitled
57.21 "Standards of Performance for Volatile Organic Compound (VOC) Emissions From the
57.22 Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit
57.23 Processes";

57.24 C. Code of Federal Regulations, title 40, part 60, subpart NNN, as amended,
57.25 entitled "Standards of Performance for Volatile Organic Compound (VOC) Emissions From

58.1 Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations";
58.2 and

58.3 D. Code of Federal Regulations, title 40, part 60, subpart VVa, as amended, entitled
58.4 "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
58.5 Manufacturing Industry for Which Construction, Reconstruction, or Modification
58.6 Commenced After November 7, 2006."

58.7 **7011.2950 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
58.8 **STANDARDS; RESIDENTIAL WOOD HEATERS.**

58.9 Code of Federal Regulations, title 40, part 60, subpart AAA, as amended through July
58.10 1, 2018, entitled "Standards of Performance for New Residential Wood Heaters," is
58.11 incorporated by reference.

58.12 **HYDRONIC HEATERS AND FORCED-AIR FURNACES**

58.13 **7011.2960 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
58.14 **STANDARDS; RESIDENTIAL HYDRONIC HEATERS AND FORCED-AIR**
58.15 **FURNACES.**

58.16 Code of Federal Regulations, title 40, part 60, subpart QQQQ, as amended through
58.17 July 1, 2018, entitled "Standards of Performance for New Residential Hydronic Heaters
58.18 and Forced-Air Furnaces," is incorporated by reference.

58.19 **7011.3000 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
58.20 **STANDARDS; RUBBER TIRE MANUFACTURING INDUSTRY.**

58.21 Code of Federal Regulations, title 40, part 60, subpart BBB, as amended, entitled
58.22 "Standards of Performance for the Rubber Tire Manufacturing Industry," is incorporated
58.23 by reference.

59.1 **7011.3050 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
59.2 **STANDARDS; POLYMER MANUFACTURING INDUSTRY.**

59.3 Code of Federal Regulations, title 40, part 60, subpart DDD, as amended, entitled
59.4 "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the
59.5 Polymer Manufacturing Industry," is incorporated by reference.

59.6 **7011.3100 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
59.7 **STANDARDS; POLYMERIC COATING OF SUPPORTING SUBSTRATES**
59.8 **FACILITIES.**

59.9 Code of Federal Regulations, title 40, part 60, subpart VVV, as amended, entitled
59.10 "Standards of Performance for Polymeric Coating of Supporting Substrates Facilities," is
59.11 incorporated by reference.

59.12 **7011.3150 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
59.13 **STANDARDS; FLEXIBLE VINYL AND URETHANE COATING AND PRINTING.**

59.14 Code of Federal Regulations, title 40, part 60, subpart FFF, as amended, entitled
59.15 "Standards of Performance for Flexible Vinyl and Urethane Coating and Printing," is
59.16 incorporated by reference.

59.17 **7011.3200 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
59.18 **STANDARDS; SYNTHETIC FIBER PRODUCTION FACILITIES.**

59.19 Code of Federal Regulations, title 40, part 60, subpart HHH, as amended, entitled
59.20 "Standards of Performance for Synthetic Fiber Production Facilities," is incorporated by
59.21 reference.

59.22 **7011.3250 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
59.23 **STANDARDS; PETROLEUM DRY CLEANERS.**

59.24 Code of Federal Regulations, title 40, part 60, subpart JJJ, as amended, entitled
59.25 "Standards of Performance for Petroleum Dry Cleaners," is incorporated by reference, except
59.26 that the authorities identified in Code of Federal Regulations, title 40, section 60.623, are
59.27 not delegated to the commissioner and are retained by the administrator.

60.1 **7011.3300 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
60.2 **STANDARDS; ONSHORE NATURAL GAS PROCESSING.**

60.3 The following new source performance standards are incorporated by reference:

60.4 A. Code of Federal Regulations, title 40, part 60, subpart KKK, as amended,
60.5 entitled "Standards of Performance for Equipment Leaks of VOC From Onshore Natural
60.6 Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced
60.7 After January 20, 1984, and on or Before August 23, 2011," except that authorities identified
60.8 in Code of Federal Regulations, title 40, section 60.634, are not delegated to the commissioner
60.9 and are retained by the administrator; and

60.10 B. Code of Federal Regulations, title 40, part 60, subpart LLL, as amended, entitled
60.11 "Standards of Performance for SO₂ Emissions From Onshore Natural Gas Processing for
60.12 Which Construction, Reconstruction, or Modification Commenced After January 20, 1984,
60.13 and on or Before August 23, 2011."

60.14 **CRUDE OIL AND NATURAL GAS PRODUCTION**

60.15 **7011.3325 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
60.16 **STANDARDS; CRUDE OIL AND NATURAL GAS PRODUCTION, TRANSMISSION**
60.17 **AND DISTRIBUTION.**

60.18 The following new source performance standards are incorporated by reference:

60.19 A. Code of Federal Regulations, title 40, part 60, subpart OOOO, as amended
60.20 through July 1, 2018, entitled "Standards of Performance for Crude Oil and Natural Gas
60.21 Production, Transmission and Distribution for which Construction, Modification, or
60.22 Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015";
60.23 and

60.24 B. Code of Federal Regulations, title 40, part 60, subpart OOOOa, as amended
60.25 through July 1, 2018, entitled "Standards of Performance for Crude Oil and Natural Gas

- 61.1 Facilities for which Construction, Modification or Reconstruction Commenced After
61.2 September 18, 2015."

61.3 **7011.3350 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
61.4 **STANDARDS; NONMETALLIC MINERAL PROCESSING PLANTS.**

- 61.5 Code of Federal Regulations, title 40, part 60, subpart OOO, as amended, entitled
61.6 "Standards of Performance for Nonmetallic Mineral Processing Plants," is incorporated by
61.7 reference.

61.8 **7011.3400 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
61.9 **STANDARDS; WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS.**

- 61.10 Code of Federal Regulations, title 40, part 60, subpart PPP, as amended, entitled
61.11 "Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants," is
61.12 incorporated by reference.

61.13 **7011.3430 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
61.14 **STANDARDS; VOC EMISSIONS FROM SOCM I REACTOR PROCESSES.**

- 61.15 Code of Federal Regulations, title 40, part 60, subpart RRR, as amended, entitled
61.16 "Standard of Performance for Volatile Organic Compound Emissions From Synthetic
61.17 Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes," is incorporated
61.18 by reference.

61.19 **7011.3450 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
61.20 **STANDARDS; MAGNETIC TAPE COATING FACILITIES.**

- 61.21 Code of Federal Regulations, title 40, part 60, subpart SSS, as amended, entitled
61.22 "Standards of Performance for Magnetic Tape Coating Facilities," is incorporated by
61.23 reference.

62.1 **7011.3500 DEFINITIONS.**

62.2 Subpart 1. **Scope.** The definitions in Code of Federal Regulations, title 40, subparts
62.3 Cc, WWW, and XXX, apply to terms in parts 7011.3500 to 7011.3525, unless the terms
62.4 are otherwise defined in this part.

62.5 Subp. 2. [See repealer.]

62.6 Subp. 3. [See repealer.]

62.7 *[For text of subparts 4 and 5, see Minnesota Rules]*

62.8 Subp. 6. **Solid waste capacity.** "Solid waste capacity" means the design capacity, as
62.9 defined in Code of Federal Regulations, title 40, section 60.751, that will be in place in the
62.10 landfill at the time of the expiration of the facility's solid waste permit, or at the time ultimate
62.11 capacity is reached.

62.12 **7011.3505 STANDARDS OF PERFORMANCE FOR EXISTING MUNICIPAL**
62.13 **SOLID WASTE LANDFILLS EXISTING BEFORE MAY 30, 1991.**

62.14 Subpart 1. **Scope.** The owner or operator of a landfill must comply with this part and
62.15 Code of Federal Regulations, title 40, part 60, subpart WWW, as amended, as incorporated
62.16 by reference in part 7011.3510, if construction, modification, or reconstruction began before
62.17 May 30, 1991, and:

62.18 A. the landfill has accepted solid waste for disposal since November 8, 1987; or

62.19 B. the landfill has additional solid waste capacity available for future waste
62.20 disposal.

62.21 Subp. 2. **Operational standards for collection and control systems.** The owner or
62.22 operator of a landfill that must monitor surface methane concentrations must comply with
62.23 Code of Federal Regulations, title 40, section 60.755(c)(1), except that the owner or operator
62.24 must conduct the monitoring at least three times per year, once during each of the following
62.25 periods: March 14 to May 14, June 21 to September 23, and October 21 to November 21.

63.1 Subp. 3. **Monitoring operations.** The owner or operator of a landfill seeking to comply
63.2 with Code of Federal Regulations, title 40, section 60.752(b)(2)(iii), may confirm that there
63.3 is no means to bypass the control device in the design plan, submitted in accordance with
63.4 Code of Federal Regulations, title 40, section 60.752(b)(2)(i), in lieu of complying with the
63.5 requirements in Code of Federal Regulations, title 40, section 60.756(b)(2) and (c)(2).

63.6 Subp. 4. **Reporting requirements.** The owner or operator of a landfill must submit
63.7 the reports required by Code of Federal Regulations, title 40, sections 60.752(a) and
63.8 60.757(a)(1) and (3) and (b)(1)(i), on the following schedule:

63.9 A. the owner or operator of an active landfill, and the owner or operator of a closed
63.10 landfill with a solid waste capacity greater than or equal to 2.5 million megagrams and 2.5
63.11 million cubic meters, must submit an initial solid waste capacity report no later than the
63.12 submittal of the next annual report required by part 7035.2585;

63.13 B. the owner or operator of an active landfill that proposes to increase the total
63.14 solid waste capacity to greater than or equal to 2.5 million megagrams and 2.5 million cubic
63.15 meters must submit an amended solid waste capacity report no later than the submittal of
63.16 the solid waste management facility permit application that proposes an increase in permitted
63.17 capacity; and

63.18 C. the owner or operator of a landfill that must submit an NMOC emission rate
63.19 report to comply with Code of Federal Regulations, title 40, section 60.757(b), must submit
63.20 the initial NMOC emission rate report no later than the submittal of the next annual report
63.21 required by part 7035.2585 or the submittal of the solid waste management facility permit
63.22 application that proposes an increase in permitted capacity, whichever occurs earlier.

63.23 Subp. 5. **Compliance times for equipment installation.**

63.24 A. The owner or operator of a landfill that has:

64.1 (1) a solid waste capacity greater than or equal to 2.5 million megagrams and
64.2 2.5 million cubic meters; and

64.3 (2) an NMOC emission rate of 50 megagrams per year or more must complete
64.4 installation of gas collection and control equipment capable of meeting the conditions in
64.5 Code of Federal Regulations, title 40, section 60.752(b)(2)(ii), by June 28, 2000.

64.6 B. The owner or operator of a landfill that has:

64.7 (1) a solid waste capacity greater than or equal to 2.5 million megagrams and
64.8 2.5 million cubic meters; and

64.9 (2) an NMOC emission rate less than 50 megagrams per year on January 28,
64.10 1997, must comply with this part within 30 months of the date of the first NMOC emission
64.11 rate that equals or exceeds 50 megagrams per year.

64.12 **Subp. 6. Exception to standard or compliance schedule.** The owner or operator of
64.13 a landfill seeking to apply a less stringent emission standard or longer compliance schedule
64.14 than that specified in this part may submit a written request to the commissioner and the
64.15 United States Environmental Protection Agency under Code of Federal Regulations, title
64.16 40, section 60.24(f).

64.17 **Subp. 7. NMOC emission rate estimations.** The owner or operator of a landfill that
64.18 has a landfill gas collection system in place on January 28, 1997, may comply with Code
64.19 of Federal Regulations, title 40, section 60.754(a)(5), using the method in Code of Federal
64.20 Regulations, title 40, section 60.754(b), if the owner or operator can demonstrate to the
64.21 commissioner that the system effectively collects landfill gas from all gas-producing areas
64.22 of the landfill and negative pressure can be maintained at each wellhead without excess air
64.23 infiltration.

65.1 **7011.3510 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
65.2 **STANDARDS; MUNICIPAL SOLID WASTE LANDFILLS EXISTING ON OR**
65.3 **AFTER MAY 30, 1991.**

65.4 Subpart 1. [See repealer.]

65.5 Subp. 1a. **Scope.** The requirements of this part apply to the owner or operator of a
65.6 landfill that began construction, modification, or reconstruction after May 30, 1991.

65.7 Subp. 1b. **Incorporation by reference.** Code of Federal Regulations, title 40, part
65.8 60, subpart WWW, as amended, entitled "Standards of Performance for Municipal Solid
65.9 Waste Landfills," is incorporated by reference.

65.10 Subp. 2. **Additional requirements.** The owner or operator of a landfill subject to
65.11 Code of Federal Regulations, title 40, part 60, subpart WWW, must additionally comply
65.12 with part 7011.3505, subpart 4.

65.13 **7011.3515 INCORPORATION BY REFERENCE; NEW SOURCE PERFORMANCE**
65.14 **STANDARDS; MUNICIPAL SOLID WASTE LANDFILLS EXISTING AFTER**
65.15 **JULY 17, 2014.**

65.16 Subpart 1. **Scope.** The requirements of this part apply to the owner or operator of a
65.17 landfill that began construction, modification, or reconstruction after July 17, 2014.

65.18 Subp. 2. **Incorporation by reference.** Code of Federal Regulations, title 40, part 60,
65.19 subpart XXX, as amended through July 1, 2018, entitled "Standards of Performance for
65.20 Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or
65.21 Modification after July 17, 2014," is incorporated by reference.

65.22 **7011.3525 INCORPORATION BY REFERENCE; EMISSION GUIDELINES AND**
65.23 **COMPLIANCE TIMES; MUNICIPAL SOLID WASTE LANDFILLS EXISTING**
65.24 **ON OR BEFORE JULY 17, 2014.**

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

66.1 Subp. 2. **Incorporation by reference; federal emission guidelines.** Code of Federal
66.2 Regulations, title 40, part 60, subpart Cf, as amended, entitled "Emission Guidelines and
66.3 Compliance Times for Municipal Solid Waste Landfills," is incorporated by reference with
66.4 the following exceptions:

66.5 A. the incorporation of section 60.31f (e) changes the phrase "; 40 CFR part 62,
66.6 subpart GGG; or a state plan implementing subpart Cc of this part" to "or 40 CFR part 62,
66.7 subpart GGG,";

66.8 B. the incorporation of section 60.32f changes the phrase "Planning, awarding of
66.9 contracts, installing, and starting up MSW landfill air emission collection and control
66.10 equipment that is capable of meeting the Emission Guidelines under § 60.33f must be
66.11 completed." to "The owner or operator must complete planning, awarding of contracts,
66.12 installing, and starting up MSW landfill air emission collection and control equipment that
66.13 is capable of meeting the Emission Guidelines under § 60.33f.";

66.14 C. the incorporation of section 60.33f (a) does not include the phrase "For approval,
66.15 a state plan must require" and changes the phrase "to collect and control" to "must collect
66.16 and control";

66.17 D. the incorporation of section 60.33f (b) changes the phrase "For approval, a
66.18 state plan must include provisions for the installation of" to "The owner or operator must
66.19 install";

66.20 E. the incorporation of section 60.33f (c) changes the phrase "For approval, a state
66.21 plan must include provisions" to "The owner or operator must provide";

66.22 F. the incorporation of section 60.33f (d) changes the sentence "For approval, a
66.23 state plan must require each owner or operator of an MSW landfill having a design capacity
66.24 less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume to submit
66.25 an initial design capacity report to the Administrator as provided in § 60.38f (a)" to "The

67.1 owner or operator of an MSW landfill having a design capacity less than 2.5 million
67.2 megagrams by mass or 2.5 million cubic meters by volume must submit an initial design
67.3 capacity report to the commissioner as provided in § 60.38f (a)";

67.4 G. the incorporation of section 60.33 (c) changes the sentence "For approval, a
67.5 state plan must require each owner or operator of an MSW landfill having a design capacity
67.6 equal to or greater than 2.5 megagrams and 2.5 million cubic meters to either install a
67.7 collection and control system as provided in paragraphs (b) and (c) of this section or calculate
67.8 an initial NMOC emission rate for the landfill using the procedures specified in § 60.35f
67.9 (a)" to "The owner or operator of an MSW landfill having a design capacity equal to or
67.10 greater than 2.5 megagrams and 2.5 million cubic meters must either install a collection
67.11 and control system as provided in paragraphs (b) and (c) of this section or calculate an initial
67.12 NMOC emission rate for the landfill using the procedures specified in § 60.35f (a)";

67.13 H. the incorporation of section 60.34f does not include the sentence "For approval,
67.14 a state plan must include provisions for the operational standards in this section for an MSW
67.15 landfill with a gas collection and control system used to comply with the provisions of §
67.16 60.33f (b) and (c)";

67.17 I. the incorporation of section 60.35f changes the phrase "For approval, a state
67.18 plan must include" to "The owner or operator must use the";

67.19 J. the incorporation of section 60.36f changes the phrase "For approval, a state
67.20 plan must include" to "The owner or operator must comply with";

67.21 K. the incorporation of section 60.37f changes the phrase "For approval, a state
67.22 plan must include" to "The owner or operator must comply with";

67.23 L. the incorporation of section 60.38f:

67.24 (1) changes the phrase "For approval, a state plan must include" to "The
67.25 owner or operator must comply with";

68.1 (2) changes the phrase in paragraph (a) "90 days after the effective date of
68.2 EPA approval of the state's plan under section 111(d) of the Clean Air Act" to "12 months
68.3 after the effective date of this rule";

68.4 (3) changes the phrase in paragraph (c) "90 days after the effective date of
68.5 EPA approval of the state's plan under section 111(d) of the Clean Air Act" to "12 months
68.6 after the effective date of this rule";

68.7 (4) in paragraph (d), does not include the sentence "The state plan must
68.8 include a process for state review and approval of the site-specific design plan for each gas
68.9 collection and control system"; and

68.10 (5) in paragraph (e), changes the phrase "; 40 CFR part 62, subpart GGG; or
68.11 a state plan implementing subpart Cc of this part," to ", or 40 CFR part 62, subpart GGG,";

68.12 M. the incorporation of section 60.39f does not include the sentence "For approval,
68.13 a state plan must include the recordkeeping provisions in this section"; and

68.14 N. the incorporation of section 60.40f does not include the sentence "For approval,
68.15 a state plan must include the specifications for active collection systems in this section."

68.16 **7011.7040 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
68.17 **ORGANIC HAZARDOUS AIR POLLUTANTS FROM SYNTHETIC ORGANIC**
68.18 **CHEMICAL MANUFACTURING INDUSTRY.**

68.19 The following national emission standards for hazardous air pollutants are incorporated
68.20 by reference:

68.21 A. Code of Federal Regulations, title 40, part 63, subpart F, as amended, entitled
68.22 "National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic
68.23 Organic Chemical Manufacturing Industry"; and

68.24 B. Code of Federal Regulations, title 40, part 63, subpart G, as amended, entitled
68.25 "National Emission Standards for Organic Hazardous Air Pollutants From The Synthetic

69.1 Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer
69.2 Operations, and Wastewater."

69.3 **7011.7050 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
69.4 **INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS**
69.5 **HEATERS; MAJOR SOURCES.**

69.6 Code of Federal Regulations, title 40, part 63, subpart DDDDD, as amended, entitled
69.7 "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial,
69.8 Commercial, and Institutional Boilers and Process Heaters," is incorporated by reference.

69.9 **7011.7055 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
69.10 **INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS; AREA**
69.11 **SOURCES.**

69.12 Code of Federal Regulations, title 40, part 63, subpart JJJJJ, as amended, entitled
69.13 "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and
69.14 Institutional Boilers Area Sources," is incorporated by reference.

69.15 **7011.7060 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
69.16 **ORGANIC HAZARDOUS AIR POLLUTANTS FOR EQUIPMENT LEAKS.**

69.17 The following national emission standards for hazardous air pollutants are incorporated
69.18 by reference:

69.19 A. Code of Federal Regulations, title 40, part 63, subpart H, as amended, entitled
69.20 "National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks";
69.21 and

69.22 B. Code of Federal Regulations, title 40, part 63, subpart I, as amended, entitled
69.23 "National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes
69.24 Subject to the Negotiated Regulation for Equipment Leaks."

70.1 **7011.7080 INCORPORATION BY REFERENCE; EMISSION STANDARDS; COKE**
70.2 **OVEN BATTERIES.**

70.3 Code of Federal Regulations, title 40, part 63, subpart L, as amended, entitled "National
70.4 Emission Standards for Coke Oven Batteries," is incorporated by reference.

70.5 **7011.7090 INCORPORATION BY REFERENCE; EMISSION STANDARDS; COKE**
70.6 **OVENS: PUSHING, QUENCHING, AND BATTERY STACKS.**

70.7 Code of Federal Regulations, title 40, part 63, subpart CCCCC, as amended, entitled
70.8 "National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing,
70.9 Quenching, and Battery Stacks," is incorporated by reference.

70.10 **7011.7100 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
70.11 **PERCHLOROETHYLENE DRY CLEANING FACILITIES.**

70.12 Code of Federal Regulations, title 40, part 63, subpart M, as amended, entitled "National
70.13 Perchloroethylene Air Emission Standards for Dry Cleaning Facilities," is incorporated by
70.14 reference.

70.15 **7011.7120 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
70.16 **CHROMIUM EMISSIONS FROM HARD AND DECORATIVE CHROMIUM**
70.17 **ELECTROPLATING AND CHROMIUM ANODIZING TANKS.**

70.18 Code of Federal Regulations, title 40, part 63, subpart N, as amended, entitled "National
70.19 Emission Standards for Chromium Emissions From Hard and Decorative Chromium
70.20 Electroplating and Chromium Anodizing Tanks," is incorporated by reference.

70.21 **7011.7140 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
70.22 **ETHYLENE OXIDE FOR STERILIZERS.**

70.23 The following national emission standards for hazardous air pollutants are incorporated
70.24 by reference:

70.25 A. Code of Federal Regulations, title 40, part 63, subpart O, as amended, entitled
70.26 "Ethylene Oxide Emissions Standards for Sterilization Facilities"; and

71.1 B. Code of Federal Regulations, title 40, part 63, subpart WWWW, as amended,
71.2 entitled "National Emission Standards for Hospital Ethylene Oxide Sterilizers."

71.3 **7011.7160 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
71.4 **INDUSTRIAL PROCESS COOLING TOWERS.**

71.5 Code of Federal Regulations, title 40, part 63, subpart Q, as amended, entitled "National
71.6 Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers,"
71.7 is incorporated by reference.

71.8 **7011.7180 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
71.9 **GASOLINE DISTRIBUTION.**

71.10 The following national emission standards for hazardous air pollutants are incorporated
71.11 by reference:

71.12 A. Code of Federal Regulations, title 40, part 63, subpart R, as amended, entitled
71.13 "National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals
71.14 and Pipeline Breakout Stations)"; and

71.15 B. Code of Federal Regulations, title 40, part 63, subpartBBBBB, as amended,
71.16 entitled "National Emission Standards for Hazardous Air Pollutants for Source Category:
71.17 Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities."

71.18 **7011.7185 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
71.19 **GASOLINE DISPENSING FACILITIES.**

71.20 Code of Federal Regulations, title 40, part 63, subpart CCCCCC, as amended, entitled
71.21 "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline
71.22 Dispensing Facilities," is incorporated by reference.

71.23 **7011.7200 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
71.24 **HALOGENATED SOLVENT CLEANING.**

71.25 Code of Federal Regulations, title 40, part 63, subpart T, as amended, entitled "National
71.26 Emission Standards for Halogenated Solvent Cleaning," is incorporated by reference.

72.1 **7011.7235 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
72.2 **PRIMARY LEAD SMELTING.**

72.3 Code of Federal Regulations, title 40, part 63, subpart TTT, as amended, entitled
72.4 "National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting,"
72.5 is incorporated by reference.

72.6 **7011.7240 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
72.7 **SECONDARY LEAD SMELTING.**

72.8 Code of Federal Regulations, title 40, part 63, subpart X, as amended, entitled "National
72.9 Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting," is
72.10 incorporated by reference.

72.11 **7011.7260 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
72.12 **MARINE TANK VESSEL LOADING OPERATIONS.**

72.13 Code of Federal Regulations, title 40, part 63, subpart Y, as amended, entitled "National
72.14 Emission Standards for Marine Tank Vessel Loading Operations," is incorporated by
72.15 reference.

72.16 **7011.7280 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
72.17 **PETROLEUM REFINERIES.**

72.18 The following national emission standards for hazardous air pollutants are incorporated
72.19 by reference:

72.20 A. Code of Federal Regulations, title 40, part 63, subpart CC, as amended, entitled
72.21 "National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries";
72.22 and

72.23 B. Code of Federal Regulations, title 40, part 63, subpart UUU, as amended,
72.24 entitled "National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries:
72.25 Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units."

73.1 **7011.7290 INCORPORATION BY REFERENCE; EMISSION STANDARDS; OIL**
73.2 **AND NATURAL GAS PRODUCTION, TRANSMISSION, AND STORAGE.**

73.3 The following national emission standards for hazardous air pollutants are incorporated
73.4 by reference:

73.5 A. Code of Federal Regulations, title 40, part 63, subpart HH, as amended, entitled
73.6 "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas
73.7 Production Facilities"; and

73.8 B. Code of Federal Regulations, title 40, part 63, subpart HHH, as amended,
73.9 entitled "National Emission Standards for Hazardous Air Pollutants From Natural Gas
73.10 Transmission and Storage Facilities."

73.11 **7011.7300 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
73.12 **MAGNETIC TAPE MANUFACTURING OPERATIONS.**

73.13 Code of Federal Regulations, title 40, part 63, subpart EE, as amended, entitled "National
73.14 Emission Standards for Magnetic Tape Manufacturing Operations," is incorporated by
73.15 reference.

73.16 **7011.7320 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
73.17 **AEROSPACE MANUFACTURING AND REWORK FACILITIES.**

73.18 Code of Federal Regulations, title 40, part 63, subpart GG, as amended, entitled
73.19 "National Emission Standards for Aerospace Manufacturing and Rework Facilities," is
73.20 incorporated by reference.

73.21 **7011.7340 INCORPORATION BY REFERENCE; EMISSION STANDARDS; WOOD**
73.22 **FURNITURE MANUFACTURING OPERATIONS.**

73.23 Code of Federal Regulations, title 40, part 63, subpart JJ, as amended, entitled "National
73.24 Emission Standards for Wood Furniture Manufacturing Operations," is incorporated by
73.25 reference.

74.1 **7011.7360 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
74.2 **SHIPBUILDING AND SHIP REPAIR OPERATIONS.**

74.3 Code of Federal Regulations, title 40, part 63, subpart II, as amended, entitled "National
74.4 Emission Standards for Shipbuilding and Ship Repair (Surface Coating)," is incorporated
74.5 by reference.

74.6 **7011.7370 INCORPORATION BY REFERENCE; EMISSION STANDARDS; BOAT**
74.7 **MANUFACTURING.**

74.8 Code of Federal Regulations, title 40, part 63, subpart VVVV, as amended, entitled
74.9 "National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing," is
74.10 incorporated by reference.

74.11 **7011.7380 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
74.12 **PRINTING AND PUBLISHING INDUSTRY.**

74.13 Code of Federal Regulations, title 40, part 63, subpart KK, as amended, entitled
74.14 "National Emission Standards for the Printing and Publishing Industry," is incorporated by
74.15 reference.

74.16 **7011.7385 INCORPORATION BY REFERENCE; EMISSION STANDARDS; PAPER**
74.17 **AND OTHER WEB COATING.**

74.18 Code of Federal Regulations, title 40, part 63, subpart JJJJ, as amended, entitled
74.19 "National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating,"
74.20 is incorporated by reference.

74.21 **7011.7390 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
74.22 **MUNICIPAL SOLID WASTE LANDFILLS.**

74.23 Code of Federal Regulations, title 40, part 63, subpart AAAA, as amended, entitled
74.24 "National Emission Standards for Hazardous Air Pollutants; Municipal Solid Waste
74.25 Landfills," is incorporated by reference.

75.1 **7011.7400 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
75.2 **OFF-SITE WASTE OPERATIONS.**

75.3 The following national emission standards for hazardous air pollutants are incorporated
75.4 by reference:

75.5 A. Code of Federal Regulations, title 40, part 63, subpart DD, as amended, entitled
75.6 "National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and
75.7 Recovery Operations";

75.8 B. Code of Federal Regulations, title 40, part 63, subpart OO, as amended, entitled
75.9 "National Emission Standards for Tanks-Level 1";

75.10 C. Code of Federal Regulations, title 40, part 63, subpart PP, as amended, entitled
75.11 "National Emission Standards for Containers";

75.12 D. Code of Federal Regulations, title 40, part 63, subpart QQ, as amended, entitled
75.13 "National Emission Standards for Surface Impoundments";

75.14 E. Code of Federal Regulations, title 40, part 63, subpart RR, as amended, entitled
75.15 "National Emission Standards for Individual Drain Systems"; and

75.16 F. Code of Federal Regulations, title 40, part 63, subpart VV, as amended, entitled
75.17 "National Emission Standards for Oil-Water Separators and Organic-Water Separators."

75.18 **7011.7410 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
75.19 **HAZARDOUS WASTE COMBUSTION.**

75.20 Code of Federal Regulations, title 40, part 63, subpart EEE, as amended, entitled
75.21 "National Emission Standards for Hazardous Air Pollutants from Hazardous Waste
75.22 Combustors," is incorporated by reference.

76.1 **7011.7420 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
76.2 **POLYMERS AND RESINS.**

76.3 The following national emission standards for hazardous air pollutants are incorporated
76.4 by reference:

76.5 A. Group I polymers and resins. Code of Federal Regulations, title 40, part 63,
76.6 subpart U, as amended, entitled "National Emission Standards for Hazardous Air Pollutant
76.7 Emissions: Group I Polymers and Resins";

76.8 B. Group II polymers and resins. Code of Federal Regulations, title 40, part 63,
76.9 subpart W, as amended, entitled "National Emission Standards for Hazardous Air Pollutants
76.10 for Epoxy Resins Production and Non-Nylon Polyamides Production";

76.11 C. Group III polymers and resins. Code of Federal Regulations, title 40, part 63,
76.12 subpart OOO, as amended, entitled "National Emission Standards for Hazardous Air Pollutant
76.13 Emissions: Manufacture of Amino/Phenolic Resins"; and

76.14 D. Group IV polymers and resins. Code of Federal Regulations, title 40, part 63,
76.15 subpart JJJ, as amended, entitled "National Emission Standards for Hazardous Air Pollutant
76.16 Emissions: Group IV Polymers and Resins."

76.17 **7011.7460 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
76.18 **FERROALLOYS PRODUCTION.**

76.19 Code of Federal Regulations, title 40, part 63, subpart XXX, as amended, entitled
76.20 "National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production:
76.21 Ferromanganese and Silicomanganese," is incorporated by reference.

76.22 **7011.7480 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
76.23 **FLEXIBLE POLYURETHANE FOAM PRODUCTION.**

76.24 Code of Federal Regulations, title 40, part 63, subpart III, as amended, entitled "National
76.25 Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam
76.26 Production," is incorporated by reference.

77.1 **7011.7485 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
77.2 **FLEXIBLE POLYURETHANE FOAM PRODUCTION AND FABRICATION**
77.3 **OPERATIONS.**

77.4 The following national air emission standards for hazardous air pollutants are
77.5 incorporated by reference:

77.6 A. Code of Federal Regulations, title 40, part 63, subpart MMMMM, as amended,
77.7 entitled "National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane
77.8 Foam Fabrication Operations"; and

77.9 B. Code of Federal Regulations, title 40, part 63, subpart OOOOOO, as amended,
77.10 entitled "National Emission Standards for Hazardous Air Pollutants Flexible Polyurethane
77.11 Foam Production and Fabrication Area Sources."

77.12 **7011.7520 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
77.13 **MINERAL WOOL PRODUCTION.**

77.14 Code of Federal Regulations, title 40, part 63, subpart DDD, as amended, entitled
77.15 "National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production,"
77.16 is incorporated by reference.

77.17 **7011.7560 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
77.18 **PESTICIDE ACTIVE INGREDIENT PRODUCTION.**

77.19 Code of Federal Regulations, title 40, part 63, subpart MMM, as amended, entitled
77.20 "National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient
77.21 Production," is incorporated by reference.

77.22 **7011.7580 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
77.23 **PHARMACEUTICALS PRODUCTION.**

77.24 Code of Federal Regulations, title 40, part 63, subpart GGG, as amended, entitled
77.25 "National Emission Standards for Pharmaceuticals Production," is incorporated by reference.

78.1 **7011.7600 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
78.2 **PHOSPHORIC ACID MANUFACTURING AND PHOSPHATE FERTILIZERS**
78.3 **PRODUCTION.**

78.4 The following national emission standards for hazardous air pollutants are incorporated
78.5 by reference:

78.6 A. Code of Federal Regulations, title 40, part 63, subpart AA, as amended, entitled
78.7 "National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid
78.8 Manufacturing Plants"; and

78.9 B. Code of Federal Regulations, title 40, part 63, subpart BB, as amended, entitled
78.10 "National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers
78.11 Production Plants."

78.12 **7011.7610 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
78.13 **HYDROCHLORIC ACID PRODUCTION.**

78.14 Code of Federal Regulations, title 40, part 63, subpart NNNNN, as amended, entitled
78.15 "National Emission Standards for Hazardous Air Pollutant Emissions: Hydrochloric Acid
78.16 Production," is incorporated by reference.

78.17 **7011.7620 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
78.18 **POLYETHER POLYOLS PRODUCTION.**

78.19 Code of Federal Regulations, title 40, part 63, subpart PPP, as amended, entitled
78.20 "National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols
78.21 Production," is incorporated by reference.

78.22 **7011.7640 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
78.23 **PORTLAND CEMENT MANUFACTURING.**

78.24 Code of Federal Regulations, title 40, part 63, subpart LLL, as amended, entitled
78.25 "National Emission Standards for Hazardous Air Pollutants From the Portland Cement
78.26 Manufacturing Industry," is incorporated by reference.

79.1 **7011.7650 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
79.2 **PRIMARY COPPER SMELTING.**

79.3 Code of Federal Regulations, title 40, part 63, subpart QQQ, as amended, entitled
79.4 "National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting,"
79.5 is incorporated by reference.

79.6 **7011.7660 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
79.7 **PRIMARY ALUMINUM PRODUCTION.**

79.8 Code of Federal Regulations, title 40, part 63, subpart LL, as amended, entitled "National
79.9 Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants,"
79.10 is incorporated by reference.

79.11 **7011.7665 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
79.12 **SECONDARY ALUMINUM PRODUCTION.**

79.13 Code of Federal Regulations, title 40, part 63, subpart RRR, as amended, entitled
79.14 "National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum
79.15 Production," is incorporated by reference.

79.16 **7011.7670 INCORPORATION BY REFERENCE; EMISSION STANDARDS; STEEL**
79.17 **PICKLING - HYDROCHLORIC ACID PROCESS.**

79.18 Code of Federal Regulations, title 40, part 63, subpart CCC, as amended, entitled
79.19 "National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process
79.20 Facilities and Hydrochloric Acid Regeneration Plants," is incorporated by reference.

79.21 **7011.7675 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
79.22 **INTEGRATED IRON AND STEEL MANUFACTURING FACILITIES.**

79.23 Code of Federal Regulations, title 40, part 63, subpart FFFFF, as amended, entitled
79.24 "National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel
79.25 Manufacturing Facilities," is incorporated by reference.

80.1 **7011.7680 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
80.2 **PUBLICLY OWNED TREATMENT WORKS.**

80.3 Code of Federal Regulations, title 40, part 63, subpart VVV, as amended, entitled
80.4 "National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment
80.5 Works," is incorporated by reference.

80.6 **7011.7700 INCORPORATION BY REFERENCE; EMISSION STANDARDS; PULP**
80.7 **AND PAPER PRODUCTION.**

80.8 The following national emission standards for hazardous air pollutants are incorporated
80.9 by reference:

80.10 A. Code of Federal Regulations, title 40, part 63, subpart S, as amended, entitled
80.11 "National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper
80.12 Industry"; and

80.13 B. Code of Federal Regulations, title 40, part 63, subpart MM, as amended, entitled
80.14 "National Emission Standards for Hazardous Air Pollutants for Chemical Recovery
80.15 Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills."

80.16 **7011.7720 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
80.17 **WET-FORMED FIBERGLASS MAT PRODUCTION.**

80.18 Code of Federal Regulations, title 40, part 63, subpart HHHH, as amended, entitled
80.19 "National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat
80.20 Production," is incorporated by reference.

80.21 **7011.7730 INCORPORATION BY REFERENCE; EMISSION STANDARDS; WOOL**
80.22 **FIBERGLASS MANUFACTURING.**

80.23 Code of Federal Regulations, title 40, part 63, subpart NNN, as amended, entitled
80.24 "National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass
80.25 Manufacturing," is incorporated by reference.

81.1 **7011.7740 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
81.2 **CELLULOSE PRODUCTS MANUFACTURING.**

81.3 Code of Federal Regulations, title 40, part 63, subpart UUUU, as amended, entitled
81.4 "National Emission Standards for Hazardous Air Pollutants for Cellulose Products
81.5 Manufacturing," is incorporated by reference.

81.6 **7011.7760 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
81.7 **LEATHER FINISHING OPERATIONS.**

81.8 Code of Federal Regulations, title 40, part 63, subpart TTTT, as amended, entitled
81.9 "National Emission Standards for Hazardous Air Pollutants for Leather Finishing
81.10 Operations," is incorporated by reference.

81.11 **7011.7770 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
81.12 **PRINTING, COATING, AND DYEING OF FABRICS AND OTHER TEXTILES.**

81.13 Code of Federal Regulations, title 40, part 63, subpart OOOO, as amended, entitled
81.14 "National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing
81.15 of Fabrics and Other Textiles," is incorporated by reference.

81.16 **7011.7780 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
81.17 **MANUFACTURING NUTRITIONAL YEAST.**

81.18 Code of Federal Regulations, title 40, part 63, subpart CCCC, as amended, entitled
81.19 "National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional
81.20 Yeast," is incorporated by reference.

81.21 **7011.7800 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
81.22 **REINFORCED PLASTIC COMPOSITES PRODUCTION.**

81.23 Code of Federal Regulations, title 40, part 63, subpart WWWW, as amended, entitled
81.24 "National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites
81.25 Production," is incorporated by reference.

82.1 **7011.7820 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
82.2 **POLYVINYL CHLORIDE AND COPOLYMERS PRODUCTION.**

82.3 Code of Federal Regulations, title 40, part 63, subpart J, as amended, entitled "National
82.4 Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers
82.5 Production," is incorporated by reference.

82.6 **7011.7840 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
82.7 **SOLVENT EXTRACTION FOR VEGETABLE OIL PRODUCTION.**

82.8 Code of Federal Regulations, title 40, part 63, subpart GGGG, as amended, entitled
82.9 "National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable
82.10 Oil Production," is incorporated by reference.

82.11 **7011.7860 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
82.12 **RUBBER TIRE MANUFACTURING.**

82.13 Code of Federal Regulations, title 40, part 63, subpart XXXX, as amended, entitled
82.14 "National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing,"
82.15 is incorporated by reference.

82.16 **7011.7880 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
82.17 **FRICTION MATERIALS MANUFACTURING FACILITIES.**

82.18 Code of Federal Regulations, title 40, part 63, subpart QQQQQ, as amended, entitled
82.19 "National Emission Standards for Hazardous Air Pollutants for Friction Materials
82.20 Manufacturing Facilities," is incorporated by reference.

82.21 **7011.7900 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
82.22 **SURFACE COATING OF LARGE APPLIANCES.**

82.23 Code of Federal Regulations, title 40, part 63, subpart NNNN, as amended, entitled
82.24 "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large
82.25 Appliances," is incorporated by reference.

83.1 **7011.7905 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
83.2 **SURFACE COATING OF METAL COIL.**

83.3 Code of Federal Regulations, title 40, part 63, subpart SSSS, as amended, entitled
83.4 "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil,"
83.5 is incorporated by reference.

83.6 **7011.7910 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
83.7 **SURFACE COATING OF METAL FURNITURE.**

83.8 Code of Federal Regulations, title 40, part 63, subpart RRRR, as amended, entitled
83.9 "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal
83.10 Furniture," is incorporated by reference.

83.11 **7011.7920 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
83.12 **REFRACTORY PRODUCTS MANUFACTURING.**

83.13 Code of Federal Regulations, title 40, part 63, subpart SSSSS, as amended, entitled
83.14 "National Emission Standards for Hazardous Air Pollutants for Refractory Products
83.15 Manufacturing," is incorporated by reference.

83.16 **7011.7930 INCORPORATION BY REFERENCE; EMISSION STANDARDS; BRICK**
83.17 **AND STRUCTURAL CLAY PRODUCTS MANUFACTURING.**

83.18 Code of Federal Regulations, title 40, part 63, subpart JJJJJ, as amended, entitled
83.19 "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay
83.20 Products Manufacturing," is incorporated by reference.

83.21 **7011.7935 INCORPORATION BY REFERENCE; EMISSION STANDARDS; CLAY**
83.22 **CERAMICS MANUFACTURING.**

83.23 The following national emission standards for hazardous air pollutants are incorporated
83.24 by reference:

84.1 A. Code of Federal Regulations, title 40, part 63, subpart KKKKK, as amended,
84.2 entitled "National Emission Standards for Hazardous Air Pollutants for Clay Ceramics
84.3 Manufacturing"; and

84.4 B. Code of Federal Regulations, title 40, part 63, subpart RRRRRR, as amended,
84.5 entitled "National Emission Standards for Hazardous Air Pollutants for Clay Ceramics
84.6 Manufacturing Area Sources."

84.7 **7011.7940 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
84.8 **ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURING.**

84.9 The following national emission standards for hazardous air pollutants are incorporated
84.10 by reference:

84.11 A. Code of Federal Regulations, title 40, part 63, subpart LLLLL, as amended,
84.12 entitled "National Emission Standards for Hazardous Air Pollutants: Asphalt Processing
84.13 and Asphalt Roofing Manufacturing"; and

84.14 B. Code of Federal Regulations, title 40, part 63, subpart AAAAAA, as amended,
84.15 entitled "National Emission Standards for Hazardous Air Pollutants for Area Sources:
84.16 Asphalt Processing and Asphalt Roofing Manufacturing."

84.17 **7011.7960 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
84.18 **SEMICONDUCTOR MANUFACTURING.**

84.19 Code of Federal Regulations, title 40, part 63, subpart BBBBB, as amended, entitled
84.20 "National Emission Standards for Hazardous Air Pollutants for Semiconductor
84.21 Manufacturing," is incorporated by reference.

84.22 **7011.7980 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
84.23 **ENGINE TEST CELLS/STANDS.**

84.24 Code of Federal Regulations, title 40, part 63, subpart PPPPP, as amended, entitled
84.25 "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stand,"
84.26 is incorporated by reference.

85.1 **7011.8000 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
85.2 **SURFACE COATING OF WOOD BUILDING PRODUCTS.**

85.3 Code of Federal Regulations, title 40, part 63, subpart QQQQ, as amended, entitled
85.4 "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood
85.5 Building Products," is incorporated by reference.

85.6 **7011.8010 INCORPORATION BY REFERENCE; EMISSION STANDARDS; SITE**
85.7 **REMEDiation.**

85.8 Code of Federal Regulations, title 40, part 63, subpart GGGGG, as amended, entitled
85.9 "National Emission Standards for Hazardous Air Pollutants: Site Remediation," is
85.10 incorporated by reference.

85.11 **7011.8020 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
85.12 **PRIMARY MAGNESIUM REFINING.**

85.13 Code of Federal Regulations, title 40, part 63, subpart TTTTT, as amended, entitled
85.14 "National Emission Standards for Hazardous Air Pollutants for Primary Magnesium
85.15 Refining," is incorporated by reference.

85.16 **7011.8030 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
85.17 **TACONITE IRON ORE PROCESSING.**

85.18 Code of Federal Regulations, title 40, part 63, subpart RRRRR, as amended, entitled
85.19 "National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing,"
85.20 is incorporated by reference.

85.21 **7011.8040 INCORPORATION BY REFERENCE; EMISSION STANDARDS; IRON**
85.22 **AND STEEL FOUNDRIES.**

85.23 The following national emission standards for hazardous air pollutants are incorporated
85.24 by reference:

86.1 A. Code of Federal Regulations, title 40, part 63, subpart EEEEE, as amended,
86.2 entitled "National Emission Standards for Hazardous Air Pollutants for Iron and Steel
86.3 Foundries"; and

86.4 B. Code of Federal Regulations, title 40, part 63, subpart ZZZZZ, as amended,
86.5 entitled "National Emission Standards for Hazardous Air Pollutants for Iron and Steel
86.6 Foundries Area Sources."

86.7 **7011.8050 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
86.8 **MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING.**

86.9 Code of Federal Regulations, title 40, part 63, subpart FFFF, as amended, entitled
86.10 "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical
86.11 Manufacturing," is incorporated by reference.

86.12 **7011.8060 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
86.13 **SURFACE COATING OF METAL CANS.**

86.14 Code of Federal Regulations, title 40, part 63, subpart KKKK, as amended, entitled
86.15 "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal
86.16 Cans," is incorporated by reference.

86.17 **7011.8070 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
86.18 **MISCELLANEOUS COATING MANUFACTURING.**

86.19 Code of Federal Regulations, title 40, part 63, subpart HHHHH, as amended, entitled
86.20 "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating
86.21 Manufacturing," is incorporated by reference.

86.22 **7011.8080 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
86.23 **MERCURY EMISSIONS FROM MERCURY CELL CHLOR-ALKALI PLANTS.**

86.24 Code of Federal Regulations, title 40, part 63, subpart IIIII, as amended, entitled
86.25 "National Emission Standards for Hazardous Air Pollutants: Mercury Emissions from
86.26 Mercury Cell Chlor-Alkali Plants," is incorporated by reference.

87.1 **7011.8090 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
87.2 **SURFACE COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS.**

87.3 Code of Federal Regulations, title 40, part 63, subpart MMMM, as amended, entitled
87.4 "National Emission Standards for Hazardous Air Pollutants for Surface Coating of
87.5 Miscellaneous Metal Parts and Products," is incorporated by reference.

87.6 **7011.8100 INCORPORATION BY REFERENCE; EMISSION STANDARDS; LIME**
87.7 **MANUFACTURING PLANTS.**

87.8 Code of Federal Regulations, title 40, part 63, subpart AAAAA, as amended, entitled
87.9 "National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants,"
87.10 is incorporated by reference.

87.11 **7011.8110 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
87.12 **ORGANIC LIQUIDS DISTRIBUTION (NONGASOLINE).**

87.13 Code of Federal Regulations, title 40, part 63, subpart EEEE, as amended, entitled
87.14 "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution
87.15 (Non-Gasoline)," is incorporated by reference.

87.16 **7011.8120 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
87.17 **STATIONARY COMBUSTION TURBINES.**

87.18 Code of Federal Regulations, title 40, part 63, subpart YYYY, as amended, entitled
87.19 "National Emission Standards for Hazardous Air Pollutants for Stationary Combustion
87.20 Turbines," is incorporated by reference.

87.21 **7011.8130 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
87.22 **SURFACE COATING OF PLASTIC PARTS AND PRODUCTS.**

87.23 Code of Federal Regulations, title 40, part 63, subpart PPPP, as amended, entitled
87.24 "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic
87.25 Parts and Products," is incorporated by reference.

88.1 **7011.8140 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
88.2 **SURFACE COATING OF AUTOMOBILES AND LIGHT-DUTY TRUCKS.**

88.3 Code of Federal Regulations, title 40, part 63, subpart IIII, as amended, entitled
88.4 "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles
88.5 and Light-Duty Trucks," is incorporated by reference.

88.6 **7011.8150 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
88.7 **STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

88.8 Code of Federal Regulations, title 40, part 63, subpart ZZZZ, as amended, entitled
88.9 "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating
88.10 Internal Combustion Engines," is incorporated by reference.

88.11 **7011.8160 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
88.12 **PLYWOOD AND COMPOSITE WOOD PRODUCTS.**

88.13 Code of Federal Regulations, title 40, part 63, subpart DDDD, as amended, entitled
88.14 "National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood
88.15 Products," is incorporated by reference.

88.16 **7011.8190 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
88.17 **CLOSED VENT SYSTEMS, CONTROL DEVICES, RECOVERY DEVICES AND**
88.18 **ROUTING TO A FUEL GAS SYSTEM OR PROCESS.**

88.19 Code of Federal Regulations, title 40, part 63, subpart SS, as amended, entitled "National
88.20 Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and
88.21 Routing to a Fuel Gas System or a Process," is incorporated by reference.

88.22 **7011.8200 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
88.23 **EQUIPMENT LEAKS.**

88.24 The following national emission standards for hazardous air pollutants are incorporated
88.25 by reference:

88.26 A. Code of Federal Regulations, title 40, part 63, subpart TT, as amended, entitled
88.27 "National Emission Standards for Equipment Leaks - Control Level 1"; and

89.1 B. Code of Federal Regulations, title 40, part 63, subpart UU, as amended, entitled
89.2 "National Emission Standards for Equipment Leaks - Control Level 2 Standards."

89.3 **7011.8205 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
89.4 **STORAGE VESSELS (TANKS) - CONTROL LEVEL 2.**

89.5 Code of Federal Regulations, title 40, part 63, subpart WW, as amended, entitled
89.6 "National Emission Standards for Storage Vessels (Tanks) - Control Level 2," is incorporated
89.7 by reference.

89.8 **7011.8210 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
89.9 **ETHYLENE MANUFACTURING PROCESS UNITS; HEAT EXCHANGE SYSTEMS**
89.10 **AND WASTE OPERATIONS.**

89.11 Code of Federal Regulations, title 40, part 63, subpart XX, as amended, entitled
89.12 "National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange
89.13 Systems and Waste Operations," is incorporated by reference.

89.14 **7011.8215 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
89.15 **ELECTRIC ARC FURNACE STEELMAKING FACILITIES.**

89.16 Code of Federal Regulations, title 40, part 63, subpart YYYYYY, as amended, entitled
89.17 "National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc
89.18 Furnace Steelmaking Facilities," is incorporated by reference.

89.19 **7011.8220 INCORPORATION BY REFERENCE; EMISSION STANDARDS; PAINT**
89.20 **STRIPPING AND MISCELLANEOUS SURFACE COATING OPERATIONS; AREA**
89.21 **SOURCES.**

89.22 Code of Federal Regulations, title 40, part 63, subpart HHHHHH, as amended, entitled
89.23 "National Emission Standards for Hazardous Air Pollutants: Paint Stripping and
89.24 Miscellaneous Surface Coating Operations at Area Sources," is incorporated by reference.

90.1 **7011.8225 INCORPORATION BY REFERENCE; EMISSION STANDARDS; LEAD**
90.2 **ACID BATTERY MANUFACTURING.**

90.3 Code of Federal Regulations, title 40, part 63, subpart P P P P P P, as amended, entitled
90.4 "National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery
90.5 Manufacturing Area Sources," is incorporated by reference.

90.6 **7011.8230 INCORPORATION BY REFERENCE; EMISSION STANDARDS; WOOD**
90.7 **PRESERVING; AREA SOURCES.**

90.8 Code of Federal Regulations, title 40, part 63, subpart Q Q Q Q Q Q, as amended, entitled
90.9 "National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area
90.10 Sources," is incorporated by reference.

90.11 **7011.8235 INCORPORATION BY REFERENCE; EMISSION STANDARDS; GLASS**
90.12 **MANUFACTURING AREA SOURCES.**

90.13 Code of Federal Regulations, title 40, part 63, subpart S S S S S S, as amended, entitled
90.14 "National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area
90.15 Sources," is incorporated by reference.

90.16 **7011.8240 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
90.17 **SECONDARY NONFERROUS METALS PROCESSING AREA SOURCES.**

90.18 Code of Federal Regulations, title 40, part 63, subpart T T T T T T, as amended, entitled
90.19 "National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous
90.20 Metals Processing Area Sources," is incorporated by reference.

90.21 **7011.8245 INCORPORATION BY REFERENCE; EMISSIONS STANDARDS;**
90.22 **CHEMICAL MANUFACTURING AREA SOURCES.**

90.23 Code of Federal Regulations, title 40, part 63, subpart V V V V V V, as amended, entitled
90.24 "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing
90.25 Area Sources," is incorporated by reference.

91.1 **7011.8250 INCORPORATION BY REFERENCE; EMISSION STANDARDS; AREA**
91.2 **SOURCE STANDARDS FOR PLATING AND POLISHING OPERATIONS.**

91.3 Code of Federal Regulations, title 40, part 63, subpart WWWWWW, as amended,
91.4 entitled "National Emission Standards for Hazardous Air Pollutants: Area Source Standards
91.5 for Plating and Polishing Operations," is incorporated by reference.

91.6 **7011.8255 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
91.7 **METAL FABRICATION AND FINISHING.**

91.8 Code of Federal Regulations, title 40, part 63, subpart XXXXXX, as amended, entitled
91.9 "National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine
91.10 Metal Fabrication and Finishing Source Categories," is incorporated by reference.

91.11 **7011.8260 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
91.12 **FERROALLOYS PRODUCTION FACILITIES.**

91.13 Code of Federal Regulations, title 40, part 63, subpart YYYYYY, as amended, entitled
91.14 "National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys
91.15 Production Facilities," is incorporated by reference.

91.16 **7011.8265 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
91.17 **ALUMINUM, COPPER, AND OTHER NONFERROUS FOUNDRIES.**

91.18 Code of Federal Regulations, title 40, part 63, subpart ZZZZZZ, as amended, entitled
91.19 "National Emission Standards for Hazardous Air Pollutants: Area Source Standards for
91.20 Aluminum, Copper, and Other Nonferrous Foundries," is incorporated by reference.

91.21 **7011.8270 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
91.22 **CHEMICAL PREPARATIONS INDUSTRY.**

91.23 Code of Federal Regulations, title 40, part 63, subpart BBBBbbb, as amended, entitled
91.24 "National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical
91.25 Preparations Industry," is incorporated by reference.

92.1 **7011.8275 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
92.2 **PAINTS AND ALLIED PRODUCTS MANUFACTURING.**

92.3 Code of Federal Regulations, title 40, part 63, subpart CCCCCC, as amended, entitled
92.4 "National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and
92.5 Allied Products Manufacturing," is incorporated by reference.

92.6 **7011.8280 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
92.7 **PREPARED FEEDS MANUFACTURING.**

92.8 Code of Federal Regulations, title 40, part 63, subpart DDDDDDD, as amended, entitled
92.9 "National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared
92.10 Feeds Manufacturing," is incorporated by reference.

92.11 **7011.9910 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
92.12 **ARSENIC.**

92.13 The following national emission standards for hazardous air pollutants are incorporated
92.14 by reference:

92.15 A. Code of Federal Regulations, title 40, part 61, subpart N, as amended, entitled
92.16 "National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing
92.17 Plants," except that the authorities identified under Code of Federal Regulations, title 40,
92.18 section 61.164(a)(2) and (a)(3), are not delegated to the commissioner and are retained by
92.19 the administrator;

92.20 B. Code of Federal regulations, title 40, part 61, subpart O, as amended, entitled
92.21 "National Emission Standard for Inorganic Arsenic Emissions from Primary Copper
92.22 Smelters," except that the authorities identified under Code of Federal Regulations, title 40,
92.23 sections 61.172(b)(2)(ii)(B) and (b)(2)(ii)(C) and 61.174(a)(2) and (a)(3), are not delegated
92.24 to the commissioner and are retained by the administrator; and

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

93.1 **7011.9920 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
93.2 **ASBESTOS.**

93.3 Code of Federal Regulations, title 40, part 61, subpart M, as amended, entitled "National
93.4 Emission Standard for Asbestos," is incorporated by reference.

93.5 **7011.9921 DEFINITIONS.**

93.6 Subpart 1. **Scope.** The terms in this part have the meanings given for the purposes of
93.7 parts 7011.9921 to 7011.9927.

93.8 Subp. 2. **Air flow permeability.** "Air flow permeability" means the volumetric rate
93.9 of air flow in cfm, produced by a pressure decrease of 0.5 inches water gage across a new,
93.10 clean filtering fabric, divided by the area of the fabric in ft².

93.11 Subp. 3. [See repealer.]

93.12 *[For text of subpart 4, see Minnesota Rules]*

93.13 Subp. 4a. [See repealer.]

93.14 Subp. 5. **Debris.** "Debris" means waste produced by demolishing a building or
93.15 structure.

93.16 Subp. 6. [Repealed by amendment, L 1987 c 186 s 15]

93.17 Subp. 7. **Local exhaust ventilation system.** "Local exhaust ventilation system" means
93.18 a system that captures particulate matter generated by a process by applying an air stream
93.19 induced at the process and that has a device that encloses the process, partially encloses the
93.20 process, or guides the capturing air flow at the process.

93.21 Subp. 8. **Manufacturing operation.** "Manufacturing operation" means the processing
93.22 of asbestos or the production of a product containing asbestos, with the exception of a
93.23 process in which an asbestos-containing material is sprayed.

93.24 Subp. 9. [See repealer.]

94.1 *[For text of subpart 10, see Minnesota Rules]*

94.2 Subp. 11. **Visible emission.** "Visible emission" means any emission that is visually
94.3 detectable.

94.4 Subp. 12. [See repealer.]

94.5 **7011.9922 MANUFACTURING OPERATIONS.**

94.6 Subpart 1. **Emissions from local exhaust ventilation system.** Emissions of particulate
94.7 matter to the atmosphere from a local exhaust ventilation system in a building, structure,
94.8 facility, or installation within which any manufacturing operation is carried on must not
94.9 exceed the amount that would be emitted if the emissions were treated in a fabric filter
94.10 installation as described in part 7011.9925.

94.11 Subp. 2. **Other emissions.** All other visible emissions of particulate matter to the
94.12 atmosphere from a building, structure, facility, or installation within which any manufacturing
94.13 operation is carried on must not exceed the amount that would be emitted if the emissions
94.14 were treated in a fabric filter installation as described in part 7011.9925.

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

94.16 Subp. 4. **Design and operation requirements.** The design and operation of ventilation
94.17 devices in ventilation systems must conform with ANSI Z9.2, Fundamentals Governing the
94.18 Design and Operation of Local Exhaust Ventilation Systems (2012), published by the
94.19 American National Standards Institute. The standard is incorporated by reference, is not
94.20 subject to frequent change, and is available through the Minitex interlibrary loan system.

94.21 **7011.9923 SPRAYING.**

94.22 Subpart 1. **Open area.** The spraying in any area open to the outdoor atmosphere of
94.23 any acoustical insulating, thermal insulating, or fireproofing product that contains asbestos
94.24 is prohibited.

95.1 **Subp. 2. Emissions to outdoor atmosphere.** Emissions to the outdoor atmosphere
95.2 of particulate matter from spraying any acoustical insulating, thermal insulating, or
95.3 fireproofing product that contains asbestos, if the spraying is not otherwise prohibited by
95.4 law, must not exceed the amounts that would be emitted to the atmosphere if the area
95.5 containing the emissions were treated by a fabric filter installation as described in part
95.6 7011.9925.

95.7 **Subp. 3. Detectable amount of asbestos.** A product is deemed to contain asbestos if
95.8 a detectable amount of asbestos is in the product or in any material that goes into the product.
95.9 "Detectable amount of asbestos" means an amount detectable by x-ray diffraction,
95.10 petrographic optical microscopy, or any other method approved by the commissioner.

95.11 **7011.9925 FABRIC FILTER SPECIFICATIONS.**

95.12 **Subpart 1. Requirements.** Fabric filter collection devices referred to in parts
95.13 7011.9922, subparts 1 and 2, and 7011.9923, subpart 2, must be operated at not more than
95.14 four inches water gage pressure decrease as measured across the filter fabric. No bypass
95.15 devices are permitted. The collection devices must be equipped with either of the following
95.16 classes of fabrics:

95.17 A. woven fabrics that have an air flow permeability not exceeding 30 cfm/ft² and
95.18 that, if constructed of synthetic materials, contain no fill yarn other than spun yarn; or

95.19 B. felted fabrics that have an average density of not less than 14 oz/yd², an average
95.20 thickness of not less than 1/16 inch, and an air flow permeability of not more than 35 cfm/ft².

95.21 **Subp. 2. Failure to meet requirements.** Fabric filter devices do not meet the
95.22 requirements of this part if any of the following conditions exist: leakage of gases that
95.23 contain particulate matter from the control system before filtration; torn or ruptured bags;
95.24 improperly positioned bags; badly worn or threadbare bags; or presence of visible emissions
95.25 of particulate matter when collection hoppers are emptied.

96.1 Subp. 3. **Air flow permeability.** Tests of air flow permeability must be performed as
96.2 specified in ASTM D737-18, Standard Test Method for Air Permeability of Textile Fabrics
96.3 (2018), published by ASTM International. The test method is incorporated by reference, is
96.4 not subject to frequent change, and is available through the Minitex interlibrary loan system.

96.5 **7011.9930 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
96.6 **BENZENE.**

96.7 The following national emission standards for hazardous air pollutants are incorporated
96.8 by reference:

96.9 A. Code of Federal Regulations, title 40, part 61, subpart J, as amended, entitled
96.10 "National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene,"
96.11 except that the authorities identified in Code of Federal Regulations, title 40, section
96.12 61.112(c), are not delegated to the commissioner and are retained by the administrator;

96.13 B. Code of Federal Regulations, title 40, part 61, subpart L, as amended, entitled
96.14 "National Emission Standard for Benzene Emissions from Coke By-Product Recovery
96.15 Plants";

96.16 C. Code of Federal Regulations, title 40, part 61, subpart Y, as amended, entitled
96.17 "National Emission Standard for Benzene Emissions from Benzene Storage Vessels";

96.18 D. Code of Federal Regulations, title 40, part 61, subpart BB, as amended, entitled
96.19 "National Emission Standard for Benzene Emissions from Benzene Transfer Operations";
96.20 and

96.21 E. Code of Federal Regulations, title 40, part 61, subpart FF, as amended, entitled
96.22 "National Emission Standard for Benzene Waste Operations."

97.1 **7011.9940 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
97.2 **BERYLLIUM.**

97.3 The following national emission standards for hazardous air pollutants are incorporated
97.4 by reference:

97.5 A. Code of Federal Regulations, title 40, part 61, subpart C, as amended, entitled
97.6 "National Emission Standard for Beryllium"; and

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

97.8 **7011.9950 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
97.9 **MERCURY.**

97.10 Code of Federal Regulations, title 40, part 61, subpart E, as amended, entitled "National
97.11 Emission Standard for Mercury," is incorporated by reference.

97.12 **7011.9960 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
97.13 **RADON.**

97.14 The following national emission standards for hazardous air pollutants are incorporated
97.15 by reference:

97.16 A. Code of Federal Regulations, title 40, part 61, subpart B, as amended, entitled
97.17 "National Emission Standards for Radon Emissions From Underground Uranium Mines";

97.18 B. Code of Federal Regulations, title 40, part 61, subpart Q, as amended, entitled
97.19 "National Emission Standards for Radon Emissions From Department of Energy Facilities";

97.20 C. Code of Federal Regulations, title 40, part 61, subpart R, as amended, entitled
97.21 "National Emission Standards for Radon Emissions From Phosphogypsum Stacks";

97.22 D. Code of Federal regulations, title 40, part 61, subpart T, as amended, entitled
97.23 "National Emission Standards for Radon Emissions From the Disposal of Uranium Mill
97.24 Tailings"; and

97.25 *[For text of item E, see Minnesota Rules]*

98.1 **7011.9970 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
98.2 **RADIONUCLIDES.**

98.3 The following national emissions standards for hazardous air pollutants are incorporated
98.4 by reference:

98.5 A. Code of Federal Regulations, title 40, part 61, subpart H, as amended, entitled
98.6 "National Emission Standards for Emissions of Radionuclides Other Than Radon From
98.7 Department of Energy Facilities";

98.8 B. Code of Federal Regulations, title 40, part 61, subpart I, as amended, entitled
98.9 "National Emission Standards for Radionuclide Emissions From Federal Facilities Other
98.10 Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H"; and

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

98.12 **7011.9980 INCORPORATION BY REFERENCE; EMISSION STANDARDS; VINYL**
98.13 **CHLORIDE.**

98.14 Code of Federal Regulations, title 40, part 61, subpart F, as amended, entitled "National
98.15 Emission Standard for Vinyl Chloride," is incorporated by reference, except that authorities
98.16 identified under Code of Federal Regulations, title 40, section 61.66, are retained by the
98.17 administrator.

98.18 **7011.9990 INCORPORATION BY REFERENCE; EMISSION STANDARDS;**
98.19 **VOLATILE HAZARDOUS AIR POLLUTANTS.**

98.20 Code of Federal Regulations, title 40, part 61, subpart V, as amended, entitled "National
98.21 Emission Standard for Equipment Leaks (Fugitive Emission Sources)," is incorporated by
98.22 reference, except that authorities identified under Code of Federal Regulations, title 40,
98.23 sections 61.242-1(c)(2) and 61.244, are retained by the administrator.

99.1 **7017.0150 GENERAL PROVISIONS OF MONITORING AND TESTING**
99.2 **REQUIREMENTS.**

99.3 References to the administrator in the incorporated federal regulations refer to the
99.4 commissioner, except when authorities are specifically identified in Code of Federal
99.5 Regulations or state rule as nondelegable.

99.6 **7017.1010 INCORPORATION BY REFERENCE; MONITORING**
99.7 **REQUIREMENTS.**

99.8 Subpart 1. **New source performance standards.** The following regulations are
99.9 incorporated by reference:

99.10 A. Code of Federal Regulations, title 40, section 60.13, as amended, entitled
99.11 "Monitoring Requirements";

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

99.13 Subp. 2. **National emissions standards for hazardous air pollutants.** The following
99.14 regulations are incorporated by reference:

99.15 *[For text of item A, see Minnesota Rules]*

99.16 B. Code of Federal Regulations, title 40, section 63.8, as amended, entitled
99.17 "Monitoring Requirements."

99.18 Subp. 3. [See repealer.]

99.19 **7017.1020 INCORPORATION BY REFERENCE; CONTINUOUS EMISSION**
99.20 **MONITORING.**

99.21 Affected sources, as defined in part 7007.0100, subpart 4, must comply with Code of
99.22 Federal Regulations, title 40, part 75, as amended, entitled "Continuous Emission
99.23 Monitoring," which is incorporated by reference.

100.1 **7017.1170 QUALITY ASSURANCE AND CONTROL REQUIREMENTS FOR**
100.2 **CEMS.**

100.3 *[For text of subparts 1 and 1a, see Minnesota Rules]*

100.4 Subp. 2. **Quality assurance plan required.** The owner or operator of the facility
100.5 must develop and implement a written quality assurance plan that covers each CEMS. The
100.6 plan must be on site and available for inspection within 30 days after monitor certification.
100.7 The plan must be revised as needed to keep the plan up to date with the facility's current
100.8 policies and procedures. The plan must contain all of the information required by Code of
100.9 Federal Regulations, title 40, part 60, appendix F, section 3, or Code of Federal Regulations,
100.10 title 40, part 75, Appendix B, as amended. The plan must include the manufacturer's spare
100.11 parts list for each CEMS and require that those parts be kept at the facility unless the
100.12 commissioner gives written approval to exclude specific spare parts from the list considering
100.13 the consequences of a malfunction of the part, the likelihood of a malfunction, the time
100.14 required to obtain the part, and other pertinent factors.

100.15 Subp. 3. **Daily calibration drift assessment and adjustment.** The facility owner or
100.16 operator must conduct daily calibration drift assessments and make adjustments as needed
100.17 according to the procedure listed in items A and B, Code of Federal Regulations, title 40,
100.18 section 60.13(d)(1), or Code of Federal Regulations, title 40, part 75, Appendix B, section
100.19 2.1, as amended, as applicable, for each pollutant concentration and diluent monitor. The
100.20 calibration drift assessment must be conducted on each monitor range. The span value
100.21 specified in the applicable requirement or compliance document must be used to determine
100.22 the zero and span calibration points. If no span value is specified in the applicable requirement
100.23 or compliance document, the owner or operator must use a span value equivalent to 1.5
100.24 times the emission limit.

100.25 A. For an extractive CEMS, minimum drift assessment procedures must include
100.26 introducing applicable zero and span gas mixtures into the measurement system as near the
100.27 probe as is practical. Gases within \pm two percent of tag value must be used to perform the

101.1 span (upscale) drift assessment. The span and zero gas mixtures must be the same
101.2 composition as specified in the applicable performance specification.

101.3 B. For a nonextractive, in situ CEMS, minimum drift assessment procedures must
101.4 include upscale checks using a certified calibration gas cell or test cell that is functionally
101.5 equivalent to a known gas concentration. The zero check may be performed by computing
101.6 the zero value from upscale measurements or by mechanically producing a zero condition.

101.7 *[For text of subparts 4 to 8, see Minnesota Rules]*

101.8 **7017.1215 INCORPORATION BY REFERENCE; QUALITY ASSURANCE AND**
101.9 **CONTROL REQUIREMENTS FOR COMS.**

101.10 For quality assurance and control requirements for COMS, the facility owner or operator
101.11 must conduct quality assurance and quality control as specified in Procedure 3 - Quality
101.12 Assurance Requirements for Continuous Opacity Monitoring Systems at Stationary Sources,
101.13 Code of Federal Regulations, title 40, part 60, Appendix F, as amended, which is incorporated
101.14 by reference.

101.15 **7017.2010 INCORPORATION BY REFERENCE; TEST METHODS.**

101.16 For the purpose of parts 7017.2020 to 7017.2060, the documents in items A to D are
101.17 incorporated by reference.

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

101.19 **7017.2015 INCORPORATION BY REFERENCE; TESTING REQUIREMENTS.**

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

101.21 Subp. 2. **New source performance standards.** The following are incorporated by
101.22 reference:

101.23 A. Code of Federal Regulations, title 40, section 60.8, as amended, entitled
101.24 "Performance Tests," except that authorities identified in Code of Federal Regulations, title

102.1 40, sections 60.8(b)(2) and 60.8(b)(3), are not delegated to the commissioner and are retained
102.2 by the administrator.

102.3 B. Code of Federal Regulations, title 40, section 60.11, as amended, entitled
102.4 "Compliance with Standards and Maintenance Requirements," except that authorities
102.5 identified in Code of Federal Regulations, title 40, section 60.11(e), are not delegated to
102.6 the commissioner and are retained by the administrator.

102.7 Subp. 3. **National emission standards for hazardous air pollutants.** The following
102.8 are incorporated by reference:

102.9 *[For text of item A, see Minnesota Rules]*

102.10 B. Code of Federal Regulations, title 40, section 61.13, as amended, entitled
102.11 "Emission Tests and Waiver of Emission Tests," except that authorities identified in Code
102.12 of Federal Regulations, title 40, section 61.13(h)(1)(ii), are not delegated to the commissioner
102.13 and are retained by the administrator.

102.14 Subp. 4. [See repealer.]

102.15 **7017.2060 PERFORMANCE TEST PROCEDURES.**

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

102.17 Subp. 2. **Sample port location.** The sampling location, as selected by Method 1, is
102.18 the same for each pollutant during a performance test.

102.19 Subp. 3. **Particulate matter determination.** The owner or operator must conduct
102.20 particulate matter emission tests as required in this subpart.

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

102.22 *[For text of subparts 4 and 4a, see Minnesota Rules]*

103.1 Subp. 5. **Opacity determination by Method 9.** Opacity observations must be
103.2 performed by a certified observer and in accordance with the requirements of Method 9. In
103.3 addition, the requirements of subpart 6 and the following items apply:

103.4 A. The commissioner must reject the opacity results if the commissioner cannot
103.5 determine the compliance status of the emission facility due to error, bias, or insufficient
103.6 documentation during the performance test. The recommendations of Method 9 and EPA
103.7 document EPA-600/4-77-027b, Addition Section 3.12 (Feb. 1984), as amended, entitled
103.8 "Quality Assurance Handbook for Air Pollution Measurement Systems: Volume III.
103.9 Stationary Source Specific Methods," which is incorporated by reference, must be used in
103.10 determining the acceptability of opacity results. This document is available through the
103.11 Minitex interlibrary loan system and is not subject to frequent change.

103.12 B. One series of readings is required for each condition where opacity is required
103.13 to be tested. Each test run consists of 240 consecutive readings at 15-second intervals and
103.14 must be obtained concurrently with a test run for particulate matter, where applicable. Copies
103.15 of the opacity form showing all readings and required notation must be included in the
103.16 performance test report.

103.17 C. The results of continuous monitoring by transmissometer that indicate that the
103.18 opacity at the time visual observations were made was not in excess of the standard are
103.19 probative but not conclusive evidence of the actual opacity of an emission if the owner or
103.20 operator meets the burden of proving that the instrument used met, at the time of the alleged
103.21 violation, Performance Specification 1, had been properly maintained and, at the time of
103.22 the alleged violation, calibrated, and that the resulting data have not been tampered with in
103.23 any way. The data is subject to the reduction processes in subpart 6.

103.24 D. Data reduction must be performed in accordance with Paragraph 2.5 of Method
103.25 9 and subpart 6. A one-hour period means any 60 consecutive minutes and a six-minute
103.26 period means any set of 24 consecutive 15-second intervals.

104.1 Subp. 6. **Opacity data reduction procedures.** For the purpose of this part, "excursion"
104.2 means an opacity higher than the base standard that is allowed for a limited number of
104.3 minutes within a time period. Compliance with opacity limits is determined from all data
104.4 points collected in an averaging period and according to items A and B.

104.5 A. For opacity standards that allow excursions based on six-minute periods, an
104.6 exceedance of the standard occurs if, having taken the allowable excursion into account,
104.7 any six-minute average exceeds the standard. The exceedance is expressed as the value of
104.8 the highest six-minute average and the number of nonoverlapping six-minute averages that
104.9 exceed the standard within the period of the test run.

104.10 B. For opacity standards that do not allow excursions, an exceedance of the
104.11 standard occurs if any six-minute average exceeds the standard. The exceedance is expressed
104.12 as the value of the highest six-minute average and the number of nonoverlapping six-minute
104.13 averages that exceed the standard within the period of the test run.

104.14 Subp. 7. **Polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans**
104.15 **determination.** For Method 23, each sample run must be at least three hours in duration
104.16 at an average sampling rate of 0.5 dscf/minute or higher. The minimum sample volume is
104.17 90 dscf. Longer test runs may be required by the commissioner to collect a greater sample
104.18 volume if low resolution mass spectroscopy is to be used for analysis of the field samples
104.19 or as otherwise required by part 7017.2045, subpart 6.

104.20 **7019.0050 GENERAL PROVISIONS OF EMISSION INVENTORY**
104.21 **REQUIREMENTS.**

104.22 References to the administrator in the incorporated federal regulations refer to the
104.23 commissioner, except when authorities are specifically identified in Code of Federal
104.24 Regulations or state rule as nondelegable.

105.1 **7019.0100 INCORPORATION BY REFERENCE; NOTIFICATION AND**
105.2 **RECORD-KEEPING REQUIREMENTS.**

105.3 Subpart 1. **New source performance standards.** Code of Federal Regulations, title
105.4 40, section 60.7, as amended, entitled "Notification and record keeping," is incorporated
105.5 by reference.

105.6 Subp. 2. **National emission standards for hazardous air pollutants.** The following
105.7 are incorporated by reference:

105.8 *[For text of item A, see Minnesota Rules]*

105.9 B. Code of Federal Regulations, title 40, section 63.10, as amended, entitled
105.10 "Recordkeeping and reporting requirements."

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

105.12 Subp. 3. [See repealer.]

105.13 **7019.3030 METHOD OF CALCULATION.**

105.14 *[For text of items A and B, see M.R.]*

105.15 C. For purposes of selecting a calculation method, a method is considered available
105.16 if the conditions associated with the method in parts 7019.3040 to 7019.3100 are met. The
105.17 method described in part 7019.3100 may be used, provided that the proposal is submitted
105.18 to the commissioner by September 1 of the first year for which the emissions are being
105.19 calculated. The commissioner must reject data submitted using the methods described in
105.20 parts 7019.3040 to 7019.3090 if the conditions for the method are not fully met.

105.21 **TERM CHANGE.** The term "agency," when it refers to the Minnesota Pollution Control
105.22 Agency, is changed to "commissioner" wherever it appears in Minnesota Rules, parts
105.23 7011.0115, 7011.0120, 7011.0520, 7011.0535, 7011.0615, 7011.0720, 7011.0917, 7011.1285,
105.24 7011.1320, 7011.1325, 7011.1430, 7011.1625, 7011.1910, 7011.1915, 7011.2010, 7011.2015,
105.25 7011.2300, and 7011.3505.

- 106.1 **REPEALER.** Minnesota Rules, parts 7005.0100, subparts 9a and 42b; 7011.1405, subpart
106.2 4; 7011.1410, subpart 4; 7011.3500, subparts 2 and 3; 7011.3510, subpart 1; 7011.7000;
106.3 7011.8170; 7011.9900; 7011.9921, subparts 3, 4a, 9, and 12; 7017.1010, subpart 3;
106.4 7017.2015, subpart 4; and 7019.0100, subpart 3, are repealed.

February 18, 2020

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 Planned Amendment of Air Quality Standards to
Incorporate Federal Requirements by Reference and Make Minor
Corrections and Clarif***
OAH 71-9003-35966; Revisor R-4452

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

If you have any questions, please contact me at (651) 361-7881, at
anne.laska@state.mn.us; or via fax at (651) 539-0310.

Sincerely,



ANNE LASKA
Legal Assistant

Enclosures

cc: Mary H. Lynn (via email)