CHAPTER 7019

MINNESOTA POLLUTION CONTROL AGENCY

EMISSION INVENTORY REQUIREMENTS

7019.0050 GENERAL PROVISIONS OF EMISSION INVENTORY REQUIREMENTS.

References to the administrator in the incorporated federal regulations refer to the commissioner, except when authorities are specifically identified in Code of Federal Regulations or state rule as nondelegable.

Statutory Authority: *MS s 116.07*

History: *44 SR 1030*

Published Electronically: *April 16, 2020*

7019.0100 INCORPORATION BY REFERENCE; NOTIFICATION AND RECORD-KEEPING REQUIREMENTS.

Subpart 1. **New source performance standards.** Code of Federal Regulations, title 40, section 60.7, as amended, entitled "Notification and record keeping," is incorporated by reference.

Subp. 2. **National emission standards for hazardous air pollutants.** The following are incorporated by reference:

A. Code of Federal Regulations, title 40, section 63.9, as amended, entitled "Notification requirements."

B. Code of Federal Regulations, title 40, section 63.10, as amended, entitled "Recordkeeping and reporting requirements."

C. Code of Federal Regulations, title 40, section 61.09, as amended, entitled "Notification of Startup."

D. Code of Federal Regulations, title 40, section 61.10, as amended, entitled "Source reporting and waiver request."

Subp. 3. [Repealed, 44 SR 1030]

Statutory Authority: *MS s 116.07*

History: *18 SR 580; 20 SR 2254(NO. 42); 44 SR 1030*

Published Electronically: *April 16, 2020*

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

Subpart 1. **Notification of deviations which endanger human health or the environment.** The owner or operator of an emission facility, in the event of any deviation, as defined in part 7007.0100, subpart 8a, which could endanger human health or the environment, shall notify, orally or by facsimile, the commissioner or the state duty officer immediately after discovery of the deviation or immediately after when the deviation reasonably should have been discovered by the owner or operator. Within two working days of the discovery, the owner or operator shall submit to the commissioner a written description of the deviation stating:

A. the cause of the deviation;

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

C. whether or not the deviation has been corrected;

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

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

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

A. an applicable requirement or compliance document does not require operation of the control equipment;

B. an applicable requirement or compliance document specifies alternative minimum operating conditions for the process or control equipment that are still complied with despite the breakdown; or

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

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

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

A. an applicable requirement or compliance document allows the shutdown of, or does not require operation of, the control equipment;

B. an applicable requirement or compliance document specifies alternative minimum operating conditions for the process or control equipment that are still complied with despite the shutdown; or

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

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

Subp. 4. **Operation changes.** In any shutdown, breakdown, or deviation covered by subpart 1, 2, or 3, the owner or operator shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.

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

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

B. allows the owner or operator of an emission facility to violate an applicable requirement or compliance document;

C. excuses compliance with Minnesota Statutes, section 116.061;

D. prevents the agency from exercising its emergency powers under Minnesota Statutes, section 116.11, in the event that conditions warranting such action shall arise; or

E. prevents the owner or operator of an emission facility from establishing the emergency defense described in part 7007.1850 if the owner or operator meets the requirements of that part.

Subp. 6. **Definitions.** "Applicable requirement" has the meaning given in part 7007.0100, subpart 7. "Compliance document" has the meaning given in part 7017.2005, subpart 2. "Immediately" means as soon as possible considering plant and personnel safety.

Subp. 7. **Transition to amended rule.** The amendments to this part that take effect on January 20, 1998, supersede the requirements of permit conditions based on this part in air emission permits issued by the agency prior to January 1, 1998.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 18 SR 614; 21 SR 165; 22 SR 1237; 23 SR 2224*
Published Electronically: *April 3, 2019*

7019.2000 Subpart 1. [Repealed, 23 SR 1764]

Subp. 2. [Repealed, 23 SR 1764]

Subp. 3. [Repealed, 23 SR 1764]

Subp. 4. [Repealed, 17 SR 440]
Published Electronically: *November 29, 2007*

7019.3000 EMISSION INVENTORY.

Subpart 1. **Emission inventory required.**

A. All owners or operators of emission reporting facilities, as defined in part 7002.0015, subpart 3a, shall submit an annual emission inventory report to the agency, in a format specified by the commissioner, relating to ammonia, carbon monoxide, particulate matter, and all chargeable pollutants as defined in part 7002.0015, subpart 2a. The report shall be submitted on or before April 1 of the year following the year being reported. The responsible official, as defined in part 7007.0100, subpart 21, must sign the report and shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision by qualified personnel. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that the data provided in this document will be used by the MPCA to calculate a fee, which the facility will be required to pay under Minnesota Rules, part 7002.0065, based on the tons of pollution emitted by the facility."

B. (1) All owners or operators of facilities issued option B registration permits under part 7007.1120 shall submit either an emission inventory using methods described under subitem (3)

and parts 7019.3020 to 7019.3100 or the certification and VOC-containing material report in subitem (2). The report shall be submitted on or before the April 1 following the year being reported.

(2) All owners or operators that choose to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (2), shall submit a report and certification to the agency. The responsible official, as defined in part 7007.0100, subpart 2, must sign the report and shall make the following certification:

"I certify under penalty of law that the facility described in registration permit number .... is eligible for the option B registration permit that it was issued and holds and that the facility purchased or used (as stated in the permit application) .... gallons of VOC-containing materials in the 12-month reporting period. I further certify that the eligibility of the facility and the quantity of material reported herein were determined under my direction or supervision by qualified personnel. The information used to determine eligibility and the quantity of material reported herein for the registration permit is, to the best of my knowledge and belief, true and accurate. I understand that the information provided in this certification will be used by the MPCA to assess a fee under Minnesota Rules, part 7002.0025, subpart 1, item C, which the facility will be required to pay under Minnesota Rules, part 7002.0065."

(3) All owners and operators that choose to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), shall submit an emission inventory report to the agency, in a format specified by the commissioner, relating to emissions from the use of VOC-containing materials using methods described in part 7019.3030, item B, and the certification in subitem (2). The certification and emission inventory shall be signed by the responsible official, as defined in part 7007.0100, subpart 2.

Subp. 2. **Owner or operator error in reporting data.** If an owner or operator discovers an error in the data after having submitted it to the agency, the owner or operator shall submit corrected data, with a written explanation of the mistake and why it occurred. If the commissioner agrees that the correction is appropriate, the commissioner shall correct the data in the inventory. However, for purposes of assessing the emission fee under part 7002.0025, the commissioner shall not accept any correction submitted by an owner or operator which would result in a reduction of tons emitted if the correction is submitted more than 45 days after the mailing date of the previous year's air emissions summary.

Subp. 3. **Mercury emission sources.** Owners or operators of a mercury emission source as defined in part 7005.0100, subpart 23b, must submit an annual emission inventory report of the mercury emissions to the commissioner in a format specified by the commissioner. The report must be submitted on or before April 1 of the year following the year being reported. The initial report must cover the first full calendar year following September 29, 2014. Owners or operators of stationary sources that have air emissions of mercury but that are not mercury emission sources must report every three years.

Subp. 4. **Possible mercury emission sources.** If the commissioner determines that a stationary source has activity levels or emission factors that indicate that the source may be a mercury emission source, the commissioner may request that the owners or operators quantify the source's mercury

emissions using the methods listed in part 7019.3030, item A. The owners or operators must complete the quantification and submit a report to the commissioner within 120 days of the commissioner's request.

Statutory Authority: *MS s 116.07*

History: *17 SR 440; 18 SR 614; 18 SR 1059; 21 SR 165; 28 SR 1482; 32 SR 904; 39 SR 386*
Published Electronically: *February 3, 2015*

7019.3010 [Repealed, 21 SR 165]
Published Electronically: *November 29, 2007*

7019.3020 CALCULATING ACTUAL EMISSIONS FOR EMISSION INVENTORY.

A. Emissions from all emissions units must be reported in the annual emissions inventory report in a format specified by the commissioner. Emissions from insignificant activities listed in part 7007.1300, subpart 2, must not be reported. Emissions from insignificant activities listed in part 7007.1300, subparts 3 and 4, and conditionally insignificant activities listed in part 7008.4000 must be reported if the commissioner or owner or operator has determined that emissions from those activities are not insignificant for purposes of permitting under parts 7007.0100 to 7007.1850 or for those activities required to be quantified by a facility issued a capped permit option 1. Notwithstanding the previous sentence, the commissioner may request an inventory of fugitive emissions from roads and parking lots, defined as insignificant under part 7007.1300, subpart 3, item G, upon determining that emissions from these sources represent a substantial portion of the facility's total emissions.

B. All owners or operators of emission reporting facilities, as defined in part 7002.0015, subpart 3a, or facilities issued option B registration permits under part 7007.1120 that choose to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), shall calculate emissions based on parts 7019.3030 to 7019.3100, except for any facility which has obtained an option C or D registration permit under part 7007.1125 or 7007.1130 or a capped permit under parts 7007.1140 to 7007.1148.

C. Owners or operators of emission reporting facilities that hold an air emission permit under part 7007.1115, registration permit option A, must report actual emissions calculated for the calendar year for which emissions are being reported in a format specified by the commissioner.

D. All owners or operators of emission reporting facilities which have obtained an air emission permit under part 7007.1125, registration permit option C, shall report the quantity of each fuel purchased or used (whichever was stated in the facility's registration permit application) in the year for which emissions are being calculated. The report shall apportion the quantity of fuel burned with the type of combustion unit (indirect heating units or internal combustion engines) in which it was burned. The owner or operator shall report the quantity of VOC-containing materials purchased or used (whichever is stated in the facility's registration permit application) in the year for which emissions are being calculated. The owners or operators reporting VOC-containing materials purchases or usage shall also report the weight factor (WF) of the VOC in the materials

(weight of VOC per weight of VOC-containing materials) and the density of the materials. The actual emissions shall be calculated by the commissioner.

E. All owners or operators of emission reporting facilities which have obtained an air emission permit under part 7007.1130, registration permit option D, shall report the actual emissions calculated for purposes of compliance demonstration required in part 7007.1130, subpart 3, item E, for the calendar year for which emissions are being reported in a format specified by the commissioner.

F. All owners or operators of emission reporting facilities which have obtained an air emission permit under parts 7007.1140 to 7007.1148, capped permit, shall report the actual emissions calculated for purposes of compliance demonstration required in part 7007.1146, subpart 2, item H, for the calendar year for which emissions are being reported for all emission units in a format specified by the commissioner.

G. All owners or operators of an emission reporting facility submitting an emission inventory based in whole, or in part, on a material balance calculation shall submit a sample material balance calculation with the emission inventory. Such facilities shall also maintain a record of the material safety data sheets or vendor certification of the VOC, mercury, or sulfur content of the material for each material or fuel used and the material balance calculations for a period of five years after the date of submittal of the emission inventory.

H. The emission inventory may be based on the use of control equipment only if the use of the specific control equipment is required under conditions of a permit or applicable requirement as defined in part 7007.0100, subpart 7, or is included in a notification received by the agency under part 7007.1150, item C. This item applies upon issuance under chapter 7007 of a registration, state, capped, general, or part 70 permit to a stationary source but no earlier than the date three years after EPA grants full program approval of the agency's permit program under Title 5 of the Clean Air Act.

Statutory Authority: *MS s 115.03; 116.07*

History: *21 SR 165; 29 SR 626; 32 SR 904; 39 SR 386; 41 SR 763; 43 SR 797*

Published Electronically: *April 3, 2019*

7019.3030 METHOD OF CALCULATION.

A. The owner or operator of an emission reporting facility, except one issued an option C or D registration permit under part 7007.1125 or 7007.1130 or a capped permit under parts 7007.1140 to 7007.1148, shall calculate the facility's actual emissions using the methods listed in subitems (1) to (4). The methods are listed in a hierarchy of the most preferred method to the least preferred method. The most preferred method available shall be used. Where more than one method is listed in the subitem, they are considered to be equal in the hierarchy and any can be used:

(1) part 7019.3040 (continuous emission monitor data);

(2) part 7019.3050, item B (performance test data);

(3) part 7019.3060 (VOC material balance), 7019.3065 (mercury material balance), 7019.3070 ($S0_2$ material balance), 7019.3080 (emission factor), or 7019.3090 (enforceable limitations), as applicable; or

(4) part 7019.3100 (facility proposal).

B. The owner or operator of a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), shall calculate the facility's actual emissions using the methods listed in part 7019.3060.

The owner or operator of a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), shall not consider the effects of pollution control equipment on emissions from the use of VOC-containing materials when calculating actual emissions for an emissions inventory.

C. For purposes of selecting a calculation method, a method is considered available if the conditions associated with the method in parts 7019.3040 to 7019.3100 are met. The method described in part 7019.3100 may be used, provided that the proposal is submitted to the commissioner by September 1 of the first year for which the emissions are being calculated. The commissioner must reject data submitted using the methods described in parts 7019.3040 to 7019.3090 if the conditions for the method are not fully met.

Statutory Authority: *MS s 116.07*

History: *21 SR 165; 29 SR 626; 32 SR 904; 39 SR 386; 44 SR 1030*

Published Electronically: *April 16, 2020*

7019.3040 CONTINUOUS EMISSION MONITOR (CEM) DATA.

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

(1) the CEM has been certified by the commissioner; and

(2) the CEM data have not been rejected by the commissioner due to failure by the owner or operator to comply with parts 7017.1002 to 7017.1220; all applicable permit conditions; and any other applicable state or federal laws pertaining to CEM operation.

B. Facilities required to use this method shall include the following information in their emission inventory:

(1) the total operating time of the applicable emission unit and the total operating time of the CEM;

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

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

Statutory Authority: *MS s 116.07*

History: *21 SR 165; 23 SR 1764*

Published Electronically: *November 29, 2007*

7019.3050 PERFORMANCE TEST DATA.

A. If an emission reporting facility or mercury emission source as defined in part 7005.0100, subpart 23b, has collected representative emission data through the use of performance tests in compliance with the preconditions in items B and C, and if CEM data under part 7019.3040 is not available, the facility shall calculate its emissions based on performance tests. If the emission data is unrepresentative because fuel or material feed used under the test conditions is substantially different than the conditions under which the emissions unit is normally operated or because the emissions unit has been modified, the facility shall calculate its emissions based on the next highest available method. Emissions unit operating load variation from test load does not make the data unrepresentative. In the event that the facility has collected emission data through the use of performance tests and determines that the data is unrepresentative for any reason, the facility shall submit an explanation of why the data is unrepresentative with the emissions calculated using the next highest available method. The commissioner shall determine if the conditions of the performance test were representative based upon the operating data supplied by the facility for the year of the inventory.

B. All the requirements of parts 7017.2001 to 7017.2060, including the requirement to notify the commissioner prior to conducting performance tests as required in part 7017.2030, subpart 1, all other applicable state and federal laws, and all applicable air emission permit conditions relating to performance testing have been complied with.

C. For facilities that are required to conduct annual performance testing, the test was performed during the calendar year for which the emissions are being calculated. If the commissioner granted the facility an extension to a testing deadline that resulted in the test being performed after the calendar year but prior to the emissions inventory submittal deadline, the data from that test may be used. For facilities that are not required to conduct annual performance testing, the emission factors used are derived from the most recently conducted performance test. Unless required under item D, performance test data may not be more than ten years older than the last date of the emission

inventory period and must be representative of operating conditions during the calendar year for which the emission inventory is being submitted.

D. If the most recently conducted performance test data is more than ten years older than the last date of the emission inventory period, then the emission factor derived from the performance test shall be used if it results in higher calculated emissions than any default emission factor allowed under part 7019.3060, 7019.3070, or 7019.3080, as applicable, unless an alternative factor is approved by the commissioner under part 7019.3100 (facility proposal) or unless continuous emission monitor data that satisfies the conditions of part 7019.3040 is available. The performance test data must be representative of operating conditions during the calendar year for which the emission inventory is being submitted. Mercury emission sources, as defined in part 7005.0100, subpart 23b, must follow the testing schedule in item E.

E. Unless a mercury emission source, as defined in part 7005.0100, subpart 23b, is already subject to a compliance demonstration for mercury under another applicable requirement, operating permit, or enforceable agreement, the owners or operators of the source must test according to subitems (1) to (5):

(1) the owners or operators of a mercury emission source in operation on or before September 29, 2014, must conduct an initial performance test for mercury emissions on the emission units and processes described in subitem (2):

(a) the owners or operators must submit the test report to the commissioner within 365 days of September 29, 2014; and

(b) the test must be conducted in compliance with parts 7017.2001 to 7017.2060;

(2) the emission units and processes to be tested are those for which prior testing conducted under chapter 7017, emission factors, or similar calculations indicate actual emissions are three or more pounds of mercury per year from each unit or process;

(3) the owners or operators of a mercury emission source that commences operation or makes a physical or operational change that results in an increase in the potential to emit mercury after September 29, 2014, must conduct an initial performance test for mercury emissions within 180 days of initial start-up or on a schedule established in an air emission permit or other enforceable agreement and submit the test report to the commissioner. "Start-up" has the meaning given in part 7005.0100, subpart 42a. "Potential to emit" has the meaning given in part 7005.0100, subpart 35a;

(4) if a stationary source has mercury emissions from units or processes that are substantially equivalent, the results of testing from one may be applied to the others, scaled for throughput or operating hours. With the test results, the owners or operators must provide documentation that the units or processes are substantially equivalent; and

(5) after the initial test, the owners or operators must conduct subsequent performance tests within 60 months of each prior test:

(a) subsequent performance tests are not required if the owners or operators determine that the stationary source is no longer a mercury emission source as defined under part 7005.0100, subpart 23b; and

(b) if the stationary source becomes a mercury emission source again, the owners or operators must resume conducting subsequent performance tests according to this subitem within 180 days of making the determination that actual emissions exceed the threshold for a mercury emission source.

Statutory Authority: *MS s 116.07*

History: *21 SR 165; 32 SR 904; 39 SR 386*

Published Electronically: *February 3, 2015*

7019.3060 VOLATILE ORGANIC COMPOUND (VOC) MATERIAL BALANCE.

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

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

where:

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

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

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

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

Statutory Authority: *MS s 116.07*

History: *21 SR 165*
Published Electronically: *November 29, 2007*

7019.3065 MERCURY MATERIAL BALANCE.

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

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

Where:

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

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

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

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

Statutory Authority: *MS s 116.07*

History: *39 SR 386*
Published Electronically: *October 1, 2014*

7019.3070 SO_2 MATERIAL BALANCE.

If the methods in parts 7019.3040 and 7019.3050 are unavailable to an emission reporting facility, it may calculate sulfur dioxide emissions using the SO_2 material balance method described in this part. A person using this method shall measure the sulfur content of the fuel and assume that all of the sulfur in the fuel is oxidized to sulfur dioxide. This method may be used in conjunction with or instead of emission factors and enforceable limitations methods described in parts 7019.3080

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

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

where:

SO_2 = Sulfur dioxide emissions from a batch of fuel.

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

F = Amount of fuel burned by weight in pounds.

2000 = Pounds per ton.

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

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

Statutory Authority: *MS s 116.07*

History: *21 SR 165*
Published Electronically: *November 29, 2007*

7019.3080 EMISSION FACTORS.

If the methods in parts 7019.3040 and 7019.3050 are unavailable to an emission reporting facility or a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), the facility may calculate its emissions using emission factors as defined in part 7005.0100, subpart 10a, and as described in this part. This method may be used in conjunction with or instead of material balance and enforceable limitations methods described in parts 7019.3060, 7019.3070, and 7019.3090, where applicable. Calculations of actual emissions shall be based on operating data multiplied by an emission factor. Operating data necessary to apply the emission factor used in the calculation of emissions in this method shall be included in the emission inventory. Operating data means the data necessary to apply the emission factor to calculate emissions. For example, tons of material handled is the necessary operating data for an emissions factor expressed as "tons of pollutant/ton of material handled."

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

to 7017.2060 and 7019.3050, that capture efficiency shall be used in the calculation of actual emissions.

Statutory Authority: *MS s 116.07*

History: *21 SR 165; 32 SR 904*
Published Electronically: *November 29, 2007*

7019.3090 ENFORCEABLE LIMITATIONS.

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

Statutory Authority: *MS s 116.07*

History: *21 SR 165*
Published Electronically: *November 29, 2007*

7019.3100 FACILITY PROPOSAL.

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

(1) that the proposed method is more accurate than the methods in parts 7019.3040 to 7019.3090; or

(2) that none of the methods in parts 7019.3040 to 7019.3090 is technically or economically feasible and the proposed method is accurate.

B. The proposal shall include:

(1) a comparison of the accuracy of the proposed method with the alternatives in parts 7019.3040 to 7019.3090;

(2) a detailed description of the proposed method; and

(3) an explanation of why none of the alternatives in parts 7019.3040 to 7019.3090 are technically or economically feasible if the facility is making the proposal under item A, subitem (2).

C. The proposal shall be submitted to the commissioner by September 1 of the year for which the emissions are being calculated. The commissioner shall approve the emission reporting facility's proposal if the commissioner finds that the facility has made the demonstration required under item A. If the commissioner rejects the proposal, the commissioner shall do so by November 30 of the year for which the emissions are being calculated. Approval of a method shall expire no more than five years after the year for which emissions were first calculated. The commissioner shall revoke approval of the method if, after the first year's emission inventory submittal, the owner or operator or the commissioner has determined that the method described under this part no longer accurately calculates each unit's actual emissions. If the commissioner revokes the approval, the commissioner shall do so by November 30 of the year for which the emissions are being calculated.

Statutory Authority: *MS s 116.07*

History: *21 SR 165*

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