

**CHAPTER 7005**  
**MINNESOTA POLLUTION CONTROL AGENCY**  
**AIR QUALITY DIVISION**  
**AIR POLLUTION CONTROL**

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**GENERAL PROVISIONS**

**7005.0100 DEFINITIONS.**

Subpart 1. **Scope.** As used in the state air pollution control rules, the following terms have the meanings given them except as expressly provided in a specific rule.

Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency as constituted under Minnesota Statutes, section 116.02, subdivision 1.

Subp. 3. **Alternative method.** "Alternative method" means a method of sampling and analyzing for an air pollutant which is not a Reference or Equivalent method but which has been demonstrated to the director's satisfaction to, in specific cases, produce results adequate for its determination of compliance.

Subp. 4. **Breakdown.** "Breakdown" means a sudden and unavoidable failure of air pollution control equipment or process equipment to operate as designed.

Subp. 4a. **Commenced.** "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or reconstruction, or has entered into a contractual obligation to undertake and complete, within a reasonable time, this program.

Subp. 5. **Construction.** "Construction" means fabrication, erection, or installation of an emission facility.

Subp. 6. **Continuous monitoring system.** "Continuous monitoring system" means the total equipment used to continuously sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Subp. 7. [Repealed by amendment, 8 SR 2275]

Subp. 8. **Control equipment.** "Control equipment" means an "air contaminant treatment facility" or a "treatment facility" as those terms are defined in Minnesota Statutes, section 116.06, subdivision 6.

Subp. 9. **Director.** "Director" means the chief executive officer of the agency as described in Minnesota Statutes, section 116.04.

Subp. 10. **Emission facility.** "Emission facility" means any structure, work, equipment, machinery, device, apparatus, or other means whereby an emission is caused to occur.

Subp. 10a. **Emission source.** "Emission source" means a single source whereby an emission is caused to occur.

Subp. 11. **Equivalent method.** "Equivalent method" means a method of sampling and analyzing for an air pollutant which has been demonstrated to the director's satisfaction to have under specified conditions a consistent and

quantitatively known relationship to the Reference methods set forth in Code of Federal Regulations, title 40, part 60, appendix A.

Subp. 11a. **Existing facility.** "Existing facility" means an emission facility at which construction, modification, or reconstruction was commenced before the effective date of the applicable New Source Performance Standard or the applicable state air pollution control rule.

Subp. 11b. **Fugitive emissions.** "Fugitive emissions" means pollutant discharges to the atmosphere that do not pass through a stack, chimney, or other functionally equivalent opening, at which a measurement of the emissions can be made using a Reference method other than Method 9.

Subp. 12. [Repealed by amendment, 8 SR 2275]

Subp. 13. [Repealed by amendment, 8 SR 2275]

Subp. 14. [Repealed by amendment, 8 SR 2275]

Subp. 15. [Repealed by amendment, 8 SR 2275]

Subp. 16. [Repealed by amendment, 8 SR 2275]

Subp. 17. [Repealed by amendment, 8 SR 2275]

Subp. 18. [Repealed by amendment, 8 SR 2275]

Subp. 19. [Repealed by amendment, 8 SR 2275]

Subp. 20. [Repealed by amendment, 8 SR 2275]

Subp. 21. [Repealed by amendment, 8 SR 2275]

Subp. 22. [Repealed by amendment, 8 SR 2275]

Subp. 23. [Repealed by amendment, 8 SR 2275]

Subp. 24. **Minneapolis-Saint Paul Air Quality Control Region.** "Minneapolis-Saint Paul Air Quality Control Region" means the area encompassed by the boundaries of the following counties: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington. See Code of Federal Regulations, title 40, part 81.27 (1982).

Subp. 24a. **Modification.** "Modification" means a physical change or a change in the operation of an emission facility that is not allowed under a permit, stipulation agreement, or an applicable air pollution control rule, and that results in an increase in the emission of an air pollutant.

Subp. 25. **Monitoring device.** "Monitoring device" means the total equipment used to measure and record (if applicable) process or control equipment parameters.

Subp. 25a. **New facility.** "New facility" means an emission facility on which construction, modification, or reconstruction was commenced after the effective date of the applicable New Source Performance Standard or the applicable state air pollution control rule.

Subp. 26. **New Source Performance Standard.** "New Source Performance Standard" means a standard of performance promulgated by the administrator of the United States Environmental Protection Agency under the Clean Air Act, United States Code, title 42, section 7411, as amended.

Subp. 27. **Nitrogen oxides.** "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide.

Subp. 28. **One-hour period.** "One-hour period" means any 60-minute period commencing on the hour.

Subp. 29. **Opacity.** "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Subp. 30. **Owner or operator.** "Owner or operator" means a person who owns, leases, operates, controls, or supervises an emission facility.

Subp. 31. **Particulate matter.** "Particulate matter" means material, except water, which exists at standard conditions in a finely divided form as a liquid or solid.

Subp. 31a. **Performance specification.** "Performance specification" means the specifications for continuous monitoring systems in Code of Federal Regulations, title 40, part 60, appendix B (1982).

Subp. 32. [Repealed by amendment, 8 SR 2275]

Subp. 33. [Repealed by amendment, 8 SR 2275]

Subp. 34. [Repealed by amendment, 8 SR 2275]

Subp. 35. **Person.** "Person" means person as defined in Minnesota Statutes, section 116.06, subdivision 8.

Subp. 35a. **Potential emissions.** "Potential emissions" means the emissions from an emission facility, after control equipment has been applied, when the facility is operating at maximum design capacity and maximum hours of operation or as limited by enforceable permit conditions, whichever results in fewer emissions.

Subp. 35b. **Reconstruction.** "Reconstruction" means replacement of depreciable components of an existing emission source to which a New Source Performance Standard or state air pollution control rule is applicable, to the extent that the fixed capital cost of the depreciable components exceeds 50 percent of the fixed capital cost of depreciable components that would be required to construct a comparable entirely new emission source.

Subp. 35c. **Reference method; Method.** "Reference method" or "Method" means the procedures for performance tests in Code of Federal Regulations, title 40, part 60, appendix A, (1982).

Subp. 35d. **Run.** "Run" means the net period of time during which an emission sample is collected.

Subp. 36. [Repealed by amendment, 8 SR 2275]

Subp. 37. **Shutdown.** "Shutdown" means the cessation of operation of an emission facility or control equipment for any purpose.

Subp. 38. [Repealed by amendment, 8 SR 2275]

Subp. 39. **Smoke.** "Smoke" means small gas-borne particles resulting from incomplete combustion, consisting predominantly, but not exclusively of carbon and other combustible material, or ash, that form a visible plume in the air.

Subp. 40. [Repealed by amendment, 8 SR 2275]

Subp. 41. **Standard conditions.** "Standard conditions" means a temperature of 20 degrees Celsius (68 degrees Fahrenheit) and a pressure of 760 mm of Hg (29.92 in. of Hg).

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

Subp. 42a. **Startup.** "Startup" means the setting into operation of an emission facility or control equipment for any purpose.

Subp. 42b. **State air pollution control rules.** "State air pollution control rules" means parts 7005.0010 to 7005.3060.

Subp. 43. [Repealed by amendment, 8 SR 2275]

Subp. 44. **Total emission facility.** "Total emission facility" means an assemblage of all emission sources on adjacent property that are under common ownership or control and that exist for a common function.

**Statutory Authority:** *MS s 116.07 subd 4*

**History:** 8 SR 2275

**7005.0110 ABBREVIATIONS.**

As used in the state air pollution control rules, the following abbreviations have the meanings given them:

- A. A.S.T.M., American Society for Testing and Materials;
- B. Btu, British thermal unit;
- C. °C, degree Celsius (centigrade);
- D. cal, calorie;
- E. cfm, cubic feet per minute;
- F. CO, carbon monoxide;
- G. CO<sub>2</sub>, carbon dioxide;
- H. dscm, dry cubic meter at standard conditions;
- I. dscf, dry cubic feet at standard conditions;
- J. °F, degree Fahrenheit;
- K. g, gram;
- L. gr, grain;
- M. Hg, mercury;
- N. H<sub>2</sub>S, hydrogen sulfide;
- O. H<sub>2</sub>SO<sub>4</sub>, sulfuric acid;
- P. J, joule;
- Q. kg, kilogram;
- R. l, liter;
- S. m, meter;
- T. mg, milligram;
- U. ml, milliliter;
- V. mm, millimeter;
- W. N<sub>2</sub>, nitrogen;
- X. NO<sub>2</sub>, nitrogen dioxide;
- Y. NO<sub>x</sub>, nitrogen oxides;
- Z. O<sub>2</sub>, oxygen;
- AA. ppb, parts per billion;
- BB. ppm, parts per million;
- CC. psia, pounds per square inch absolute;
- DD. scf, cubic feet at standard conditions;
- EE. SO<sub>2</sub>, sulfur dioxide;
- FF. µg, microgram (10<sup>-6</sup> gram).

**Statutory Authority:** *MS s 116.07 subd 4*

**History:** *8 SR 2275*

**7005.0115 APPLICABILITY OF STANDARDS OF PERFORMANCE.**

**Subpart 1. Existing facility.** An owner or operator of an existing emission facility shall comply with all applicable state air pollution control rules for existing emission facilities.

**Subp. 2. New facility.** An owner or operator who constructs, modifies, or reconstructs an emission facility shall comply with the New Source Performance Standards, if applicable, or the standards of performance for a new emission facility set forth in the state air pollution control rules.

**Subp. 3. Exception.** For the purpose of the state air pollution control rules, the use of an alternative type of fuel or raw material is not a modification if the existing facility was designed to accommodate the alternative type of fuel or raw material. An emission facility is considered to be designed to accommodate an alternative type of fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change.

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**Statutory Authority:** *MS s 116.07 subd 4*

**History:** 8 SR 2275

## 7005.0116 OPACITY STANDARD ADJUSTMENT.

Subpart 1. **Application for permit modification.** An owner or operator of an emission facility may file an application for a permit modification under parts 7005.0200 to 7005.0280 for adjustment of the opacity standard applicable to an emission source. In addition to the items required under parts 7005.0200 to 7005.0280, the application must contain data that demonstrates that:

A. based on tests conducted under parts 7005.1850 to 7005.1880, the emission source is in compliance with the applicable standard of performance for particulate matter and all other standards of performance, except the opacity standard;

B. the total emission facility is in compliance with all applicable standards of performance except the opacity standard at the emission sources for which adjustments are being sought or have already been permitted by the agency; and

C. the total emission facility was operated in a manner to minimize the opacity of emissions at the emission source during the performance tests conducted under item A.

Subp. 2. **Atmospheric dispersion modeling.** If the data submitted under subpart 1 indicates that an adjustment of the opacity standard may cause or contribute to a violation of an ambient air quality standard, the agency shall require the owner or operator to conduct atmospheric dispersion modeling and include the results of the modeling in the application for a permit modification. However, a total emission facility that has potential emissions of particulate matter of less than 25 tons per year is not required to conduct modeling. Modeling must be performed according to Guidelines on Air Quality Models (OAQPS No. 1.2-080, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, 1978) or methods that the director finds to be comparably reliable.

Subp. 3. **Opacity adjustment determination and permit modification.** The agency shall set an adjusted opacity standard at the most restrictive level which the performance tests conducted under subpart 1, items A and C demonstrate the emission source is capable of meeting and shall modify the permit to establish the adjusted opacity standard, if the requirements of subparts 1 and 2 are met and the total emission facility, with the adjusted opacity standard, would meet any one of the following:

A. not cause or contribute to a violation of an ambient air quality standard;

B. have potential emissions of particulate matter of less than 25 tons per year and less than one ton per day; or

C. contribute less than one  $\mu\text{g}/\text{m}^3$  to an annual ambient particulate matter standard violation and less than five  $\mu\text{g}/\text{m}^3$  to a 24-hour ambient particulate matter standard violation.

**Statutory Authority:** *MS s 116.07 subd 4*

**History:** 8 SR 2275

## 7005.0117 CIRCUMVENTION.

No owner or operator may install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.

**Statutory Authority:** *MS s 116.07 subd 4*

**History:** 8 SR 2275

- 7005.0120 [Repealed by amendment, 8 SR 2275]
- 7005.0130 [Repealed by amendment, 8 SR 2275]
- 7005.0140 [Repealed by amendment, 8 SR 2275]
- 7005.0150 [Repealed by amendment, 8 SR 2275]
- 7005.0160 [Repealed by amendment, 8 SR 2275]
- 7005.0170 [Repealed by amendment, 8 SR 2275]
- 7005.0180 [Repealed by amendment, 8 SR 2275]
- 7005.0200 [Repealed, 8 SR 2276]
- 7005.0210 [Repealed, 8 SR 2276]
- 7005.0220 [Repealed, 8 SR 2276]
- 7005.0230 [Repealed, 8 SR 2276]
- 7005.0240 [Repealed, 8 SR 2276]
- 7005.0250 [Repealed, 8 SR 2276]
- 7005.0260 [Repealed, 8 SR 2276]
- 7005.0270 [Repealed, 8 SR 2276]
- 7005.0280 [Repealed, 8 SR 2276]
- 7005.1700 [Renumbered 7001.1260]
- 7005.1710 [Renumbered 7001.1270]
- 7005.1720 [Renumbered 7001.1280]
- 7005.1730 [Renumbered 7001.1290]
- 7005.1740 Subpart 1. [Repealed by amendment, 8 SR 2277]  
Subp. 2. [Renumbered 7001.1310, subp. 2]  
Subp. 3. [Renumbered 7001.1310, subp. 3]  
Subp. 4. [Renumbered 7001.1310, subp. 4]  
Subp. 5. [Repealed by amendment, 8 SR 2277]
- 7005.1750 Subpart 1. [Renumbered 7001.1330]  
Subp. 2. [Repealed by amendment, 8 SR 2277]  
Subp. 3. [Repealed by amendment, 8 SR 2277]  
Subp. 4. [Repealed by amendment, 8 SR 2277]
- 7005.1760 [Repealed by amendment, 8 SR 2277]
- 7005.1770 Subpart 1. [Renumbered 7001.1340, subpart 1]  
Subp. 2. [Repealed by amendment, 8 SR 2277]  
Subp. 3. [Repealed by amendment, 8 SR 2277]  
Subp. 4. [Repealed by amendment, 8 SR 2277]  
Subp. 5. [Renumbered 7001.1340, subp. 2]  
Subp. 6. [Repealed by amendment, 8 SR 2277]  
Subp. 7. [Repealed by amendment, 8 SR 2277]  
Subp. 8. [Repealed by amendment, 8 SR 2277]

Subp. 9. [Repealed by amendment, 8 SR 2277]

7005.1780 [Repealed by amendment, 8 SR 2277]

7005.1790 [Repealed by amendment, 8 SR 2277]

7005.1800 [Repealed by amendment, 8 SR 2277]

7005.2450 [Repealed, 8 SR 1675]

7005.2460 [Repealed, 8 SR 1675]

7005.2470 [Repealed, 8 SR 1675]

7005.2480 [Repealed, 8 SR 1675]

7005.2490 [Repealed, 8 SR 1675]

7005.2500 [Repealed, 8 SR 1675]

7005.2510 [Repealed, 8 SR 1675]

#### STANDARDS OF PERFORMANCE FOR DRY BULK AGRICULTURAL COMMODITY FACILITIES

##### 7005.2520 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of parts 7005.2520 to 7005.2523 the following terms have the meanings given them.

Subp. 2. **Capture system.** "Capture system" means equipment such as hoods, ducts, fans, and dampers used to capture particulate matter.

Subp. 3. **Column dryer.** "Column dryer" means equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

Subp. 4. **Dry bulk agricultural commodity, commodity.** "Dry bulk agricultural commodity" or "commodity" includes grain, grain by-products, seed, beet pulp or pellets, and alfalfa meal or pellets.

Subp. 5. **Dry bulk agricultural commodity facility.** "Dry bulk agricultural commodity facility" means a facility where bulk commodities are unloaded, handled, cleaned, dried, stored, ground, or loaded. "Dry bulk agricultural commodity facility" does not include a facility located on a family farm or family farm corporation, as defined in Minnesota Statutes, section 116B.02, which handles commodities from the farm or used on the farm.

Subp. 6. **Grain.** "Grain" means corn, wheat, sorghum, rice, rye, oats, barley, flax, soybeans, and sunflower seeds.

Subp. 7. **Grain storage elevator.** "Grain storage elevator" means a grain elevator located at a wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant that has a permanent grain storage capacity of more than 35,200 cubic meters, which is approximately 1,000,000 bushels.

Subp. 8. **Grain terminal elevator.** "Grain terminal elevator" means a grain elevator that has a permanent storage capacity of more than 88,100 cubic meters, which is approximately 2,500,000 bushels, except a grain elevator located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

Subp. 9. **Handling operation.** "Handling operation" includes the use of bucket elevators, scale hoppers, conveyors, trippers, and spouts for the distribution and weighing of commodities within a commodity facility.

Subp. 10 **Loading station.** "Loading station" means the part of a commodity facility where the commodities are transferred from the facility to a truck, railcar, barge, or ship

Subp. 11. **Normal loading procedure.** "Normal loading procedure" means that part of a barge or ship loading operation where the spout and associated dust suppression systems are capable of distributing the commodity in the hold as needed without making modifications to the loading procedure, such as removing the dust suppressor, raising the spout, slowing the loading rate below the design capability of the spout, or attaching equipment at the end of the spout.

Subp. 12. **Rack dryer.** "Rack dryer" means equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

Subp. 13. **Reasonably available control technology (RACT).** "Reasonably available control technology (RACT)" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

Subp. 14. **Throughput.** "Throughput" means the number of tons of commodities received, plus the number of tons of commodities shipped, divided by two, determined on the basis of an average year. An average year is determined by averaging the actual receipts and shipments for the last three consecutive fiscal years. For facilities less than three years old, actual and anticipated receipts and shipments must be used.

Subp. 15. **Topping-off.** "Topping-off" means the placing of grain in the final three feet of void in a barge, nine feet in a ship, between the fore and aft center line of the hatch and the outboard side of the vessel. The depth is determined by vertical measurement along the outboard side of the vessel from the top of the hatch opening

Subp. 16. **Trimming.** "Trimming" means the part of ship loading that requires the use of spoons, slingers, and other equipment attached to the loading spout to ensure that a ship is loaded to capacity.

Subp. 17. **Unloading station.** "Unloading station" means the part of a commodity facility where the commodities are transferred from a truck, railcar, barge, or ship to a receiving hopper.

**Statutory Authority:** *MS s 116.07 subd 1*

**History:** *8 SR 1675*

#### **7005.2521 STANDARDS OF PERFORMANCE FOR DRY BULK AGRICULTURAL COMMODITY FACILITIES.**

Subpart 1 **Owner or operator duties.** The owner or operator of a commodity facility shall:

A. clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions to a level consistent with RACT; and

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

Subp. 2. **Federal requirements.** The owner, operator, or other person who conducts activities at a grain terminal elevator or grain storage elevator, of which construction, modification, or reconstruction commenced after August 3, 1978, shall meet the requirements of Code of Federal Regulations, title 40, part 60.300, subpart DD, (August 3, 1978) entitled "Standards of Performance for Grain Elevators."

Subp. 3. **Prohibited discharges.** A commodity facility that is not required to be controlled under subpart 2 must be controlled if the facility meets one of the descriptions listed in part 7005.2523 where the table indicates "control

required." For a facility where control is required under this section, no owner, operator, or other person who conducts activities at the facility may allow:

A. a discharge of fugitive emissions that exhibit greater than five percent opacity from a truck unloading station, railcar unloading station, railcar loading station, or handling operation;

B. a discharge of fugitive emissions that exhibit greater than ten percent opacity from a truck loading station;

C. a discharge of fugitive emissions that exhibit greater than 20 percent opacity from a ship or barge loading or unloading station, except that during trimming or topping-off, when normal loading procedures cannot be used, no opacity standard applies; and

D. a discharge of particulate matter from control equipment that exceeds the limits set forth in part 7005.0520 or that exhibits greater than ten percent opacity, except that facilities constructed prior to January 1, 1984, with an annual commodity throughput of more than 180,000 tons and located in an unincorporated area or in a city with a population of less than 7,500, outside the Minneapolis-Saint Paul Air Quality Control Region, is in compliance if the control equipment has a collection efficiency of not less than 85 percent by weight.

Subp. 4. **Capture systems and control equipment.** The owner or operator of a commodity facility not required to control emissions under subpart 2 or 3 is not required to install capture systems and control equipment but shall unload, handle, clean, dry, and load commodities to minimize fugitive emissions to a level consistent with RACT. If a capture system is used, the particulate matter must be conveyed through control equipment that has a collection efficiency of not less than 85 percent by weight.

Subp. 5. **Grain dryer specifications.** A grain dryer must meet the following design specifications:

A. the perforations of a column dryer screen must not exceed 3/32 inches in diameter; and

B. the emissions from a rack dryer must pass through a 50-mesh screen enclosure before discharge to the atmosphere.

**Statutory Authority:** *MS s 116.07 subd 1*

**History:** *8 SR 1675*

#### **7005.2522 NUISANCE.**

Notwithstanding any provisions in parts 7005.2520 to 7005.2523, no owner or operator of a dry bulk agricultural commodity facility may operate or maintain a facility that creates a public nuisance. If the director determines that operation or maintenance of a commodity facility creates a public nuisance, the director may require the owner or operator to take measures necessary to eliminate the nuisance.

**Statutory Authority:** *MS s 116.07 subd 1*

**History:** *8 SR 1675*

**7005.2523 CONTROL REQUIREMENTS SCHEDULE.**

Facility Description	Date Construction, Modification or Reconstruction Commenced	
	Prior to 1/1/84	After 1/1/84
Facility located in Minneapolis-Saint Paul Air Quality Control Region or located in a city with a population of 7,500 or more or with annual commodity throughput of more than 180,000 tons	Control required	Control required
Facility with annual commodity throughput of 120,000 to 180,000 tons and located in a city with a population of less than 7,500	No control required	Control required
Facility with annual commodity throughput and location other than those described above	No control required	No control required

**Statutory Authority:** *MS s 116.07 subd 1*

**History:** *8 SR 1675*