

CHAPTER 7009
MINNESOTA POLLUTION CONTROL AGENCY
AMBIENT AIR QUALITY STANDARDS

	AMBIENT AIR QUALITY STANDARDS	7009.1030	EPISODE DECLARATION.
7009.0010	DEFINITIONS.	7009.1040	CONTROL ACTIONS.
7009.0020	PROHIBITED EMISSIONS.	7009.1050	EMERGENCY POWERS.
7009.0030	ENFORCEMENT.	7009.1060	TABLE 1.
7009.0040	ENFORCEMENT; OPTIONS.	7009.1070	TABLE 2: EMISSION REDUCTION OBJECTIVES FOR PARTICULATE MATTER.
7009.0050	INTERPRETATION AND MEASUREMENT METHODOLOGY, EXCEPT FOR HYDROGEN SULFIDE.	7009.1080	TABLE 3: EMISSION OBJECTIVES FOR SULFUR OXIDES.
7009.0060	MEASUREMENT METHODOLOGY FOR HYDROGEN SULFIDE.	7009.1090	TABLE 4: EMISSION REDUCTION OBJECTIVES FOR NITROGEN OXIDES.
7009.0070	TIME OF COMPLIANCE.	7009.1100	TABLE 5: EMISSION REDUCTION OBJECTIVES FOR HYDROCARBONS.
7009.0080	STATE AMBIENT AIR QUALITY STANDARDS.	7009.1110	TABLE 6: EMISSION REDUCTION OBJECTIVES FOR CARBON MONOXIDE.
	AIR POLLUTION EPISODES		ADOPTION OF FEDERAL REGULATIONS
7009.1000	AIR POLLUTION EPISODES.	7009.9000	DETERMINING CONFORMITY OF GENERAL FEDERAL ACTIONS TO STATE OR FEDERAL IMPLEMENTATION PLANS.
7009.1010	DEFINITIONS.		
7009.1020	EPISODE LEVELS.		

AMBIENT AIR QUALITY STANDARDS

7009.0010 DEFINITIONS.

Subpart 1. **Scope.** For the purpose of parts 7009.0010 to 7009.0080, the following terms have the meanings given them.

Subp. 2. **Primary ambient air quality standards; primary standards.** "Primary ambient air quality standards" or "primary standards" mean levels established to protect the public health from adverse effects. The adverse effects that the standards should protect against include acute or chronic subjective symptoms and physiological changes that are likely to interfere with normal activity in healthy or sensitive individuals or to interfere unreasonably with the enjoyment of life or property.

Subp. 3. **Secondary ambient air quality standards; secondary standards.** "Secondary ambient air quality standards" or "secondary standards" mean levels established to protect the public welfare from any known or anticipated adverse effects, such as injury to agricultural crops and livestock, damage to or deterioration of property, annoyance and nuisance of persons, or hazards to air and ground transportation.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.0020 PROHIBITED EMISSIONS.

No person shall emit any pollutant in such an amount or in such a manner as to cause or contribute to a violation of any ambient air quality standard beyond such person's property line, provided however, that in the event the general public has access to the person's property or portion thereof, the ambient air quality standards shall apply in those locations. The general public shall not include employees, trespassers, or other categories of people who have been directly authorized by the property owner to enter or remain on the property for a limited period of time and for a specific purpose.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.0030 ENFORCEMENT.

The requirement in part 7009.0020 applies without respect to whether emission rules stated in other air pollution control rules of the agency are also being violated. However, in

7009.0030 AMBIENT AIR QUALITY STANDARDS

284

enforcing the ambient air quality standards specified in parts 7009.0010 to 7009.0080, the agency shall not seek payment of a civil or criminal penalty from a person to or with whom a permit or stipulation agreement has been issued or entered into by the agency if and only if:

A. that permit or stipulation agreement establishes emission limitations or standards of performance for the pollutant or precursor thereof for which there is an ambient air quality standard which has been violated; and

B. the person to or with whom the permit or stipulation agreement has been issued or entered into by the agency was in compliance with the corresponding emission limitations and standards of performance at the time of the violation of the ambient air quality standard.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.0040 ENFORCEMENT; OPTIONS.

Notwithstanding part 7009.0030, any violations of the ambient air quality standards shall constitute grounds for the modification or revocation of a permit, for action by the agency to amend a stipulation agreement, or for other enforcement action by the agency to further require reduction or control of that person's emissions.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.0050 INTERPRETATION AND MEASUREMENT METHODOLOGY, EXCEPT FOR HYDROGEN SULFIDE.

For all ambient air quality standards except hydrogen sulfide, interpretation of the standards and measurements made to determine compliance with the standards shall be performed as set forth in:

A. Code of Federal Regulations, title 40, part 50, National Primary and Secondary Ambient Air Quality Standards, as amended; or

B. Code of Federal Regulations, title 40, part 53-Ambient Air Monitoring Reference and Equivalent Methods, as amended; and

C. Code of Federal Regulations, title 40, part 58, Ambient Air Quality Surveillance, as amended.

Statutory Authority: *MS s 116.07*

History: *18 SR 614; 19 SR 550; 23 SR 2224*

7009.0060 MEASUREMENT METHODOLOGY FOR HYDROGEN SULFIDE.

For hydrogen sulfide, measurements made to determine compliance with the standards shall be performed in accordance with any measurement method approved by the commissioner. The commissioner shall approve a measurement method where the sensitivity, precision, accuracy, response time, and interference levels of the method are comparable to that of the measurement methods for the other pollutants described in part 7009.0050; and when the person seeking to take the measurement has developed and submitted to the agency a quality assurance plan that provides operational procedures for each of the activities described in Code of Federal Regulations, as amended, title 40, part 58, appendix A.2.2, Quality Assurance Requirements for State and Local Air Monitoring Stations.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 18 SR 614; 19 SR 550*

MINNESOTA RULES 2011

285

AMBIENT AIR QUALITY STANDARDS 7009.0080

7009.0070 TIME OF COMPLIANCE.

The ozone and sulfur dioxide standards shall be attained as expeditiously as practicable but in no case later than December 31, 1984.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.0080 STATE AMBIENT AIR QUALITY STANDARDS.

The following table contains the state ambient air quality standards.

Pollutant/Air Contaminant	Primary Standard	Secondary Standard	Remarks
Hydrogen Sulfide	0.05 ppm by volume (70.0 micrograms per cubic meter)		1/2 hour average not to be exceeded over 2 times per year
	0.03 ppm by volume (42.0 micrograms per cubic meter)		1/2 hour average not to be exceeded over 2 times in any 5 consecutive days
Ozone	0.08 ppm by volume (235 micrograms per cubic meter)	same as primary standard	daily maximum 8 hour average; the standard is attained when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to the standard
Carbon Monoxide	9 ppm by volume (10 milligrams per cubic meter)	same as primary standard	maximum 8 hour concentration not to be exceeded more than once per year
	30 ppm by volume (35 milligrams per cubic meter)	same as primary standard	maximum 1 hour concentration not to be exceeded more than once per year
Sulfur Dioxide	80 micrograms per cubic meter (0.03 ppm by volume)	60 micrograms per cubic meter (0.02 ppm by volume)	maximum annual arithmetic mean
	365 micrograms per cubic meter (0.14 ppm by volume)	same as primary standard	maximum 24 hour concentration not to be exceeded more than once per year

MINNESOTA RULES 2011

7009.0080 AMBIENT AIR QUALITY STANDARDS

286

		915 micrograms per cubic meter (0.35 ppm by volume)	maximum 3 hour concentration not to be exceeded more than once per year in Air Quality Control Regions 127, 129, 130, and 132
		1300 micrograms per cubic meter (0.5 ppm by volume)	maximum 3 hour concentration not to be exceeded more than once per year in Air Quality Control Regions 128, 131, and 133
	1300 micrograms per cubic meter (0.5 ppm by volume)		maximum 3 hour concentration not to be exceeded more than once per year
	1300 micrograms per cubic meter (0.5 ppm by volume)		maximum 1 hour concentration not to be exceeded more than once per year
Particulate Matter	75 micrograms per cubic meter	60 micrograms per cubic meter	maximum annual geometric mean
	260 micrograms per cubic meter	150 micrograms per cubic meter	maximum 24 hour concentration not to be exceeded more than once per year
Nitrogen Dioxide	0.05 ppm by volume (100 micrograms per cubic meter)	same as primary standard	maximum annual arithmetic mean
Lead	1.5 micrograms per cubic meter	same as primary standard	maximum arithmetic mean averaged over a calendar quarter
PM-10	150 micrograms per cubic meter	same as primary standard	maximum 24-hour average concentration; the standard is attained when the expected number of days per calendar year exceeding the value of the standard is equal to or less than one
	50 micrograms per cubic meter	same as primary standard	annual arithmetic mean; the standard is attained when the expected annual arithmetic mean concentration is less than or equal to the value of the standard

MINNESOTA RULES 2011

287

AMBIENT AIR QUALITY STANDARDS 7009.1010

PM-2.5	65 micrograms per cubic meter	same as primary standard	24-hour average concentration; the standard is attained when the 98th percentile 24-hour concentration is less than or equal to the standard
	15.0 micrograms per cubic meter	same as primary standard	annual arithmetic mean; the standard is attained when the annual arithmetic mean concentration is less than or equal to the standard

Statutory Authority: *MS s 116.07*

History: *18 SR 614; 19 SR 550; 22 SR 1237; 23 SR 2224*

AIR POLLUTION EPISODES

7009.1000 AIR POLLUTION EPISODES.

Parts 7009.1000 to 7009.1110 apply to any owner or operator of any emission facility or stationary source having allowable emissions of any single air pollutant of 250 or more tons per year located within or having air pollutant emissions affecting any area within Minnesota for which an air pollution alert, air pollution warning, air pollution emergency, or air pollution significant harm episode has been declared by the commissioner.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 13 SR 2154; 18 SR 614; 20 SR 2316*

7009.1010 DEFINITIONS.

Subpart 1. **Scope.** As used in parts 7009.1000 to 7009.1110, the following words shall have the meanings defined herein.

Subp. 2. **Air pollutant.** "Air pollutant" means particulate matter, sulfur dioxide, nitrogen oxides, ozone, carbon monoxide, or nonmethane hydrocarbons.

Subp. 3. **Alert level.** "Alert level" means the concentration of pollutants, as specified in part 7009.1020, at which first stage control actions are to be taken.

Subp. 4. **Allowable emission.** "Allowable emission" means the emission rate calculated using the maximum rated capacity of the emission facility or stationary source, unless the emission facility or stationary source is subject to enforceable permit conditions which limit the operating rate or hours of operation or both, and the applicable standard of performance in agency rules or the standard in the permit, whichever is more stringent.

Subp. 4a. **Commissioner.** "Commissioner" means the commissioner of the Minnesota Pollution Control Agency or the commissioner's designee.

Subp. 5. **Declaration.** "Declaration" means the formal public notification of an episode made by the commissioner.

Subp. 6. [Repealed by amendment, L 1987 c 186 s 15]

Subp. 7. **Emergency level.** "Emergency level" means that concentration of pollutants, as specified in part 7009.1020, at which third stage control actions are to be taken.

Subp. 8. **Episode.** "Episode" means that period of time during which ambient air concentrations of air pollutants equal or exceed the alert level and meteorological conditions are such that the air pollutant concentrations can be expected to persist or to increase in the absence of control actions.

Subp. 9. **Significant harm level.** "Significant harm level" means that concentration of pollutants, as specified in part 7009.1020, at which fourth stage control actions are to be taken.

7009.1010 AMBIENT AIR QUALITY STANDARDS

288

Subp. 10. **Warning level.** "Warning level" means that concentration of pollutants, as specified in part 7009.1020, at which second stage control actions are to be taken.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 13 SR 2154; 18 SR 614*

7009.1020 EPISODE LEVELS.

The level at which the commissioner shall declare an air pollutant alert, warning, emergency, or significant harm episode shall be determined by table 1 in part 7009.1060.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 18 SR 614*

7009.1030 EPISODE DECLARATION.

Subpart 1. **Alert.** An air pollution alert shall be declared by the commissioner when the commissioner finds that the concentration of any air pollutant has reached the alert level at any monitoring site and meteorological conditions are such that the air pollutant concentration can be expected to remain at, or exceed, the alert level for 12 or more hours or, in the case of ozone, to recur the following day at the same or higher levels unless control actions are taken.

Subp. 2. **Warning.** An air pollution warning shall be declared by the commissioner when the commissioner finds that the concentration of any air pollutant has reached the warning level at any monitoring site and meteorological conditions are such that the air pollutant concentration can be expected to remain at, or exceed, the warning level for 12 or more hours or, in the case of ozone, to recur the following day at the same or higher levels unless control actions are taken. An air pollution warning shall also be declared by the commissioner when the commissioner finds that the alert level concentrations for any air pollutant have persisted in the area for 48 hours and are expected to continue for the subsequent 12 hours.

Subp. 3. **Emergency.** An air pollution emergency shall be declared by the commissioner when the concentration of any air pollutant has reached the emergency level at any monitoring site and meteorological conditions are such that the air pollutant concentration can be expected to remain at, or exceed, the emergency level for 12 or more hours or, in the case of ozone, to recur the following day at the same or higher levels unless control actions are taken. An air pollution emergency shall also be declared by the commissioner when the commissioner finds that the warning level concentrations for any air pollutant have persisted in the area for 48 hours and are expected to continue for the subsequent 12 hours.

Subp. 4. **Significant harm episode.** An air pollution significant harm episode shall be declared by the commissioner when the concentration of any air pollutant has reached the significant harm level at any monitoring site and meteorological conditions are such that the air pollutant concentration can be expected to remain at, or exceed, the significant harm level for 12 or more hours or, in the case of ozone, to recur the following day at the same or higher levels unless control actions are taken.

Subp. 5. **Geographical area.** The geographical area subject to episode levels of any air pollutant shall be delineated to the extent feasible and shall be identified in the commissioner's declaration.

Subp. 6. **End of episode.** The commissioner shall terminate the episode by declaration when:

A. the measured air pollutant concentrations no longer satisfy the criteria specified in part 7009.1020; and

B. the meteorological conditions indicate that there will not be a recurrence of episode levels of air pollutants within 24 hours of control actions are reduced or eliminated.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 18 SR 614*

7009.1040 CONTROL ACTIONS.

Subpart 1. **Compliance required.** Notwithstanding the provisions of other rules or of any installation permit, operating permit, stipulation agreement, variances, or order of the agency, all persons shall, upon notification by the commissioner or the commissioner's designee, comply with episode control directives issued by the commissioner.

Subp. 2. **Control directive.** Control directives issued to any owner or operator of an emission facility shall be based on the emission reduction plan submitted to the commissioner pursuant to subpart 3; provided, however, that in the event that no emission reduction plan has been approved for such facility, the episode control directives shall be based upon the emission reduction objectives set forth at subpart 4.

Subp. 3. **Episode emission reduction plan.** The owner or operator of each emission facility or stationary source located in an area of the state designated by the commissioner as having exceeded the alert levels in part 7009.1060, table 1, within the last ten years and having allowable emissions of greater than or equal to 250 tons per year of the pollutant causing the episode, shall submit to the commissioner an episode emission reduction plan to be implemented at the facility or stationary source in the event of a declaration by the commissioner of an air pollution episode. The plan shall be submitted to the commissioner within 90 days of the designation of the area or by September 1, 1995, whichever is later. The plan shall be consistent with the emission reduction objectives in subpart 4 and shall designate at least two individuals to be notified in the event of the declaration of an air pollution episode. The plan shall be subject to the approval of the commissioner. If the commissioner finds that the plan is inconsistent with such emission reduction objectives, the plan shall be returned to the owner or operator along with a written statement of the reason(s) for disapproval. The owner or operator shall correct the deficiency within 30 days of notification of disapproval and shall resubmit the plan to the commissioner.

Subp. 4. **Emission reduction objectives.** For the purpose of these parts, emission reduction objectives shall be as indicated in tables 2 through 6 in parts 7009.1070 to 7009.1110. In the event of episode levels of both particulate matter and sulfur dioxide the commissioner shall direct coal fired electric power generating facilities which pollutant is to be reduced at each facility.

Subp. 5. **Right to enter.** During the time that an air pollution episode declaration is in effect and has not been terminated, the owner or operator of any emission facility who has been directed to implement any portion of the facility's emission reduction plan shall allow the agency, or any authorized employee or agent of the agency, when authorized by law and upon the presentation of proper credentials to enter upon the property of the owner or operator for the purpose of obtaining information or examining records or conducting surveys or investigations pertaining to the operation of the emission facilities and the control equipment. The owner or operator shall make available on the premises to such agency employee a copy of the episode emission reduction plan for the emission facility and shall, upon request of the agency employee, demonstrate that the control directives issued to the owner or operator are being implemented.

Statutory Authority: *MS s 116.07*

History: *L 1987 c 186 s 15; 13 SR 2154; 18 SR 614; 20 SR 2316; 22 SR 1237*

7009.1050 EMERGENCY POWERS.

Nothing in these parts shall be interpreted to preempt the agency's emergency powers as provided in Minnesota Statutes, section 116.11 or to preclude appropriate actions from being taken by the agency to protect the public health.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

MINNESOTA RULES 2011

7009.1060 AMBIENT AIR QUALITY STANDARDS

290

7009.1060 TABLE 1.

	Alert	Warning	Emergency	Significant Harm
SO ₂	300 ppb	600 ppb	800 ppb	1000 ppb
24 hr. avg.	800 µg/m ³	1600 µg/m ³	2100 µg/m ³	2620 µg/m ³
Part. 24 hr. avg.	375 µg/m ³	625 µg/m ³	875 µg/m ³	1000 µg/m ³
CO	15 ppm	30 ppm	40 ppm	50 ppm
8 hr. avg.	17 mg/m ³	34 mg/m ³	46 mg/m ³	57.5 mg/m ³
NO ₂	150 ppb	300 ppb	400 ppb	500 ppb
24 hr. avg.	282 µg/m ³	565 µg/m ³	750 µg/m ³	938 µg/m ³
NO ₂	600 ppb	1200 ppb	1600 ppb	2000 ppb
1 hr. avg.	1130 µg/m ³	2260 µg/m ³	3000 µg/m ³	3750 µg/m ³
Ozone	200 ppb	400 ppb	500 ppb	600 ppb
1 hr. avg.	400 µg/m ³	800 µg/m ³	1000 µg/m ³	1200 µg/m ³
SO ₂ x Part. µg/m ³ x µg/m ³				
24 hr. x 24 hr.	65 x 10 ³	261 x 10 ³	393 x 10 ³	490 x 10 ³

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.1070 TABLE 2: EMISSION REDUCTION OBJECTIVES FOR PARTICULATE MATTER.

EMISSION FACILITY	AIR POLLUTION ALERT	AIR POLLUTION WARNING	AIR POLLUTION EMERGENCY
1. Coal or oil-fired electric power generating facilities.	<p>a. Substantial reduction by utilization of fuels having lowest available ash content.</p> <p>b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</p>	<p>a. Maximum reduction by utilization of fuels having lowest available ash content.</p> <p>b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</p>	<p>a. Maximum reduction by utilization of fuels having lowest available ash content.</p> <p>b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</p>

MINNESOTA RULES 2011

291

AMBIENT AIR QUALITY STANDARDS 7009.1070

- | | | | |
|--|--|--|--|
| | c. Substantial reduction by diverting electric power generation to facilities outside of Alert Area. | c. Maximum reduction by diverting electric power generation to facilities outside of Warning Area. | c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area. |
| 2. Coal or oil-fired process steam generating facilities | a. Substantial reduction by utilization of fuels having lowest available ash content. | a. Maximum reduction by utilization of fuels having lowest available ash content. | a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage. |
| | b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. | b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. | b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. |
| | c. Reduction of steam load demands consistent with continuing plant operation. | c. Reduction of steam load demands consistent with continuing plant operations. | c. Taking the action called for in the emergency plan. |
| | | d. Making ready for use a plan of action to be taken if an emergency develops. | |
| 3. A-Manufacturing, processing, and mining industries. AND B-Other persons required by this rule to prepare standby plans. | a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations. | a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations. | a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. |
| | b. Maximum reduction by deferring trade waste disposal operations which emit particles. | b. Maximum reduction by deferring trade waste disposal operations which emit particles. | b. Elimination of air contaminants from trade waste disposal processes which emit particles. |

MINNESOTA RULES 2011

7009.1070 AMBIENT AIR QUALITY STANDARDS

292

	c. Reduction of particulate producing heat load demands for processing consistent with continuing plant operations.	c. Reduction of particulate producing heat load demands for processing consistent with continuing plant operations.	c. Maximum reduction of particulate producing heat load demands for processing.
4. Refuse disposal operations.	a. Maximum reduction by prevention of open burning. b. Substantial reduction by limiting burning of refuse in incinerators to the hours between 12:00 noon and 4:00 p.m.	a. Maximum reduction by prevention of open burning. b. Complete elimination of the use of incinerators.	a. Maximum reduction by prevention of open burning. b. Complete elimination of the use of incinerators.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.1080 TABLE 3: EMISSION OBJECTIVES FOR SULFUR OXIDES.

EMISSION FACILITY	AIR POLLUTION ALERT	AIR POLLUTION WARNING	AIR POLLUTION EMERGENCY
1. Coal or oil-fired electric power generating facilities.	a. Substantial reduction by utilization of fuels having lowest available sulfur content. b. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.	a. Maximum reduction by utilization of fuels having lowest available sulfur content. b. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.	a. Maximum reduction by utilization of fuels having lowest available sulfur content. b. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
2. Coal or oil-fired process steam generating facilities.	a. Substantial reduction by utilization of fuels having lowest available sulfur content. b. Reduction of steam load demands consistent with continuing plant operations.	a. Maximum reduction by utilization of fuels having the lowest available sulfur content. b. Reduction of steam load demands consistent with continuing plant operations.	a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage. b. Taking the action called for in the emergency plan.

MINNESOTA RULES 2011

			c. Making ready for use a plan of action to be taken if an emergency develops.
3. A-Manufacturing and processing industries AND B-Other persons required by this rule to prepare standby plans.	a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations.	a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
	b. Maximum reduction by deferring trade waste disposal operations which emit sulfur dioxide.	b. Maximum reduction by deferring trade waste disposal operations which emit sulfur dioxide.	b. Elimination of air contaminants from trade waste disposal processes which emit sulfur dioxide.
	c. Reduction of sulfur dioxide producing heat load demands for processing consistent with continuing plant operations	c. Reduction of sulfur dioxide producing heat load demands for processing consistent with continuing plant operations.	c. Maximum reduction of sulfur dioxide producing load demands for processing.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.1090 TABLE 4: EMISSION REDUCTION OBJECTIVES FOR NITROGEN OXIDES.

EMISSION FACILITY	AIR POLLUTION ALERT	AIR POLLUTION WARNING	AIR POLLUTION EMERGENCY
1. Steam-electric power generating facilities.	a. Substantial reduction by utilization of fuel which results in the formation of less air contaminant.	a. Maximum reduction by utilization of fuel which results in the formation of less air contaminant.	a. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
	b. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.	b. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.	

MINNESOTA RULES 2011

7009.1090 AMBIENT AIR QUALITY STANDARDS

294

- | | | | |
|---|--|--|--|
| 2. Process steam generating facilities. | a. Substantial reduction by utilization of fuel which results in the formation of less air contaminant. | a. Maximum reduction by utilization of fuel which results in the formation of less air contaminant. | a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage. |
| | b. Reduction of steam load demands consistent with continuing plant operations. | b. Reduction of steam load demands consistent with continuing plant operations. | |
| | | c. Making ready for use a plan of action to be taken if an emergency develops. | |
| 3. A-Manufacturing and processing industries.
AND
B-Other persons required by this rule to prepare standby plans. | a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations. | a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations. | a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. |
| | b. Maximum reduction by deferring trade waste disposal operations which emit nitrogen oxides. | b. Maximum reduction by deferring trade waste disposal operations which emit nitrogen oxides. | b. Elimination of air contaminants from trade waste disposal processes which emit nitrogen oxides. |
| | c. Reduction of nitrogen oxide producing heat load demands for processing consistent with continuing plant operations. | c. Reduction of nitrogen oxide producing heat load demands for processing consistent with continuing plant operations. | c. Maximum reduction of nitrogen oxide producing heat load demands for processing. |

MINNESOTA RULES 2011

295

AMBIENT AIR QUALITY STANDARDS 7009.1100

4. Stationary internal combustion engines.	a. Reduction of power demands consistent with continuing operations.	a. Reduction of power demands consistent with continuing operations.	a. Maximum reduction by reducing power demands to absolute necessities consistent with personnel safety and preventing equipment damage.
		b. Maximum reduction by utilization of fuels or power source which results in the formation of less air contaminants.	b. Maximum reduction by utilization of fuels or power source which results in the formation of less air contaminants.
5. Refuse disposal operations.	a. Maximum reduction by prevention of open burning.	a. Maximum reduction by prevention of open burning.	a. Maximum reduction by prevention of open burning.
	b. Substantial reduction by limiting burning of refuse in incinerators to the hours between 12:00 noon and 4:00 p.m.	b. Complete elimination of the use of incinerators.	b. Complete elimination of the use of incinerators.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.1100 TABLE 5: EMISSION REDUCTION OBJECTIVES FOR HYDROCARBONS.

EMISSION FACILITY	AIR POLLUTION ALERT	AIR POLLUTION WARNING	AIR POLLUTION EMERGENCY
1. Petroleum products storage and distribution.	a. Substantial reduction of air contaminants by curtailing, postponing, or deferring transfer operations.	a. Maximum reduction of air contaminants by assuming reasonable economic hardship by postponing transfer operations.	a. Elimination of air contaminants by curtailing, postponing, or deferring transfer operations to the extent possible without causing damage to equipment.

MINNESOTA RULES 2011

7009.1100 AMBIENT AIR QUALITY STANDARDS

296

2. Surface coating and preparation.	a. Substantial reduction of air contaminants by curtailing, postponing, or deferring transfer operations.	a. Maximum reduction of air contaminants by assuming reasonable economic hardship by postponing transfer operations.	a. Elimination of air contaminants by curtailing, postponing, or deferring transfer operations to the extent possible without causing damage to equipment.
3. A-Manufacturing and processing industries. AND B-Other persons required by this rule to prepare standby plans.	a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations.	a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
4. Mobile sources.	a. Voluntary reduction in unnecessary vehicle use in response to Agency advisory.	a. Voluntary reduction in vehicle use through increased use of public transport, car pools, and van pools.	a. Maximum reduction by banning vehicle use except for emergencies.

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

7009.1110 TABLE 6: EMISSION REDUCTION OBJECTIVES FOR CARBON MONOXIDE.

EMISSION FACILITY	AIR POLLUTION ALERT	AIR POLLUTION WARNING	AIR POLLUTION EMERGENCY
1. A-Manufacturing industries. AND B-Other persons required by this rule to prepare standby plans.	a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations.	a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without injury to persons or damage to equipment.

MINNESOTA RULES 2011

297

AMBIENT AIR QUALITY STANDARDS 7009.9000

- | | | | |
|--------------------------------|---|--|---|
| 2. Refuse disposal operations. | a. Maximum reduction by prevention of open burning. | a. Maximum reduction by prevention of open burning. | a. Maximum reduction by prevention of open burning. |
| 3. Mobile Sources. | a. Voluntary reduction in unnecessary vehicle use in response to Agency advisory. | a. Voluntary reduction in vehicle use through increased use of public transport, car pools, and van pools. | a. Maximum reduction by banning vehicle use except for emergencies. |

Statutory Authority: *MS s 116.07*

History: *18 SR 614*

ADOPTION OF FEDERAL REGULATIONS

7009.9000 DETERMINING CONFORMITY OF GENERAL FEDERAL ACTIONS TO STATE OR FEDERAL IMPLEMENTATION PLANS.

Code of Federal Regulations, title 40, part 51, subpart W, as amended, entitled "Determining Conformity of General Federal Actions to State or Federal Implementation Plans," is adopted and incorporated by reference, with the exception of Code of Federal Regulations, title 40, part 51, subpart W, section 51.851(a).

Statutory Authority: *MS s 116.07*

History: *20 SR 1167*