

1.1 **Department of Health**1.2 **Proposed Permanent Rules Relating to Indoor Ice Arenas and Motorsports Arenas**1.3 **4620.3900 APPLICATION PURPOSE.**

1.4 ~~Parts 4620.3900 to 4620.4800 apply to owners/operators of ice arenas in~~
1.5 ~~which internal combustion engine-powered ice resurfacing machines are used, and~~
1.6 ~~owners/operators of enclosed sports arenas in which other internal combustion~~
1.7 ~~engine-powered vehicles or equipment are used for racing, competition, or for~~
1.8 ~~demonstration including, but not limited to, midget cars, motorcycles, and snowmobiles.~~
1.9 The purpose of parts 4620.3900 to 4620.4800 is to protect public health by ensuring
1.10 acceptable air quality in the operation and maintenance of indoor ice arenas.

1.11 **4620.3910 APPLICATION.**

1.12 Parts 4620.3900 to 4620.4800 apply to owners or operators of indoor ice arenas.

1.13 **4620.3950 ACCEPTABLE AIR QUALITY.**

1.14 The owner or operator of an indoor ice arena must maintain acceptable air quality
1.15 conditions at all times in areas of the arena building that are open to the public. Such
1.16 conditions are defined as: one-hour average air concentration of not more than 20 parts of
1.17 carbon monoxide per one million parts of air by volume (20 ppm), and one-hour average
1.18 air concentrations of not more than 0.3 parts of nitrogen dioxide per one million parts of
1.19 air by volume (0.3 ppm).

1.20 **4620.4000 DEFINITIONS.**

1.21 Subpart 1. **Scope.** For the purposes of parts 4620.3900 to 4620.4800, the following
1.22 terms shall have the meanings given them ~~unless the context clearly indicates otherwise.~~

1.23 Subp. 1a. **Air quality measuring device.** "Air quality measuring device" means
1.24 direct-read pump and colorimetric tube or electronic real-time gas detection equipment for
1.25 sampling and measuring nitrogen dioxide and carbon monoxide air concentrations.

2.1 Subp. 2. [See repealer.]

2.2 Subp. 3. [Repealed by amendment, L 1977 c 305 s 39]

2.3 Subp. 3a. **Arena.** "Arena" means an indoor ice arena.

2.4 Subp. 3b. **Arena building.** "Arena building" means a structure with a roof and walls
2.5 that houses an indoor ice arena.

2.6 Subp. 4. **Certificate.** "Certificate" means a certificate of approval issued by the
2.7 commissioner of health pursuant to under parts 4620.3900 to 4620.4800.

2.8 Subp. 5. [See repealer.]

2.9 Subp. 5a. **Commissioner.** "Commissioner" means the commissioner of health or the
2.10 commissioner's designee.

2.11 Subp. 5b. **Edging.** "Edging" means operation of an ice edger.

2.12 Subp. 6. [See repealer.]

2.13 Subp. 7. [See repealer.]

2.14 Subp. 7a. **Ice edger.** "Ice edger" means power equipment used to modify the
2.15 perimeter of an ice sheet.

2.16 Subp. 7b. **Ice maintenance machine.** "Ice maintenance machine" means an ice
2.17 resurfacer or ice edger.

2.18 Subp. 7c. **Ice resurfacer.** "Ice resurfacer" means power equipment used to modify
2.19 the entire surface of the ice.

2.20 Subp. 7d. **Indoor ice arena.** "Indoor ice arena" means a single room of a
2.21 permanent or temporary structure where an ice sheet is maintained having the following
2.22 characteristics:

2.23 A. the room has a roof;

3.1 B. the room is bounded by walls, doorways, or windows, whether open or
3.2 closed; and

3.3 C. the walls, doorways, or windows cover more than 50 percent of the combined
3.4 surface area of the vertical planes that make up the room's perimeter (sides).

3.5 Subp. 7e. Operator. "Operator" means the person designated by the owner as
3.6 responsible to operate and maintain the indoor ice arena.

3.7 Subp. 7f. Owner. "Owner" means the person having legal title to the indoor ice
3.8 arena or the owner's legally authorized representative.

3.9 Subp. 8. **Person.** "Person" means any natural ~~person~~ individual, corporation,
3.10 partnership, or other business association and includes the state and its political
3.11 subdivisions.

3.12 Subp. 8a. Responsible person. "Responsible person" means the individual
3.13 authorized by the operator to ensure acceptable air quality conditions in the arena.

3.14 Subp. 9. **Resurfacing machine.** "Resurfacing machine" means ~~internal combustion~~
3.15 ~~engine-powered operation of an ice resurfacing machine~~ resurfacers.

3.16 **4620.4100 RESURFACING MACHINES CERTIFICATE OF APPROVAL.**

3.17 Subpart 1. Applicability. After July 1, 1973, No person shall may own or operate an
3.18 indoor ice arena in which a resurfacing machine is used unless the commissioner issues
3.19 the person a certificate is issued by the commissioner of health. The certificate must
3.20 be displayed in a conspicuous place in the ice arena. If all conditions specified in parts
3.21 4620.3900 to 4620.4800 are met, the commissioner of health shall issue a certificate.

3.22 Subp. 2. Certificate application. Applications for a certificate must be submitted on
3.23 forms prescribed by the commissioner. An application must be submitted:

3.24 A. annually, by owners or operators of all existing indoor ice arenas; and

4.1 B. at least 30 days before owners or operators open new indoor ice arenas
4.2 to the public.

4.3 Subp. 3. Certificate issuance. The commissioner must issue a certificate under
4.4 subpart 2, if the commissioner determines that the owner or operator has complied with
4.5 parts 4620.3900 to 4620.4800 and demonstrated the ability to maintain acceptable air
4.6 quality conditions in the arena building.

4.7 Subp. 4. Certificate expiration and renewal. A certificate issued under this part
4.8 expires one year from the date of issue.

4.9 A. Owners or operators must apply for renewal on forms prescribed by the
4.10 commissioner at least 30 days before a certificate expires.

4.11 B. If a certificate expires while a renewal application is pending approval, the
4.12 arena may continue to operate under the expired certificate until the commissioner issues a
4.13 new certificate or denies the renewal application.

4.14 Subp. 5. Posting of certificate. The certificate must be prominently displayed in a
4.15 location that is clearly visible to the public.

4.16 **4620.4450 TRAINING.**

4.17 Subpart 1. Requirements. The owner or operator must ensure that a trained
4.18 responsible person is available in the arena building at all times that the arena is open to
4.19 the public. Training must:

4.20 A. be appropriate for the trainee's level of responsibility in operating the arena;

4.21 B. be performed annually;

4.22 C. include the following topics:

4.23 (1) acceptable air quality conditions;

4.24 (2) methods of maintaining acceptable air quality in the arena;

- 5.1 (3) proper operation and storage of the arena air quality measuring device;
5.2 (4) proper collection of air samples with the arena air quality measuring
5.3 device;
5.4 (5) appropriate actions for correcting unacceptable air quality; and
5.5 (6) record-keeping requirements; and
5.6 D. be documented.

5.7 Subp. 2. Documentation. Trainees must acknowledge, with their written signature,
5.8 that they have received training meeting the requirements of this part. Owners or operators
5.9 must maintain the written acknowledgment according to part 4620.4650.

5.10 **4620.4510 MEASUREMENT OF AIR QUALITY CONDITIONS.**

5.11 Subpart 1. Measuring air quality. Owners or operators of indoor ice arenas must
5.12 measure carbon monoxide and nitrogen dioxide air concentrations in each arena when
5.13 internal combustion engine-powered ice maintenance equipment is used.

5.14 Subp. 2. Persons who can take measurements. Measurements must be made by an
5.15 individual who has received training as specified in part 4620.4450.

5.16 Subp. 3. Measurements for ice resurfacing. Owners or operators must measure air
5.17 concentrations at least twice per week after using an internal combustion engine-powered
5.18 ice resurfer. Measurements must be taken:

- 5.19 A. at board height, inside the boards, and at the centerline of the ice;
5.20 B. 20 minutes after completing resurfacing unless the commissioner has granted
5.21 the operator approval to measure under an alternative schedule;
5.22 C. at times of maximum use of the resurfacing machine; and
5.23 D. at least once on Saturday or Sunday of each week that the arena is open
5.24 to the public.

6.1 Subp. 4. Measurements for ice edging.

6.2 A. Owners or operators must measure air concentrations at least once per week
6.3 after using an internal combustion engine-powered ice edger. Measurements must be
6.4 taken following a time of maximum ice edger use at board height, inside the boards,
6.5 and at the centerline of the ice:

6.6 (1) 20 minutes after completing edging if the arena building is open to
6.7 the public when edging occurs; or

6.8 (2) before the public reoccupies the arena, if the arena is not open to the
6.9 public when edging occurs.

6.10 B. Owners or operators may measure under an alternative schedule if the
6.11 commissioner has approved one.

6.12 Subp. 5. Measurement records. Owners or operators must keep a record of
6.13 measurement findings and make them available to the commissioner upon request.

6.14 Subp. 6. Additional measurements. Owners or operators must make additional
6.15 measurements as determined by the commissioner.

6.16 4620.4550 AIR QUALITY MEASURING DEVICES.

6.17 Subpart 1. Device requirements. The owner or operator must demonstrate that the
6.18 device and methods used to measure air quality conditions are accurate and reliable. Air
6.19 quality measuring devices must be:

6.20 A. capable of measuring carbon monoxide air concentrations in a range from 0
6.21 to 100 parts per million (ppm) in increments of 1 ppm; or

6.22 B. capable of measuring nitrogen dioxide air concentrations in a range from
6.23 0 to 5 parts per million (ppm) in increments of 0.1 ppm.

7.1 Subp. 2. Maintenance. The owner or operator must operate, store, maintain, and
7.2 calibrate the devices according to the device manufacturer's specifications. The owner or
7.3 operator must also keep maintenance and calibration records.

7.4 **4620.4600 FAILURE TO MAINTAIN AIR QUALITY.**

7.5 Subpart 1. **Corrective action necessary.** ~~When one-hour averages of more than 30~~
7.6 ~~ppm but less than 125 ppm of carbon monoxide and/or more than 0.5 ppm but less than 2~~
7.7 ~~ppm of nitrogen dioxide exist in the arena, immediate corrective action must be taken.~~
7.8 ~~This may include an immediate increase in the ventilation rate and/or an increase in the~~
7.9 ~~interval between resurfacing operations. Subsequent tests shall be conducted to confirm~~
7.10 ~~the effectiveness of such action.~~ The owner or operator must take immediate corrective
7.11 action when measurements of more than 20 ppm of carbon monoxide or more than 0.3
7.12 ppm of nitrogen dioxide are made in an area of the arena building that is open to the
7.13 public. Corrective action must include:

7.14 A. increasing the ventilation rate immediately; and

7.15 B. suspending internal combustion-powered equipment use.

7.16 The owner or operator must continue corrective action until measurements show not more
7.17 than 20 ppm of carbon monoxide and not more than 0.3 ppm of nitrogen dioxide in all
7.18 areas of the arena building that are open to the public.

7.19 Subp. 2. **Report Follow-up testing.** ~~Whenever the conditions of subpart 1 occur,~~
7.20 ~~a report must be submitted to the commissioner of health within five working days~~
7.21 ~~explaining why the methods of air quality control had failed, what immediate corrective~~
7.22 ~~action was taken, and what action is planned to prevent recurrence of exceeding the air~~
7.23 ~~quality standards.~~ The owner or operator must conduct and document the following air
7.24 quality tests to confirm the effectiveness of the corrective action:

7.25 A. at 20-minute intervals until measurements show not more than 20 ppm of
7.26 carbon monoxide and not more than 0.3 ppm of nitrogen dioxide;

8.1 B. 20 minutes after the next five uses of ice maintenance equipment; and

8.2 C. at least once per day for the subsequent three days of arena operation.

8.3 Subp. 3. ~~Substantial risk to health of persons Report. One-hour average air~~
8.4 ~~concentrations of more than 125 ppm of carbon monoxide and/or more than 2 ppm of~~
8.5 ~~nitrogen dioxide constitute an imminent, substantial danger to the health of persons. The~~
8.6 ~~arena shall be closed immediately and all people evacuated. The arena may reopen when~~
8.7 ~~the air quality standards of part 4620.4300 are obtained and can be maintained. The~~
8.8 ~~same procedure prescribed in part 4620.4600, subpart 2, shall be followed. Whenever~~
8.9 corrective action is required under subpart 1, the owner or operator must submit a report to
8.10 the commissioner within five business days that includes:

8.11 A. an explanation of why corrective action was necessary;

8.12 B. a description of the immediate corrective actions that were taken;

8.13 C. a record of all air quality tests required by subpart 2; and

8.14 D. an action plan to prevent a reoccurrence.

8.15 Subp. 4. Arena evacuation necessary.

8.16 A. The owner or operator must evacuate an area of the arena building whenever:

8.17 (1) measured carbon monoxide air concentrations exceed 85 ppm or
8.18 measured nitrogen dioxide air concentrations exceed 2.0 ppm for more than five minutes;

8.19 (2) measured carbon monoxide air concentrations exceed 40 ppm or
8.20 measured nitrogen dioxide air concentrations exceed 0.6 ppm for more than one hour after
8.21 originally measuring unacceptable air quality conditions; or

8.22 (3) measured carbon monoxide air concentrations exceed 20 ppm or
8.23 measured nitrogen dioxide air concentrations exceed 0.3 ppm for more than two hours
8.24 after originally measuring unacceptable air quality conditions.

9.1 B. When evacuation becomes necessary, the owner or operator must:

9.2 (1) contact the local fire department as soon as possible to request
9.3 assistance in evacuating the facility and assessing the hazard; and

9.4 (2) contact the Minnesota Department of Health upon completing
9.5 evacuation.

9.6 C. The evacuated areas may only be reoccupied by the public after an
9.7 evacuation under item A if:

9.8 (1) acceptable air quality conditions are measured;

9.9 (2) corrective measures have been taken to prevent further incidence of
9.10 unacceptable air quality conditions; and

9.11 (3) acceptable air quality conditions and corrective measures are verified
9.12 by the local fire department or the Minnesota Department of Health.

9.13 **4620.4650 RECORD KEEPING.**

9.14 The owner or operator must keep a record-keeping log to maintain all documentation
9.15 required by parts 4620.3900 to 4620.4600.

9.16 A. Documents that must be maintained in the record-keeping log are:

9.17 (1) training records required by part 4620.4450;

9.18 (2) air quality measurement records required by part 4620.4510, subpart 5;

9.19 (3) air quality measuring device records required by part 4620.4550,
9.20 subpart 2; and

9.21 (4) corrective action reports required by part 4620.4600, subpart 3.

9.22 B. The record-keeping log must be kept in the arena building and be available
9.23 for public and commissioner review during all hours that the arena building is open to
9.24 the public.

10.1 C. Required documents must be retained for at least three years.

10.2 **4620.4700 OTHER INTERNAL COMBUSTION ENGINES FUEL-BURNING**
 10.3 **EQUIPMENT.**

10.4 ~~After July 1, 1973, no person who owns or operates an enclosed sports~~ The owner or
 10.5 operator of an indoor ice arena open to the general public shall permit the operation of
 10.6 ~~other internal combustion engine-powered equipment or vehicles for racing, competition,~~
 10.7 ~~demonstration, or other purposes unless a certificate is issued by the commissioner~~
 10.8 ~~of health. If all conditions specified in parts 4620.3900 to 4620.4800 are met, the~~
 10.9 ~~commissioner of health shall issue a certificate. The certificate must be displayed in a~~
 10.10 ~~conspicuous place in the arena.~~ must measure air quality conditions and ensure acceptable
 10.11 air quality in the arena building when equipment, other than ice maintenance equipment,
 10.12 capable of producing carbon monoxide or nitrogen dioxide, but that is not directly vented
 10.13 to the outdoors, is used for operating or maintaining the arena.

10.14 ~~Applications for a certificate must be submitted at least 45 days prior to the event and~~
 10.15 ~~upon forms prescribed by the commissioner of health. The application must be submitted~~
 10.16 ~~by both the owner/operator of the arena and the sponsor of the activities which involve use~~
 10.17 ~~of internal combustion engines.~~

10.18 The provisions of parts 4620.4300, 4620.4400, 4620.4500, subpart 2, and part
 10.19 4620.4600, subparts 1 and 3, shall also apply. Air quality conditions ~~shall~~ must be
 10.20 measured and reports made as ~~directed by the commissioner of health~~ directs depending
 10.21 upon the specific type of activity to be conducted in the building.

10.22 **4620.4800 REVOCATION OR SUSPENSION OF APPROVAL, REINSTATEMENT**
 10.23 **ENFORCEMENT.**

10.24 ~~The commissioner of health may suspend or revoke the approval granted pursuant to~~
 10.25 ~~parts 4620.4100 and 4620.4700 upon the finding of violations of the provisions of parts~~
 10.26 ~~4620.3900 to 4620.4800. All proceedings shall be in accordance with the Minnesota~~
 10.27 ~~Administrative Procedure Act, Minnesota Statutes, chapter 14.~~

11.1 ~~A suspended or revoked certificate of approval shall be returned to the commissioner~~
11.2 ~~of health.~~

11.3 ~~Reinstatement shall be in accordance with the suspension or revocation order and~~
11.4 ~~upon an adequate showing that the grounds for suspension or revocation shall not recur.~~

11.5 The commissioner may take one or more enforcement actions listed in Minnesota
11.6 Statutes, sections 144.989 to 144.993, for a violation of this chapter.

11.7 **4620.4900 VARIANCE TO ENCLOSED SPORTS ARENA RULES RELATING**
11.8 **TO INDOOR ICE ARENAS.**

11.9 The commissioner ~~shall~~ may grant variances to parts 4620.3900 to 4620.4800, except
11.10 part ~~4620.4300~~ 4620.3950, only according to the procedures and criteria specified in
11.11 parts 4717.7000 to 4717.7050.

11.12 **4620.5000 PURPOSE.**

11.13 The purpose of parts 4620.5000 to 4620.5900 is to protect public health by ensuring
11.14 acceptable air quality in the operation and maintenance of indoor motorsports arenas.

11.15 **4620.5100 APPLICATION.**

11.16 Parts 4620.5000 to 4620.5900 apply to owners or operators of indoor motorsports
11.17 arenas.

11.18 **4620.5200 ACCEPTABLE AIR QUALITY.**

11.19 The owner or operator of an indoor motorsports arena must maintain acceptable air
11.20 quality conditions at all times in areas of the arena building that are open to the public.
11.21 Such conditions are defined as: one-hour average air concentrations of not more than 30
11.22 parts of carbon monoxide per one million parts of air by volume (30 ppm), and one-hour
11.23 average air concentrations of not more than 0.3 parts of nitrogen dioxide per one million
11.24 parts of air by volume (0.3 ppm).

11.25 **4620.5300 DEFINITIONS.**

12.1 Subpart 1. **Scope.** For the purposes of parts 4620.5000 to 4620.5900, the following
12.2 terms have the meanings given them.

12.3 Subp. 2. **Air quality measuring device.** "Air quality measuring device" means
12.4 direct-read pump and colorimetric tube or electronic real-time gas detection equipment for
12.5 sampling and measuring nitrogen dioxide or carbon monoxide air concentrations.

12.6 Subp. 3. **Arena.** "Arena" means an indoor motorsports arena.

12.7 Subp. 4. **Arena building.** "Arena building" means a structure with a roof and walls
12.8 that houses an indoor motorsports arena.

12.9 Subp. 5. **Certificate.** "Certificate" means a certificate of approval issued by the
12.10 commissioner under parts 4620.5000 to 4620.5900.

12.11 Subp. 6. **Commissioner.** "Commissioner" means the commissioner of health or the
12.12 commissioner's designee.

12.13 Subp. 7. **Event manager.** "Event manager" means the person who organizes or
12.14 directs a special indoor motorsports event.

12.15 Subp. 8. **Indoor motorsports arena.** "Indoor motorsports arena" means a single
12.16 room of a permanent or temporary structure where motorsports are operated having the
12.17 following characteristics:

12.18 A. the room has a ceiling;

12.19 B. the room is bounded by walls, doorways, or windows, whether open or
12.20 closed; and

12.21 C. the walls, doorways, or windows cover more than 50 percent of the combined
12.22 surface area of the vertical planes that make up the room's perimeter (sides).

12.23 Subp. 9. **Motorsports vehicle.** "Motorsports vehicle" means an internal combustion
12.24 engine-powered vehicle used for recreation, racing, competition, or demonstration.

13.1 Subp. 10. **Operating hours.** "Operating hours" means the time period that the
13.2 indoor motorsports arena building is open to the public and motorsports vehicles are
13.3 being used in the arena.

13.4 Subp. 11. **Operator.** "Operator" means the person designated by the owner as
13.5 responsible to operate and maintain the indoor motorsports arena.

13.6 Subp. 12. **Owner.** "Owner" means the person having legal title to the arena building
13.7 or the owner's legally authorized representative.

13.8 Subp. 13. **Person.** "Person" means any natural individual, corporation, partnership,
13.9 or other business association and includes the state and its political subdivisions.

13.10 Subp. 14. **Responsible person.** "Responsible person" means the individual
13.11 authorized by the operator to ensure acceptable air quality conditions in the arena building.

13.12 Subp. 15. **Special indoor motorsports event.** "Special indoor motorsports event"
13.13 means a single event where motorsports vehicles are operated in an arena.

13.14 Subp. 16. **Spectator.** "Spectator" means a member of the public present in the arena
13.15 building who is not a motorsports vehicle driver or rider or an actively working employee.

13.16 Subp. 17. **Spectator area.** "Spectator area" means that part of the indoor motorsports
13.17 arena building where spectators are allowed to assemble.

13.18 **4620.5400 CERTIFICATE OF APPROVAL.**

13.19 Subpart 1. **Applicability.** No person shall own or operate an indoor motorsports
13.20 arena unless the commissioner issues the person a certificate.

13.21 Subp. 2. **Certificate application.** Applications for a certificate must be submitted on
13.22 forms prescribed by the commissioner. An application must be submitted:

13.23 A. **annually, by owners or operators of existing indoor motorsports arenas;**

14.1 B. at least 30 days before owners or operators open new indoor motorsports
14.2 arenas to the public; and

14.3 C. at least 30 days before the arena owners or operators and the event manager
14.4 begin a special indoor motorsports event.

14.5 **Subp. 3. Certificate issuance.**

14.6 A. The commissioner must issue a certificate under subpart 2, item A or B,
14.7 if the commissioner determines that the owner or operator has complied with parts
14.8 4620.5000 to 4620.5900 and demonstrated the ability to maintain acceptable air quality
14.9 conditions in the arena building.

14.10 B. The commissioner shall issue a certificate granting approval to hold a special
14.11 indoor motorsports event if the owner or operator meets the requirements of item A and:

14.12 (1) submits a written plan to the commissioner that describes the methods
14.13 that the owner or operator will use to monitor air quality and ensure acceptable air quality
14.14 during the event; and

14.15 (2) the event manager and arena operator agree to the terms of the plan
14.16 in writing.

14.17 **Subp. 4. Certificate expiration and renewal.** A certificate issued under this part
14.18 expires one year from the date of issue, except that a certificate for a special indoor
14.19 motorsports event expires as the certificate describes.

14.20 A. Owners or operators shall apply for renewal on forms prescribed by the
14.21 commissioner at least 30 days before a standard certificate expires.

14.22 B. If a certificate expires while a renewal application is pending approval, the
14.23 arena may continue to operate under the expired certificate until the commissioner issues a
14.24 new certificate or denies the renewal application.

15.1 Subp. 5. Posting of certificate. The certificate must be prominently displayed in a
15.2 location that is clearly visible to the public.

15.3 **4620.5500 TRAINING.**

15.4 Subpart 1. Requirements. The owner or operator must ensure that a trained
15.5 responsible person is available in the arena building at all times that the arena is open to
15.6 the public. Training must:

15.7 A. be appropriate for the trainee's level of responsibility in operating the arena;

15.8 B. be performed annually;

15.9 C. include the following topics:

15.10 (1) acceptable air quality conditions;

15.11 (2) methods of maintaining acceptable air quality in the arena;

15.12 (3) proper operation and storage of the arena air quality measuring device;

15.13 (4) proper collection of air samples with the arena air quality measuring

15.14 device;

15.15 (5) appropriate actions for correcting unacceptable air quality; and

15.16 (6) record-keeping requirements; and

15.17 D. be documented.

15.18 Subp. 2. Documentation. Trainees shall acknowledge, with their written signature,
15.19 that they have received training meeting the requirements of this part. The written
15.20 acknowledgment shall be maintained according to part 4620.5800.

15.21 **4620.5600 MEASUREMENT OF AIR QUALITY CONDITIONS.**

16.1 Subpart 1. Measuring air quality. Owners or operators of indoor motorsports arenas
16.2 must measure carbon monoxide and nitrogen dioxide air concentrations in each indoor
16.3 motorsports arena as directed by the commissioner.

16.4 Subp. 2. Persons who can take measurements. Measurements must be made by an
16.5 individual who has received training as specified in part 4620.5500.

16.6 Subp. 3. Measurement requirements.

16.7 A. Owners and operators must measure nitrogen dioxide air concentrations as
16.8 the commissioner directs depending on the specific type of activity to be conducted in
16.9 the arena.

16.10 B. Owners and operators must measure carbon monoxide air concentrations in
16.11 each indoor motorsports arena building as follows:

16.12 (1) Frequency of measurements.

16.13 (a) Certified arenas:

16.14 i. at least two days per week;

16.15 ii. at least three hours per week during maximum use of

16.16 motorsports vehicles; and

16.17 iii. as the commissioner deems necessary.

16.18 (b) Special indoor motorsports events:

16.19 i. on each day of motorsport vehicle use;

16.20 ii. during all operating hours; and

16.21 iii. as the commissioner deems necessary.

16.22 (2) Location and documentation of measurements.

- 17.1 (a) If motorsports vehicle riders or drivers are not paid performers,
17.2 measurements must be:
- 17.3 i. made at a location on the track that represents average carbon
17.4 monoxide concentrations. The owner or operator must identify a location on the track that
17.5 represents average carbon monoxide concentrations; and
- 17.6 ii. recorded at least every 15 minutes when motorsports vehicles
17.7 are used in the arena.

- 17.8 (b) If spectators are present during motorsports activities, the operator
17.9 must measure air quality conditions in the spectator area as follows:

- 17.10 i. at the location of poorest air quality in the spectator area of
17.11 the arena. The owner or operator must identify the location where the general public is
17.12 exposed to the highest carbon monoxide levels; and
- 17.13 ii. recorded at least once every 15 minutes in the spectator area
17.14 when motorsports vehicles are used in the arena.

- 17.15 Subp. 4. Measurement records. Owners or operators must keep a record of
17.16 measurement findings and make it available to the commissioner upon request.

17.17 **4620.5650 AIR QUALITY MEASURING DEVICES.**

- 17.18 Subpart 1. Device requirements. The owner or operator must demonstrate that the
17.19 devices and methods used to measure air quality conditions are accurate and reliable. Air
17.20 quality measuring devices must be:

- 17.21 A. capable of measuring carbon monoxide air concentrations in a range from 0
17.22 to at least 100 parts per million (ppm) in increments of 1 ppm; or

- 17.23 B. capable of measuring nitrogen dioxide air concentrations in a range from 0 to
17.24 at least 5 ppm in increments of 0.1 ppm.

18.1 Subp. 2. **Maintenance.** The owner or operator must operate, store, maintain, and
18.2 calibrate the devices according to the device manufacturer's specifications. The owner or
18.3 operator must also keep maintenance and calibration records.

18.4 **4620.5700 FAILURE TO MAINTAIN AIR QUALITY.**

18.5 Subpart 1. **Corrective action necessary.** The owner or operator must take immediate
18.6 corrective action when measurements of more than 30 ppm of carbon monoxide or more
18.7 than 0.3 ppm of nitrogen dioxide are made for more than 15 minutes in an area of the
18.8 arena building that is open to the public. Corrective action must include:

18.9 A. increasing the ventilation rate immediately; and

18.10 B. suspending internal combustion-powered equipment use, if carbon monoxide
18.11 measurements remain in excess of 30 ppm or nitrogen dioxide measurements remain in
18.12 excess of 0.3 ppm for more than one hour after an original exceeding measurement.

18.13 The owner or operator must continue corrective action until measurements show not
18.14 more than 30 ppm of carbon monoxide and not more than 0.3 ppm of nitrogen dioxide in
18.15 all areas of the arena building that are open to the public.

18.16 Subp. 2. **Follow-up testing.** The owner or operator must conduct and document the
18.17 following air quality tests to confirm the effectiveness of the corrective actions:

18.18 A. at 15-minute intervals until measurements show not more than 30 ppm of
18.19 carbon monoxide and not more than 0.3 ppm of nitrogen dioxide; and

18.20 B. at 15-minute intervals for at least one hour per day for the subsequent three
18.21 days of arena operation.

18.22 Subp. 3. **Report.** Whenever the conditions of subpart 1 occur, the owner or operator
18.23 must submit a report to the commissioner within five business days that includes:

18.24 A. an explanation of why corrective action was necessary;

18.25 B. a description of the immediate corrective actions that were taken;

19.1 C. a record of all air quality tests required by subpart 2; and

19.2 D. an action plan to prevent a recurrence.

19.3 Subp. 4. Arena evacuation necessary.

19.4 A. The owner or operator must evacuate an area of the arena building whenever:

19.5 (1) measured carbon monoxide air concentrations exceed 85 ppm or
19.6 measured nitrogen dioxide concentrations exceed 2.0 ppm for more than 15 minutes; or

19.7 (2) measured carbon monoxide air concentrations exceed 30 ppm or
19.8 measured nitrogen dioxide air concentrations exceed 0.3 ppm for more than two hours
19.9 after originally measuring unacceptable air quality conditions.

19.10 B. When evacuation becomes necessary, the owner or operator must:

19.11 (1) contact the local fire department as soon as possible to request
19.12 assistance in evacuating the facility and assessing the hazard; and

19.13 (2) contact the Department of Health upon completing the evacuation.

19.14 C. Evacuated areas may only be reoccupied by the public after an evacuation
19.15 under item A if:

19.16 (1) acceptable air quality conditions are measured;

19.17 (2) corrective measures have been taken to prevent further incidence of
19.18 unacceptable air quality conditions; and

19.19 (3) acceptable air quality conditions and corrective measures are verified
19.20 by the local fire department or the Department of Health.

19.21 **4620.5800 RECORD KEEPING.**

19.22 The owner or operator must keep a record-keeping log to maintain all documentation
19.23 according to parts 4620.5000 to 4620.5900.

19.24 A. Documents that must be maintained in the record-keeping log are:

- 20.1 (1) training records required by part 4620.5500;
20.2 (2) air quality measurement records required by part 4620.5600, subpart 4;
20.3 (3) air quality measuring device records required by part 4620.5650,
20.4 subpart 2; and
20.5 (4) corrective action reports required by part 4620.5700, subpart 3.

20.6 B. The record-keeping log must be kept in the arena building and be available
20.7 for public and commissioner review during all hours that the arena building is open to
20.8 the public.

20.9 C. Required documents must be retained for at least three years.

20.10 **4620.5900 ENFORCEMENT.**

20.11 The commissioner may take one or more of the enforcement actions listed in
20.12 Minnesota Statutes, sections 144.989 to 144.993, for a violation of parts 4620.5000 to
20.13 4620.5900.

20.14 **4620.5950 VARIANCE TO RULES RELATING TO INDOOR MOTORSPORTS**
20.15 **ARENAS.**

20.16 The commissioner may grant variances to parts 4620.5000 to 4620.5900, except part
20.17 4620.5200, only according to the procedures and criteria specified in parts 4717.7000
20.18 to 4717.7050.

20.19 **REPEALER.** Minnesota Rules, parts 4620.4000, subparts 2, 5, 6, and 7; 4620.4200;
20.20 4620.4300; 4620.4400; and 4620.4500, are repealed.