

**VILLAGE OF EVENDALE, OHIO**  
**ORDINANCE #17-\_\_\_\_\_**

**AN ORDINANCE ADOPTING CHAPTER 882 OF THE CODIFIED  
ORDINANCES OF THE VILLAGE OF EVENDALE, REGULATING  
INDOOR ICE ARENAS**

- WHEREAS,** the Village of Evendale is in the unique situation of having three privately operated indoor ice arenas in this relatively small village; and
- WHEREAS,** in order to maintain ice in those arenas, equipment is used which can have a significant impact on indoor air quality and if not addressed may cause dangerous situations; and
- WHEREAS,** if air quality issues are not addressed, the health and safety of those in the facility, frequently including children, can be jeopardized; and
- WHEREAS,** in order to ensure that adequate steps are taken to maintain air quality at a safe level, the Fire Department of the Village of Evendale has recommended that the following Chapter, based upon similar regulations adopted by the State of Minnesota and in use in other communities in the United States, be adopted; now, therefore,

BE IT ORDAINED BY THE COUNCIL OF THE VILLAGE OF EVENDALE, STATE OF OHIO,  
\_\_\_\_\_ members concurring, that:

**SECTION 1:** Chapter 882 of the Evendale Municipal Code, Indoor Ice Arena Regulations, is hereby adopted to read as follows:

Chapter 882

Village of Evendale

Adopted Permanent Rules Relating to Indoor Ice Arenas

Indoor Ice Arenas

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**882.01 PURPOSE.**

The purpose of this Chapter is to protect public health by ensuring acceptable air quality in the operation and maintenance of Indoor Ice Arenas.

**882.02 APPLICATION.**

Applies to Owners of Indoor Ice Arenas.

**882.03 ACCEPTABLE AIR QUALITY.**

The Owner of an Indoor Ice Arena must maintain acceptable air quality conditions at all times in areas of the Arena Building that are open to the public. Such conditions are defined as: one-hour average (Short Term Weighted Average – STWA) air concentration of not more than 20 parts of carbon monoxide (CO) per one million parts by volume (20 ppm), and one-hour average air concentrations of not more than 0.3 parts of nitrogen dioxide (NO<sub>2</sub>) per one million parts of air by volume (0.3 ppm).

882.04

**DEFINITIONS.**

For the purposes of this Chapter, the following terms shall have the meanings given them.

- (a) **Air Quality Measuring Device** – “Air Quality Measuring Device” means direct-read pump and colorimetric tube or electronic real-time gas detection equipment for sampling and measuring nitrogen dioxide and carbon monoxide air concentrations.
- (b) **Arena** – “Arena” means an Indoor Ice Arena.
- (c) **Arena Building** – “Arena Building” means a structure with a roof and walls that houses an Indoor Ice Arena.
- (d) **Certificate** – “Certificate” means a certificate of approval issued by the Village of Evendale Fire Department.
- (e) **Authority Having Jurisdiction** – “Authority Having Jurisdiction (AHJ)” means the Fire Chief of the Village of Evendale or the Fire Chief’s designee.
- (f) **Edging** – “Edging” means operation of an Ice Edger.
- (g) **Ice Edger** – “Ice Edger” means power equipment used to modify the perimeter of an ice sheet.
- (h) **Ice Maintenance Machine** – “Ice Maintenance Machine” means an Ice Resurfacer or Ice Edger.
- (i) **Ice Resurfacer** – “Ice Resurfacer” means power equipment used to modify the entire surface of the ice.
- (j) **Indoor Ice Arena** – “Indoor Ice Arena” means a single room of a permanent or temporary structure where an ice sheet is maintained having the following characteristics:
  - 1. the room has a roof;
  - 2. the room is bounded by walls, doorways, or windows, whether open or closed; and
  - 3. the walls, doorways, or windows cover more than 50 percent of the combined surface area of the vertical planes that make up the room’s perimeter (sides).
- (k) **Owner** – “Owner” means the person having legal title to the Indoor Ice Arena or the Owner’s legally authorized representative.
- (l) **Person** – “Person” means any natural individual, corporation, partnership, or other business association and includes the Village of Evendale.
- (m) **Responsible Person** – “Responsible Person” means the individual authorized by the Owner to ensure acceptable air quality conditions in the Arena.
- (n) **Resurfacing** – “Resurfacing” means operation of an Ice Resurfacer.

882.05

**CERTIFICATE OF APPROVAL.**

(a) **Applicability.** Every Owner of an Indoor Ice Arena must obtain a Certificate and an Arena may not be operated unless such Certificate has been obtained from the AHJ.

(b) **Certificate application.** Applications for a Certificate must be submitted on forms prescribed by the AHJ. No fee will be required for an Application for a Certificate or for receiving a Certificate. An application must be submitted:

1. annually, by Owners of all existing Arenas; and
2. at least 30 days before Owners open new Arenas to the public.

(c) **Certificate issuance.** The AHJ must issue a Certificate, if the AHJ determines that the Owner has complied with all parts of this Chapter and demonstrated the ability to maintain acceptable air quality controls in the Arena Building.

(d) **Certificate expiration and renewal.** A Certificate issued under this part expires one year from the date of issue.

1. Owners must apply for renewal on forms prescribed by the AHJ at least 30 days before a Certificate expires.
2. If a Certificate expires while a renewal application is pending approval, the Arena may continue to operate under the expired Certificate until the AHJ issues a new Certificate or denies the renewal application.

(e) **Posting of Certificate.** The Certificate must be prominently displayed in a location that is clearly visible to the public in each Indoor Ice Arena.

## 882.06

### TRAINING.

(a) **Requirements.** The Owner must ensure that a trained Responsible Person is available in the Arena Building at all times that the Arena is open to the public. Training must:

1. be appropriate for the trainee's level of responsibility in operating the Arena;
2. be performed annually;
3. include the following topics:
  - a. acceptable air quality conditions;
  - b. methods of maintaining acceptable Air Quality in the Arena;
  - c. proper operation and storage of the Arena Air Quality Measuring Device;
  - d. proper collection of air samples with the Arena Air Quality Measure Devices;
  - e. appropriate actions for correcting unacceptable air quality; and
  - f. record-keeping requirements; and
4. be documented.

(b) **Documentation.** The trained Responsible Person(s) must acknowledge, with their written signature, that they have received training meeting the requirements of this Chapter. Owners must maintain the written acknowledgement according to this Chapter.

## 882.07

### MEASUREMENT OF AIR QUALITY CONDITIONS.

- (a) **Measuring air quality.** Owners of Indoor Ice Arenas must measure carbon monoxide and nitrogen dioxide air concentrations in each Arena when internal combustion engine-powered ice maintenance equipment is used.
- (b) **Persons who can take measurements.** Measurements must be made by an individual who has received annual training on monitoring equipment in use.
- (c) **Frequency of measurements.** Owners must measure air concentrations at least twice per week after using an internal combustion engine-powered ice resurfacer. Measurements must be taken:
  - 1. at board height, inside the boards, and at the centerline of the ice;
  - 2. 20 minutes after completing resurfacing unless the AHJ has granted the owner approval to measure under an alternative schedule;
  - 3. At time of maximum use of the resurfacing machine; and
  - 4. At least once on Saturday or Sunday of each week that the arena is open to the public.
- (d) Owners must measure air concentrations at least once per week after using an internal combustion engine-powered ice edger. Measurements must be taken following a time of maximum ice edger use at board height, inside the boards, and at the centerline of the ice:
  - 1. 20 minutes after completing edging if the arena building is open to the public when edging occurs; or
  - 2. before the public reoccupies the arena, if the arena is not open to the public when edging occurs.
- (e) Owners may measure under an alternative schedule if the AHJ has approved one.
- (f) **Measurement records.** Owners shall keep a record of measurement findings and make them available to the AHJ upon request.
- (g) **Additional measurements.** Owners must make any additional measurements as determined by the AHJ.

## 882.08

### **AIR QUALITY MEASURING DEVICES.**

- (a) **Device requirements.** The Owner must demonstrate that the Air Quality Measuring Device and methods used to measure air quality conditions are accurate and reliable. The Air Quality Measuring Devices must be:
  - 1. capable of measuring carbon monoxide air concentrations in a range from 0 to 100 parts per million (ppm) in increments of 1 ppm; or
  - 2. capable of measuring nitrogen dioxide air concentrations in a range from 0 to 5 parts per million (ppm) in increments of 0.1 ppm.
- (b) **Maintenance.** The Owner must operate, store, maintain, and calibrate the Air Quality Measuring Devices according to the device manufacturer's specifications. The Owner must also keep maintenance and calibration records in accordance with this Chapter.

## 882.09

### **FAILURE TO MAINTAIN AIR QUALITY.**

- (a) **Corrective action necessary.** The Owner shall take immediate corrective action when measurements of more than 20 ppm of carbon monoxide or more than 0.3 ppm of nitrogen dioxide are made in an area of the Arena Building that is open to the public. Corrective action must include:

1. increasing the ventilation rate immediately; and
2. suspending internal combustion-powered equipment use.

The Owner must continue corrective action until measurements show not more than 20 ppm of carbon monoxide and not more than 0.3 ppm of nitrogen dioxide in all areas of the Arena Building that are open to the public.

(b) **Follow-up testing.** The Owner must conduct and document the following air quality tests to confirm the effectiveness of the corrective action:

1. at board height, inside the boards, and at the centerline of the ice;
2. at 20-minute intervals until measurements show not more than 20 ppm of carbon monoxide and not more than 0.3 ppm of nitrogen dioxide;
3. 20 minutes after the next five uses of ice maintenance equipment recorded in the log; and
4. at least once per day for the subsequent three days of arena operation.

(c) **Report.** Whenever corrective action is required, the Owner must submit a report to the AHJ within five business days after the corrective action was taken that includes:

1. an explanation of why corrective action was necessary;
2. a description of the immediate corrective actions that were taken;
3. a record of all air quality tests required; and
4. an action plan to prevent a reoccurrence.

(d) **Arena evacuation necessary.**

1. The Owner must evacuate an area of the Arena Building whenever:
  - a. measured carbon monoxide air concentrations exceed 83 ppm or measured nitrogen dioxide air concentrations exceed 2.0 ppm for more than five minutes;
  - b. measured carbon monoxide air concentrations exceed 40 ppm or measured nitrogen dioxide air concentrations exceed 0.6 ppm for more than one hour after originally measuring unacceptable air quality conditions; or
  - c. measured carbon monoxide air concentrations exceed 20 ppm or measured nitrogen dioxide air concentrations exceed 0.3 ppm for more than two hours after originally measuring unacceptable air quality conditions.
2. When evacuation becomes necessary, the Owner must contact the Village of Evendale Fire Department as soon as possible to request assistance in evacuating the facility and assessing the hazard. If the Owner is not available, the Owner must designate a Responsible Person to contact the Village of Evendale Fire Department as soon as possible to request assistance in evacuating the facility and assessing the hazard.
3. The evacuated areas may only be re-occupied by the public after an evacuation if:
  - a. acceptable air quality conditions are measured; and
  - b. corrective measures have been taken to prevent further incidence of unacceptable air quality conditions; and

- c. acceptable air quality conditions and corrective measures are verified by the AHJ.

#### **882.10 RECORD KEEPING.**

The Owner shall keep a record-keeping log to maintain all documentation required.

- (a) Documents that must be maintained in the record-keeping log are:
  - 1. required training records;
  - 2. required air quality measurement records;
  - 3. required air quality measuring device records; and
  - 4. required corrective action reports.
- (b) The record-keeping log must be kept in the Arena Building and be available for public and AHJ review during all hours that the Arena Building is open to the public.
- (c) Required documents must be retained for at least three years.

#### **882.11 OTHER FUEL-BURNING EQUIPMENT.**

(a) **Notification required.** The Owner must notify the AHJ when using equipment other than Ice Maintenance Machines for operating or maintaining the Arena, if that equipment is capable of producing carbon monoxide or nitrogen dioxide and is not directly vented to the outdoors.

- (b) **Notification process.** The Owner must notify the AHJ by:
  - 1. providing a list to the AHJ of such equipment that the Owner proposes to use in its annual certificate application; and
  - 2. submitting in writing to the AHJ before using other fuel-burning equipment in the Arena if the equipment was not included in the Owner's annual submission.

(c) **Air quality measurement.** The Owner must ensure acceptable air quality in the Arena Building when using other fuel-burning equipment by measuring the air quality conditions and reporting as the AHJ directs, depending upon the specific type of activity to be conducted in the Arena Building.

#### **882.12 PENALTIES FOR VIOLATIONS.**

- (a) Operation of an Indoor Ice Arena in violation of this Chapter which does not involve violation of Section 882.09 or Section 882.13 shall constitute:
  - 1. for the first offense, a minor misdemeanor for the Owner;
  - 2. for the second offense, within the effective period of a Certificate, a misdemeanor of the fourth degree for the Owner; and
  - 3. for the third offense, within the effective period of a Certificate, a misdemeanor of the first degree for the Owner.
- (b) Operation of an Indoor Ice Arena in violation of Section 882.09 or Section 882.13 shall constitute a misdemeanor of the first degree for the Owner.
- (c) Misdemeanors under this Chapter shall be limited to up to the maximum fines as established by law and shall not include any term of imprisonment.

#### **882.13 ENFORCEMENT.**

In addition to the penalties specified in Section 882.12, violations of the requirements shall constitute grounds for the AHJ to take one or more of the enforcement actions subject to the notice and appeal provisions set forth in applicable law, including but not limited to:

- (a) Certificate suspension of two days after the fourth offense.
- (b) Certificate suspension of four days after the fifth offense.
- (c) Permanent revocation of Certificate after the sixth offense.
  - 1. A Certificate can be re-applied for after all corrective measures have been met within this Chapter.

2. All Certificates must be renewed annually.
- d) A “stop work order” may be issued at any time when applicable violations have been found.

**SECTION 2:** This ordinance shall become effective on January 1, 2018.