

## ADVISORY COMMITTEE COMMENT FORM FOR PROPOSED CODE CHANGES

(This form must be submitted electronically)

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**1346, IMC #6a**

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### **Proposed Code Change - Language**

Please provide your proposed code change in strikeout/underline format. Provide the *specific* language you would like to see changed, with new words underlined and words to be deleted should be ~~stricken~~. Also, state whether the language contained in your proposal is from a code book or from an amendment currently found in Minnesota Rule. (You may provide the language (electronically) on a separate, attached sheet).

#### **SECTION 404 ENCLOSED PARKING GARAGES**

**Revise Section 404.1 of the 2012 IMC as follows:**

**404.1 Enclosed parking garages.** Mechanical ventilation systems for enclosed parking garages shall be permitted to operate ~~intermittently in accordance with Item 1, Item 2 or both.~~

- ~~1. The system shall be arranged to operate automatically upon detection of vehicle operation or the presence of occupants by approved automatic detection devices~~ a concentration of carbon monoxide (CO) of 25 parts per million (ppm) and/or nitrogen dioxide (NO<sub>2</sub>) of 3 parts per million (ppm) by approved automatic detection devices.
- ~~2. The system shall be arranged to operate automatically upon detection of carbon monoxide detectors applied in conjunction with nitrogen dioxide detectors. Such detectors shall be installed in accordance with their manufacturer's recommendations.~~

**404.2 Minimum ventilation exhaust.** ~~Automatic operation of the system shall not reduce the ventilation airflow rate below 0.05 cfm per square foot of the floor area and t~~The system shall be capable of producing a ventilation airflow minimum exhaust rate of 0.75 cfm per square foot (0.0038 m<sup>3</sup>/s) of floor area.

## **Proposed Code Change – Need and Reason**

Please provide a thorough explanation of the need for this change and why this proposed code change is a reasonable change. During the rulemaking process, the Agency must defend the need and reasonableness of all its proposed changes. The Agency must submit evidence that it has considered all aspects of the proposal. (You may provide the need and reason (electronically) on a separate attached sheet).

**This proposed amendment contains the essential provisions of the current MR 1346, and it requires a prescriptive concentration level of carbon monoxide (CO) and/or nitrogen dioxide (NO<sub>2</sub>) to activate the ventilation/exhaust system automatically. The levels of CO and NO<sub>2</sub> specified are maximum allowable concentration levels as specified by the American Council of Governmental Industrial Hygienists, and these are industry-accepted values. This amendment also specifies a minimum exhaust rate instead of a minimum ventilation rate, which results in more consistent code enforcement and clarifies the intent of the provisions. These changes are necessary to ensure that the systems are operated when needed, based upon the detection of CO or NO<sub>2</sub>. The proposed amendment is reasonable because it promotes the use of energy-efficient ventilation systems that operate only upon detection of CO or NO<sub>2</sub> instead of operating continuously. In addition, the language is very similar to current ventilation requirements for enclosed parking garages.**

## **Proposed Code Change – Cost/Benefit Analysis**

Please consider whether this proposed code change will increase/decrease costs or indicate that it will not have any cost implications and explain how it will not. If there is an increased cost, will this cost be offset somehow by a life safety or other benefit? If so, please explain. Are there any cost increases/decreases to enforce or comply with this proposed code change? If so, please explain. (You may provide the cost/benefit analysis (electronically) on a separate, attached sheet).

**Since it has the same result as language in the current mechanical code, there are no cost implications.**

## **Other Factors to Consider Related to Proposed Code Change**

1. Is this proposed code change meant to:

change language contained in a published code book? If so, list section(s).

### **Section 404**

change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

delete language contained in a published code book? If so, list section(s).

delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

neither; this language will be new language, not found in the code book or in Minnesota Rule.

2. Is this proposed code change required by a Minnesota Statute or new legislation? If so, please provide the citation to the Statute or legislation.

**No**

3. Will this proposed code change impact other sections of a published code book or of an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.

**No.**

4. Will this proposed code change impact other parts of the Minnesota State Building Code? If so, please list the affected parts of the Minnesota State Building Code.

**No.**

5. Who are the parties affected or segments of industry affected by this proposed code change?

**None.**

6. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

**No.**

7. Are you aware of any federal requirement or regulation related to this proposed code change? If so, please list the regulation or requirement.

**No.**