Carbon Dioxide Systems: Beverage Dispensing

Fire Code Information Sheet

PURPOSE
- To provide guidance to fire code officials for dealing with the hazards of carbon dioxide (CO2) beverage dispensing systems.
- Codes can be years behind new technologies and processes. Fire code officials need resources to address these emerging issues.

RATIONALE
- The 2015 edition of the International Fire Code (IFC) now requires mechanical ventilation or an emergency alarm system when the quantity of CO2 exceeds 100 pounds.
- The new requirements in the 2015 IFC came about after several fatal carbon dioxide poisonings occurred in the United States in restaurants where CO2 leaked from large storage containers and displaced oxygen in the area. CO2 is an odorless and colorless gas heavier than air and will fill a room from bottom to top displacing the oxygen, creating a potential life-safety hazard to building occupants and emergency responders.
- Although the 2015 IFC contains new language regarding CO2 systems, this language is not part of the current Minnesota State Fire Code, which adopts the 2012 edition of the IFC. At this time Minnesota will not adopt a new fire code until early 2020.

LINKS TO 2015 IFC LANGUAGE
- 2015 IFC Section 5307 addresses protection for CO2 systems used in beverage dispensing.
- 2015 IFC Section 908.7 addresses emergency alarm systems for CO2 beverage dispensing.

SOLUTION
- For those local units of government wanting to apply the 2015 IFC provisions for CO2 beverage dispensing systems, local adoption of the IFC language via ordinance is recommended.

QUESTIONS
- Contact SFMD code specialists at 651-201-7221 or email firecode@state.mn.us

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