



Carbon Dioxide (CO₂) Used in Beverage Dispensing

Revised 9/16

Redmond Fire Prevention

ON JULY 1, 2016, the 2015 edition of the International Fire Code was formally adopted by the City of Redmond. Among the changes from the prior 2012 edition was the addition of **section 5307, Carbon Dioxide (CO₂) Systems Used In Beverage Dispensing Applications**. This section details required storage and safety measures for the safe use of carbon dioxide systems¹ in your business.

WHAT DOES THIS MEAN TO YOU?

An **emergency alarm system** is now required if CO₂ can accumulate indoors and if any tanks, cylinders, piping, or equipment are used.²

WHAT SHOULD YOU DO?

You will need to have an **emergency alarm system** compliant with the Redmond Fire Department Standards installed in your business as part of the permitting process for CO₂ usage. The alarm should

1. be placed in a location where the CO₂ will accumulate.³
2. continuously function.³
3. have a threshold of activation no greater than 5,000 parts per million (9,000 mg/m³).³
4. initiate a local alarm in the room or immediate area.³
5. be accompanied by a warning sign at the entrance of the room or area stating the following: "Carbon Dioxide Alarm. Do Not Enter. Call 911."⁴

When a Redmond Fire inspector comes for the next annual inspection of your business, this alarm will be required!

¹ For systems with more than 100 pounds (45.4 kg) of carbon dioxide.

² A mechanical ventilation system in accordance with the *International Building Code* is permitted in lieu of an emergency alarm system (IFC section 5307.5.1).

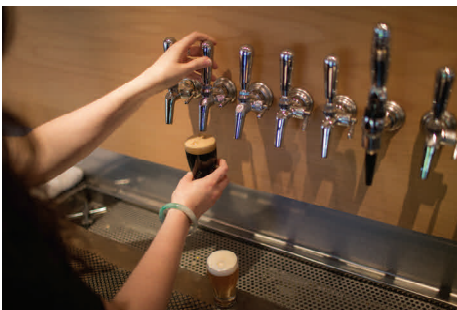
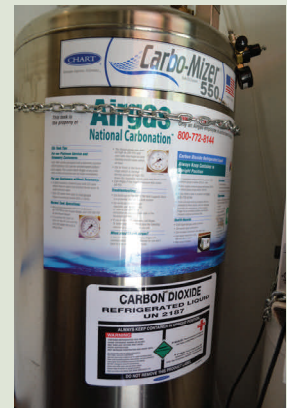
³ 2015 International Fire Code 5307.5.2

⁴ Redmond Municipal Code 15.06.013

Why should I be concerned?

Carbon dioxide is a colorless, odorless asphyxiate gas that cannot be detected without the use of specialized equipment. Even a small leak can quickly accumulate and become dangerous for customers and emergency responders alike. In 2011, a leak in a CO₂ system at a Georgia McDonald's exposed a woman to lethal levels of carbon dioxide that had built up in the walls and ceiling and leaked into a bathroom.

Installing an alarm will ensure that you, your employees, and your customers remain safe!



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