



Washington State Building Code Council

Improving the built environment by promoting health, safety and welfare

1500 Jefferson Street SE • P.O. Box 41449 • Olympia, Washington 98504
(360) 407-9280 • fax (360) 586-5366 • e-mail sbcc@ga.wa.gov • www.ga.wa.gov/sbcc

STATE BUILDING CODE INTERPRETATION 17-11

CODE: 2015 International Fire Code

SECTION: 105.7.3, 105.6.9

QUESTION 1: Given that the state adoption of the 2015 edition of the International Fire Code amends §105.6.4 by removing the limitation of the scope of carbon dioxide systems to only beverage dispensing applications, shall §105.7.3 also no longer be limited to just beverage dispensing application as specified in Table 105.6.9?

ANSWER 1: **Yes, the intent was for all sections and requirements related to carbon dioxide systems in the IFC to apply to all types of systems utilizing carbon dioxide not just beverage dispensing systems, so section 105.7.3 would also not be limited to only beverage dispensing system.**

QUESTION 2: If more than 100 pounds of liquefied carbon dioxide is installed in a facility, what – if any – type of fire construction permit in Section 105.7 shall be required (is carbon dioxide still considered by the SBCC to be a compressed gas even though it is stored in a liquid state but dispensed as a gas)?

ANSWER 2: **As section 105.7.3 requires a permit when the amounts listed in Table 105.6.9 are exceeded, and the table references 105.6.4, the threshold for a construction permit for carbon dioxide would be 100 lbs., regardless of whether compressed or liquefied. The construction requirements for carbon dioxide systems are found in Chapter 53 Compressed Gases, section 5307 Carbon Dioxide Systems, which make no reference to the physical state of carbon dioxide in the system as the risk is in its release, which would be as a gas.**

Section 202 defines Compressed Gas. Liquefied CO₂ does not meet the definition of Cryogenic Fluid due to its boiling point of 109.3 °F. Liquefied CO₂ clearly falls within the definition of Compressed Gas and therefore when there are 100 lbs. or more present, a Compressed Gas construction permit is required.

SUPERSEDES: None

REQUESTED BY: Snohomish County Fire District 7