



**City of Phoenix**  
FIRE DEPARTMENT  
FIRE PREVENTION SECTION

## **Carbon Dioxide (CO<sub>2</sub>) System Permitting in the City of Phoenix**

As a result of a carbon dioxide beverage system incident that almost turned tragic in Phoenix, and on a national level has taken numerous lives, the Phoenix Fire Department initiated a comprehensive program to ensure compressed and liquefied based carbon dioxide (CO<sub>2</sub>) systems, including beverage systems, are designed, installed, and operated in accordance with all applicable Phoenix Fire Code requirements. These safety requirements start with the permitting and plan review process for any liquid or gas CO<sub>2</sub> system with more than 50 lbs. in use per system. Based on the system design there may be multiple permits required for the CO<sub>2</sub> systems to be fully approved and placed into service. It's important to know what permits may be applicable to your setup to reduce any delays or challenges with your project. Separate applications, plan (if applicable) fees, and permit fees are required for submission for each required permit. Based on the building and other active construction permits, the required CO<sub>2</sub> permits are submitted to, issued, and inspected by different City Departments. This document will outline what permits must be obtained and how to obtain them. Below are the two Departments that issue CO<sub>2</sub> permits and may be used as a reference.

### **Phoenix Fire Department, Fire Prevention Section**

- In person application: 150 S. 12<sup>th</sup> Street, Phoenix, AZ 85034, M-F 8AM-4PM
- Online applications: <https://www.phoenix.gov/firesite/Pages/formsappsindex.aspx>
- Contact information: [PFD.Prevention@phoenix.gov](mailto:PFD.Prevention@phoenix.gov) or 602-262-6771

### **City of Phoenix Planning and Development Department Fire Reviews/Permits**

- Online applications (Over the counter alarms and dialers only): <https://apps-secure.phoenix.gov/PDD>
- Contact information: [pdd.fireplanreview@phoenix.gov](mailto:pdd.fireplanreview@phoenix.gov) or 602-495-5091

## **CO<sub>2</sub> Beverage Systems in Existing Buildings and all Non-Beverage Based CO<sub>2</sub> Systems**

1. **Permit Type:** Installation Permit for CO<sub>2</sub> liquid Dewars and CO<sub>2</sub> High Pressure Cylinders (more than 50 lbs. in use per system)
  - **Fees:**
    - Plan Review Fee: \$450 due at time of application submission
    - Modification Plan Review (existing approved system) Fee: \$300 due at time of application submission
    - Permit/Inspection Fee: \$300 due when picking up approved plans
  - **Permitting Department:** Phoenix Fire Department, Fire Prevention Section
2. **Permit Type:** Installation Permit for CO<sub>2</sub> gas detection systems
  - **Fees:**
    - Plan Review: \$300 due at time of application submission



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- Modification Plan Review (existing approved system): \$150 due at time of application submission
  - Permit/Inspection: \$300 due when picking up approved plans
  - Modification Permit/Inspection (existing approved system): \$150 due when picking up approved plans
  - **Permitting Department:** Phoenix Fire Department, Fire Prevention Section
3. **Permit Type:** Installation Permit for the gas detection system tie into a fire alarm/dialer system (if tie in is required)
- **Fee:**
    - Based on if plan review is required or permit is an over the counter. Please contact the City of Phoenix Fire Department Fire Prevention Section for more information
  - **Permitting Department:** Phoenix Fire Department, Fire Prevention Section
4. **Permit Type:** Operational Permit for CO2 systems
- **Fees:**
    - \$300 due at time of application submission
    - Permit is valid for 3 years and issued once the CO2 system is code compliant
    - Permit is obtained by and issued to the facility/premise owner, or owners' agent
  - **Permitting Department:** Phoenix Fire Department, Fire Prevention Section

**CO2 Beverage Systems in New or Under Remodel Buildings with an Active Planning and Development Department Construction Permit**

1. **Permit Type:** Installation Permit for CO2 liquid Dewars and CO2 High Pressure Cylinders (more than 50 lbs. in use per system)
- **Fees:**
    - Plan Review: \$450 due at time of application submission
    - Modification Plan Review (existing approved system): \$300 due at time of application submission
    - Permit/Inspection: \$300 due when picking up approved plans
  - **Permitting Department:** City of Phoenix Planning and Development Department
2. **Permit Type:** Installation Permit for CO2 gas detection systems
- **Fees:**
    - Plan Review: \$300 due at time of application submission
    - Modification Plan Review (existing approved system) Fee: \$150 due at time of application submission
    - Permit/Inspection: \$300 due when picking up approved plans



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- Modification Permit/Inspection (existing approved system): \$150 due when picking up approved plans
  - **Permitting Department:** City of Phoenix Planning and Development Department
3. **Permit Type:** Installation Permit for the gas detection system tie into a fire alarm/dialer system (if tie in is required)
- **Fee:**
    - Based on if plan review is required or permit is an over the counter. Please contact the City of Phoenix Planning and Development Department for more information
  - **Permitting Department:** City of Phoenix Planning and Development Department
4. **Permit Type:** Operational Permit for CO2 systems
- **Fees:**
    - \$300 due at time of application submission
    - Permit is valid for 3 years and issued once CO2 system is code compliant
    - Permit is obtained by and issued to the facility/premise owner, or owners' agent.
  - **Permitting Department:** Phoenix Fire Department, Fire Prevention Section