**Objective:** Topromote awareness ofcarbon monoxide preventive measures in the workplace

Carbon monoxide (CO) is a colorless, odorless gas produced whenever organic materials burn. When breathed, CO displaces oxygen from the bloodstream, which damages vital organs and can be fatal. CO produced in an enclosed space can kill a person within minutes. CO can also be flammable in high enough concentrations. The best protection is to take preventive measures to avoid any potential CO exposures.

**Monitoring**

**Employers are responsible to do the following:**

* Use pre-calibrated, hardwired CO detectors according to applicable regulations.
* If CO may be present, conduct air tests for carbon monoxide and oxygen prior to entry.
* Keep CO levels at or below 25 parts per million (based on an 8-hour time-weighted average).
* If CO is determined to be a potential risk, personal CO monitors that are equipped with an alarm to warn when CO levels have risen too high must be worn.

**Maintenance**

* Follow all manufacturer instructions for use, service, and maintenance for all equipment that uses CO-producing fuels.
* Assure that portable carbon monoxide detectors used for confined space entry are calibrated prior to each entry and the associated alarms are functioning properly.
* Assure that fixed CO detectors are calibrated and tested periodically.
* Keep records of maintenance.

**Controls**

**Employer responsibilities:**

* Install a ventilation system/blower to remove potential CO from the area and discharge exhaust outside prior to and during any employee entry.
* If it is possible and safe for the task, substitute electric for gas powered engines.
* When purchasing gas equipment, buy only equipment carrying the seal of a national testing agency, such as the American Gas Association or Underwriters’ Laboratories.
* Train employees on common sources of CO and the safe use of CO-producing equipment.
* Prohibit the use of units that exhaust into the work environment in areas without sufficient ventilation

**Employee responsibilities:**

* Be alert for symptoms or potential CO problems and immediately report them.
* Only use preapproved equipment.

**Outdoors vs. Indoors**

In general, only use equipment that could produce CO in **outdoor** areas with lots of ventilation.

* **Never operate the following** **indoors** **or in enclosed areas:**
* Internal combustion engines
* Portable, open flame heaters
* Flameless chemical heaters
* Gas-powered space heaters
* Generators
* Any unit that exhausts into the work environment
* If internal combustion engines are required indoors due to an **emergency situation,** only emergency responders wearing proper respiratory protection, i.e., self-contained breathing apparatuses (SCBAs), shall perform the work.
* If you must use a fuel-burning tool indoors, only use equipment that exhausts outside. The exhaust-free part of the tool may be used indoors. The engine/compressor must be outdoors, away from any sources of ventilation into the building.

This form documents that the training specified above was presented to the listed participants. By signing below, each participant acknowledges receiving this training.

Organization: Date:

Trainer: Trainer’s Signature:

**Class Participants:**

Name: Signature:

Name: Signature:

Name: Signature:

Name: Signature:

Name: Signature:

Name: Signature:

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