Whether you work at an industrial plant, school, hospital, or even a large apartment building, the gas piping running into and through your facility is often an overlooked hazard. Natural gas leaks can create an explosive and flammable atmosphere inside a building. Explosions can also occur outdoors if a gas line is eroded, damaged or struck during construction.

In the event of an incident, your site’s facility staff should review their ability to shut off natural gas both outside at the main shut-off and inside at different locations. They should be able to identify hazards that can lead to unsafe situations. And they should have a process in place for emergency evacuations.

Understanding gas piping can mean the difference between life and death in a time of emergency. Here are 10 tips to help you avoid natural gas piping issues.

1. Make sure that natural gas main shut-off valve locations are known. These valves should be checked for operability. This will mean exercising them and making sure they have handles. In many cases, natural gas main shut-off valves have not been moved in years and cannot be turned. Lubricated plug valves need to be serviced regularly to remain operable. This means that special sealants and equipment have to be on hand and/or available to keep valves working.

2. Make sure that the proper main shut-off valves are identified. Some incoming services have numerous valves. This could be confusing in a crisis.

3. Make sure that your natural gas incoming main is secured in a fenced and locked area, and that you have a key and procedures for access.

4. If your main incoming natural gas service is not secured with a fence and/or locks, consider whether or not it should be. Also make sure that emergency contact numbers and “no smoking” signs are posted near this equipment.

5. Review your site’s natural gas distribution systems inside your plant to make sure that you understand how the piping is networked and where important system shut-off valves are located. Make sure these critical network valves are accessible, operable, and have handles installed.

6. Communicate the locations of your emergency shut-off valves both inside and outside your site to your local fire department.
7. Review your site’s emergency disaster plans for the locations where people will evacuate to in the case of an incident.

8. Review the conditions on which a boiler house or process area would be evacuated. Make sure that in processes where an orderly shut-down is required, personnel understand what procedures need to be followed. This is the time to review the procedure in a formal meeting with all operators and relevant staff. In some cases, equipment must be specially prepared for a safe shut-down.

9. Consider the impact and importance that electrical systems and the sudden loss of power can have on combustion equipment. In some cases, a loss in electrical power can cause control systems to restart in an unsafe manner. Review your operations with an eye on which control systems and operations need to be on emergency power or battery back-up.

10. Make sure emergency contact information is up to date. This includes reviewing emergency and management personnel phone numbers including home, cell, and pagers. Consider that many gas utilities have merged and/or changed names. They may have also changed emergency contact information. Consider supplementing your list with disaster resource number information such as the names and phone numbers of sources for boilers, generators, and/or even fuel suppliers (propane or oil).

ABOUT US

Honeywell Combustion Safety is a part of Honeywell Thermal Solutions, an industry leader in commercial and industrial combustion solutions. Honeywell Combustion Safety, formerly known as CEC Combustion Safety, has been in business since 1984. With engineers and staff members that sit on Code committees such as NFPA 56, NFPA 85, NFPA 86, and NFPA 87, our inside expertise is integrated within all of our practices, and our global reach ensures that customers around the world are kept safe. Honeywell offers testing and inspections, engineering & upgrades/retrofits, gas hazards management, training, and field services for all industrial facilities and different types of fuel fired equipment. By assisting organizations and their personnel with the safe maintenance and operation of their combustion equipment, Honeywell aims to save lives and prevent explosions while increasing efficiency and reliability of combustion equipment.