

BY REX SILBER

BREATHE EASY

As OSHA expands the definition of confined spaces, ventilation can clear the air and help the bottom line

New rules from Occupational Safety and Health Administration on requirements for training employees working in confined spaces, which now include attics and crawlspaces, have been in effect since October. They are published at www.osha.gov/confinedspaces/index.html.

Employers must now provide pre-entry planning before asking workers to operate in a confined space, which includes disclosing the existence and location of dangers, proper ventilation methods, and elimination or control of all potential hazards in the space. Employers must document their standard operating procedures and train workers before they enter permit-required confined spaces.

While rules have long applied to confined spaces, such as pits and tunnels, they also apply to attics and crawlspaces, and include a permit program meant to protect workers from exposure to hazards associated with confined spaces. Monitors can help with diagnosing safety conditions but do not rectify unsafe conditions or keep the conditions safe. Ventilation is key.

Because certain workers like miners and sewer crews have long needed it, the equipment for ventilation already exists. Confined space ventilators (CSV) are easy to move from site to site and easy to operate. Proper ventilation helps worker productivity even as it keeps employees safe. Good air quality keeps workers on task and prevents the shutdown of job sites.

CSVs pull gases out of confined spaces or introduce fresh air in. When choosing a CSV, safety managers should look for one that is rugged and reliable while providing performance to ensure a safe, comfortable and controlled environment in the most extreme conditions. The ventilating equipment should be used the entire time that workers are in the confined space.

When choosing a CSV, it is advisable to



VENTILATION SETUP TIPS

Air is a serious thing in confined spaces. No matter what environment you have to deal with, a plentiful supply of fresh circulating air is critical. To get the most out of Schaefer Americ VAF Series Ventilators, and to ensure an effective initial purge of a confined space, follow these four tips:

1. Set the ventilator at least 5 feet away and upwind of the entry. Never block the inlet on a portable ventilator by placing it against a wall or object.
2. Lower an attached ventilator duct hose into confined space. Angle the end of the duct so that it faces an end wall.
3. Ventilate area at the maximum cubic feet per minute until hazardous gases have been removed or a sufficient supply of fresh air is available.
4. Keep duct outlet angled at an end wall to avoid gas pockets in corners and to keep air circulating more effectively.

check for the following features:

- **CFM AIRFLOW** - Employ a CSV powerful enough to keep air fresh and safe even with people working in the space

- **RUGGED, DURABLE** - You don't want the unit to break down when you need it
- **A MOTOR RATED FOR LONG-TERM USE** - You want years of use rather than performance during a single job
- **FULLY ENCLOSED MOTOR** - You don't want debris to clog the motor
- **LOW MAINTENANCE REQUIREMENTS** - You want to be able to get parts and perform minor repairs yourself
- **INDEPENDENTLY TESTED, UL CERTIFIED** - Make sure the unit will perform as expected
- **THE RIGHT MODEL FOR THE JOB** - Hazardous locations might need different motors or power source
- **DUCTING REQUIREMENTS** - Seek equipment that provides the appropriate amount of distance to safe air

The right ventilator for the job reduces risks, increases productivity and helps the bottom line. The OSHA ruling expansion means more ventilators on job sites so safety managers may want to consider creating a complete package including a gas meter, a ventilator and ducting.

To help determine your equipment needs, safety teams should discuss these basic steps.

1. **IDENTIFY THE HAZARDS:** There are many different types of hazards in confined spaces. Atmospheric hazards can be controlled with ventilation.
2. **TEST THE AIR:** Air testing equipment should be used to determine the air quality and any hazards.
3. **CHOOSE THE RIGHT EQUIPMENT:** After testing is done, determine the type of hazards the atmosphere contains and choose either a hazardous location or electric ventilator.
4. **PURGE THE CONFINED SPACE OF "BAD" AIR:** Use reliable ventilators to make the space workable and safe.
5. **CONTINUE TO TEST AND REGULATE THE AIR:** Air conditions in confined spaces can change rapidly. Continued use of ventilation and air testing equipment can keep the space safe. ■

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