

Appendix D

CONFINED SPACE VENTILATION

Continuously moving fresh, uncontaminated air through a confined space is the most effective means of controlling an atmospheric hazard. Ventilation dilutes and displaces air contaminants, assures that an adequate oxygen supply is maintained during entry, and exhausts contaminants created by entry activities such as welding, oxygen-fuel cutting, or abrasive blasting.

Before entering a confined space, members of the entry team must have watched the **Confined Space Ventilation** training video and reviewed the handbook that goes with it. Subjects covered in this training include:

- < Local exhaust vs general ventilation,
- < Exhaust ventilation vs supply ventilation,
- < Ventilation safety,
- < Effective ventilation:
 - avoiding recirculating and short-circuiting,
 - use of duct work,
 - fan placement for different space shapes.

The *Confined Space Ventilation* training video is available from the EHSC by calling 515 - 8658.

In general, ventilation should produce approximately **10 air exchanges per hour**. The amount of time required for one exchange can be determined by dividing the volume of the space by the flow rate of the fan, (flow rate is stated on the fan's label).

Procedure

1. Select a fan with enough capacity to quickly replace the volume of air in the space.
2. Use only fans in good working order. (No frayed wires)
3. Observe safety and warning labels on fan.
4. Position fan where it will take in clean, fresh air. Be very careful about automobile and generator exhaust fumes.
5. Use a flexible duct to deliver air into all areas of the space. (Generally, the duct must be at least **3 feet** into the space.)
6. Ventilate for a minimum of **5 minutes** before verifying acceptable entry conditions are present and entering.
7. Continue to ventilate throughout the entry operation.
8. Contact EHSC at 515-8658 or 515-6860 if ventilation does not achieve acceptable entry conditions.