



CIRSA HAZARD ALERT

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SAFER TOGETHER

Hazard Alert: Aquatics Facility Pump Room Confined Space

Are you following your confined space entry program for your pool pump pit?



Many aquatics facilities have pool pump pits which are or should be classified as Permit Required Confined Spaces. This means whenever an employee or contractor works in this area, the organization's Permit-Required Confined Space entry procedures must be followed.

WHY IS IT CLASSIFIED AS A PERMIT SPACE?

These spaces may be considered permit spaces because of the restricted means of entry or exit, potentially hazardous atmosphere, and potentially serious safety hazards present.

DEFINITIONS

Confined Space: A space that is:

1. Large enough and so configured so an employee can bodily enter and perform assigned work
2. Has limited or restricted opening for entry and exit
3. Not intended for continuous employee occupancy

Aquatics Facility Pump Room Confined Space (cont.)

Permit Required Confined Space (Permit Space): Has one or more of the following characteristics:

1. Contains or has a known potential to contain a hazardous atmosphere.
2. Contains a material with the potential for engulfing an entrant.
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging wall, or floor which slopes downward and tapers to a small cross section, or
4. Contains any other serious safety or health hazard.

Hazardous Atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes:

1. Flammable gas, vapor, or mist;
2. Airborne combustible dust
3. Oxygen concentration below 19.5 percent or above 23.5 percent;
4. Atmospheric concentration of any substance for which a dose or a permissible exposure limit which could result in employee exposure in excess of its dose or permissible exposure limit;
5. Any other atmospheric condition that is immediately dangerous to life or health.

Engulfment: The surrounding and effective capture of a person by a **liquid** or substance which can be aspirated to cause death by filling or plugging the respiratory system or can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Determining engulfment hazard in your pump pit: *"If evaluation determines that due to the condition of the piping, valves or flanges, manipulation and/or work performed related to the valve or flange, work done adjacent to the piping, valves and flanges, or for other reasons there exists a potential for the piping inside the space to rupture or leak into the space and potentially result in engulfment, burns, or other serious safety or health hazard to an entrant."*

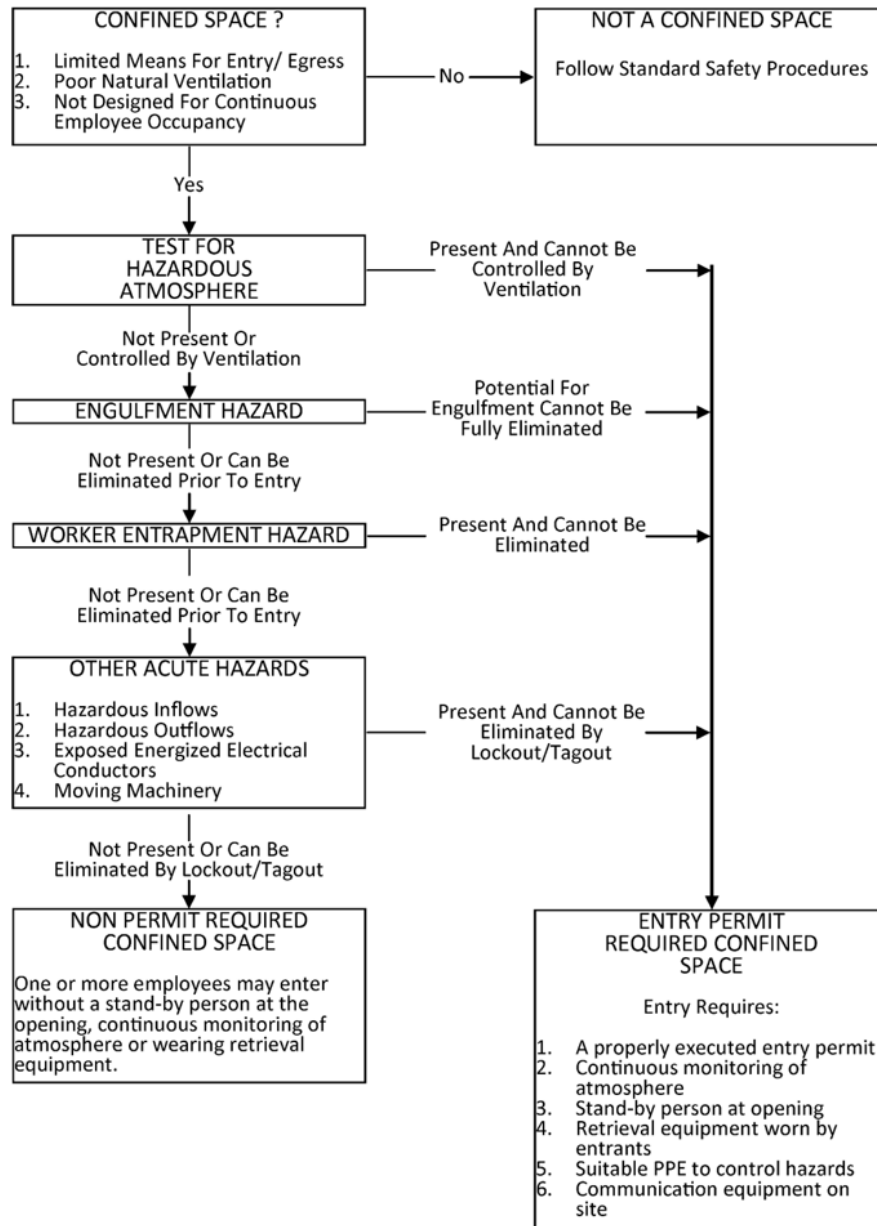
COMMON PUMP ROOM HAZARDS

- Chemical Storage in or near pump room capable of emitting gas or vapors resulting in an oxygen-deficient or hazardous atmosphere
- Boilers or other gas fired appliances in, or near pump room, capable of emitting carbon monoxide, carbon dioxide or other gases resulting in an oxygen-deficient or hazardous atmosphere
- Water pipes entering the space with enough flow to potentially engulf someone working within the confined space (i.e. within 30 minutes if uncontrolled)
- Electrical devices capable of electrocuting someone while in the confined space

DECISION TREE

The decision tree depicted on the next page can be used to help you determine if your pump pit is a permit-required confined space.

Aquatics Facility Pump Room Confined Space (cont.)



CONCLUSION

If your pump pit is classified as a Permit Required Confined Space, ensure you are following your Confined Space Entry program. Make sure your staff are properly trained and have the proper equipment available to enter the space safely.

REFERENCES

- <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.146>
- <https://www.osha.gov/laws-regs/standardinterpretations/2025-01-03>