

OAK GROVE SCHOOL DISTRICT CONFINED SPACE POLICY AND PROCEDURES

OVERVIEW

Confined spaces may present a serious risk to workers due to the potentially serious or life threatening injuries that may occur while entering or working in confined spaces. The purpose of the District's Confined Space Policy and Procedures is to establish and provide guidance on how to work safely in these spaces. These policies and procedures were developed in accordance with Title 8, California Code of Regulations (CCR), Sections 5156 – 5159, and Section 1502, and apply to all employees, contract workers who are under the direct supervision of District personnel, and to contractors who enter District confined spaces.

There are two types of confined space per 8 CCR section 5156: those that require a permit for entry and those that can be entered without a permit. A confined space is defined as a space that has all of the following characteristics:

- Is large enough and so configured that an employee can enter and perform their assigned work.
- Has limited or restricted means for entry or exit.
- Is not designed for continuous employee occupancy.

Examples of non permit-required confined spaces are: well-ventilated vaults in which there is no atmospheric contaminant, attics in which there is no damaged asbestos, and crawlways under building in which there is no damaged asbestos, steam lines, or other hazards that could reclassify the space into "permit-required." While entry permits are not required, the California Occupational Safety and Health Administration (Cal/OSHA) requires that non permit-required confined spaces have written operating and rescue procedures. The Oak Grove School District (OGSD) Confined Spaces procedures are located on the Oak Grove School District internet web site under Maintenance & Operations.

A permit-required confined space has one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere.
- Contains a material that has the potential for engulfing an entrant.
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazard.

Examples of permit-required confined spaces are: sewers or spaces where hazards include engulfment, the presence of toxic gases such as hydrogen sulfide, the presence of explosive gases, and oxygen deficiency. Other permit-required confined spaces can be produced due to welding fumes, the presence of solvent vapors, or of abrasive blasting work.

The District considers all confined spaces to be permit-required until proven safe from atmospheric hazards by testing and evaluation prior to entry and determined to be safe from any other serious safety or health hazards. Other confined spaces may not require a permit, but may be turned into permit-required spaces if additional hazards are introduced.

2.0 DEFINITIONS

Attendant An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the confined space policy.

Blanking or Blinding The absolute closure of a pipe, duct, or line by the fastening of a solid plate that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, duct, or line with no leakage.

Confined Space A document established by the employer, that authorizes specific employees to enter a permit-required confined space and contains requirements for operating inside the space.

Combustible Liquid A liquid having a flash point at or above 100°F.

Double Block and Bleed A method of closure of a line, duct, or pipe accomplished by closing and locking or tagging a drain or vent valve in the line between the two closed valves.

Engulfment The surrounding and effective capture of a person by a liquid or finely divided solid substance that can cause death by filling or plugging the respiratory system, or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Flammable An aerosol, gas, liquid, or solid capable of burning.

Flammable (Explosive) Limits The percent level of a flammable vapor or gas mixed in air between which a flame or an explosion will occur if an ignition source is present. The leanest mixture at which this will occur is called the lower flammable limit (LFL), or lower explosive limit (LEL). The richest mixture at which it will occur is the upper flammable limit (UFL), or upper explosive limit (UEL). The range (in percent) of vapor mixture between the lower and upper limits is known as the flammable range.

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

- Flammable gas, vapor, or mist in excess of 10 % of its lower flammable limit (LFL).
- Airborne combustible dust at a concentration that meets or exceeds its LFL.
- Atmospheric oxygen concentration below 19.5 % or above 23.5 %.
- Atmospheric concentration of any substance for which a Permissible Exposure Limit is published in 8 CCR, Section 5155 (Airborne Contaminants) which could result in employee exposure in excess of the permissible exposure limit.
- Any other atmospheric condition that is immediately dangerous to life or health.

Hot Work Any activity involving fire-producing operations such as burning, cutting, heating, riveting, welding, or similar operations; may also include spark-producing operations such as grinding, drilling or abrasive blasting.

Immediately Dangerous to Life or Health (IDLH) Any condition that:

- Poses an immediate or delayed threat to life.
- Causes irreversible adverse health effects.
- Interferes with an individual's ability to escape unaided from a permit space.

Note: Some IDLH materials may produce health effects that may pass without medical attention, but may be followed by sudden and possibly fatal collapse 12-72 hours after exposure.

Inerting The displacement of the atmosphere in a permit space by a noncombustible gas, such as nitrogen, to such an extent that the resulting atmosphere is non-combustible.

Isolation The process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as:

- Blanking or blinding.
- Removal or misalignment of pipe sections or ducts.
- Double block and bleed systems.
- Lockout or tagout of all sources of energy.
- Blocking or disconnection of all mechanical linkages.
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Line Breaking The intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Non-Permit Confined Space

A confined space that does not contain an atmospheric hazard, or have the potential to contain any atmospheric hazard capable of causing death or serious physical harm.

Oxygen Deficient Atmosphere An atmosphere inside a confined space containing less than 19.5% oxygen by volume.

Oxygen Enriched Atmosphere An atmosphere inside a confined space containing more than 23.5% oxygen by volume.

Permit System A written procedure for preparing and issuing permits for entry and for resuming normal functioning of the permit space following termination of entry.

Retrieval System The equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit-required confined spaces.

Toxic Material(s) A material in concentration or amount which exceeds applicable limits established by a regulatory standard, such as CCR § 5155, 5208, and 5209. In the absence of an applicable standard, a material that has the capacity to produce personal injury or illness through ingestion, inhalation, or absorption through anybody surface.

Regulations require the following limits not be exceeded:

- Permissible Exposure Limits (PEL): Employee exposure to an airborne contaminant in a workday, expressed as an 8-hour Time Weighted Average (TWA) concentration that shall not be exceeded.
- Time Weighted Average (TWA): An employee's eight-hour exposure to airborne contaminants during a workday, as measured or calculated by the formula in Cal/OSHA regulations.
- Short Term Exposure Limits (STEL): An employee exposure to an airborne contaminant, expressed as a 15-minute time weighted average concentration, shall not exceed the STEL at any time during the workday.
- Ceiling Limits: The maximum concentration of an airborne contaminant to which an employee may be exposed at any time.
- All Other Substances without a Ceiling Limit: Employee exposure to concentrations above the PEL shall be controlled to prevent harmful effects such as narcosis, significant irritation of the eyes, skin or respiratory tract, or chronic irreversible tissue change.

RESPONSIBILITIES:

District staff, contract employees, and contractors who perform confined space work shall understand and follow these procedures and related (Cal/OSHA) regulations before entering a confined space. This policy and procedure shall be placed on the Oak Grove School District website, and shall be made available to any affected employee or his/her representative for review. The Manager of Maintenance and Operations is responsible for the Confined Space Plan.

EMPLOYEES are responsible for:

- Recognizing hazards associated with confined spaces.
- Following procedures outlined in the Confined Space Policy and Procedures.
- Inspecting and maintaining confined space equipment.
- Performing duties in compliance with training received.
- Reporting any concerns, unsafe conditions, or difficulties regarding the Confined Space Entry Policy and Procedures to the supervisor.

SUPERVISORS are responsible for:

- Defining the scope of work for every confined space entry.
- Arranging for employee training
- Assure all work in confined spaces are performed by certified workers
- Labeling all permit-required confined spaces, or restricting access by other equally effective means as instructed by the Office of Environmental Health and Safety (OEHS).
- Identifying all confined spaces which employees are not required to enter
- Informing employees and contractors working under their supervision about the existence, location, and dangers of all permit-required confined spaces and preventing

entry into those spaces by unauthorized or unqualified personnel, and documenting such communications.

OGSD is responsible for:

- Providing guidance on confined space identification and labeling.
- Ensuring that an annual review of the Confined Space Policy & Procedures is completed.
- Stopping work when required to prevent injuries due to unsafe conditions.
- Providing information on hazardous chemicals.

DIRECTORS AND MANAGERS are responsible for:

- Notifying contractors if confined spaces will be entered in the scope of work for a contract and to comply with these policies and procedures.
- Notifying contractors that confined space entries shall be coordinated between the contractor and District personnel when both may enter the space, with all employees, regardless of employer, working in the permit space implementing identical entry procedures.
- Arranging for District staff to debrief the contractor at the end of entry operations, covering the permit space procedures that were implemented as well as any hazards that were encountered during entry procedures, and any recommended changes in procedures for future operations.

CONTRACTORS are responsible for:

- Obtaining any available information regarding the worksite's permit space hazards and entry operations from the District.
- Ensuring contractor employee's compliance with Cal/OSHA regulations.
- Coordinating confined space entry operations with the District.
- Informing the District of the permit-required confined space policies and procedures that he/she intends to follow. If it differs from the District's permit-required confined space policy and procedures, the contractor must follow the more stringent policy and procedures.
- Obtaining information on the rescue and emergency procedures in place.

PROCEDURES

Confined spaces must be identified and evaluated for hazards before allowing entry. "Entry" occurs when any part of the body enters the space.

ENTRY CONDITIONS

Acceptable entry conditions for any permit-required confined space work will be specified as part of the entry permit prior to entry into the permit space. Acceptable entry conditions must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

PERMIT- REQUIRED CONFINED SPACES

Before entering a confined space, the Entry Supervisor will:

- Review and approve entry permits prior to entering a permit-required confined space.

- Sign the entry permit to authorize entry.
- Post the completed permit at the entry to the space or other visible location at the worksite, so entrants can confirm that pre-entry preparations have been completed.

ATMOSPHERIC TESTING AND MONITORING

Atmospheric testing is required to determine the presence of oxygen deficiency, oxygen enrichment, and explosive or toxic levels of gases.

Air contaminant hazards within a permit space may be controlled with the use of ventilation.

RESCUE AND EMERGENCY SERVICES

Rapid response in emergencies and rescue ability is required to protect contractors in confined spaces. Employees/contractors may self-rescue if permitted, or may be retrieved by mechanical means by attendants. A 911 call also should be placed.

ENTRY TERMINATION

Terminate entry and cancel the entry permit when entry operations covered by the entry permit have been completed, or a condition that is not allowed under the entry permit arises in or near the permit space, such that it may affect entry.

TRAINING

All employees involved in confined space operations must be properly trained on the hazards involved, their duties/responsibilities, completion of entry permits and entry, operating and emergency procedures. OGSD will conduct the necessary Cal/OSHA required training for affected staff. No person shall enter permit required or non-permit confined space until the required training has been completed.

POST-ENTRY REQUIREMENTS AND RECORDKEEPING

After completion of permit-required confined space work, the Maintenance Supervisor shall retain the entry logs, air monitoring logs, hot work permits, and entry permits.

Approved by the Oak Grove School District Safety Committee on October 20, 2015. The plan was reviewed and updated on 8/2016 and 8/2017.