#### Introduction:

The procedures and guidance provided within this Plan are designed to protect employees from injury when working in or around confined spaces. The Occupational Safety and Health Administration (OSHA) requires that specific activities and forms be completed prior to and during a confined space entry. University of Louisiana at Lafayette's Environmental Health and Safety Office (EHS) will provide or make available this Confined Space Plan to all employees, supervisors, and contractors who conduct activities subject to confined space regulations. This Plan provides guidance on training requirements, how to conduct a confined space entry, and emergency response procedures.

#### Purpose:

The purpose of this document is to establish practices and procedures that can protect University of Louisiana at Lafayette employees from hazards associated with permit and non-permit required confined space work. In addition to specific requirements for confined space entry, a complete confined space program incorporates other safety programs including, but not limited to, lockout/tagout (LOTO), hazard communication, hot work, and personal protective equipment (PPE).

#### Scope:

University of Louisiana at Lafayette's Confined Space Plan applies to all university employees working on University of Louisiana at Lafayette property and leased spaces. Contractors must provide their own confined space plan for work in permit and non-permit required confined spaces on University of Louisiana at Lafayette property.

### **Roles/Responsibilities:**

All employees expected to perform confined space work or work around confined spaces are responsible for following the guidance provided within this document as well as instructions given by their supervisor. Additional title and employee responsibilities for entry into a confined space or permit required confined space may be given under the direction of the EHS office. The following individuals, offices, and units are responsible for ensuring that the directives, components, and maintenance of the university's confined space program are achieved.

### **Environmental, Health & Safety Office**

Responsible for the design, implementation, and maintenance of University of Louisiana at Lafayette's Confined Space Plan. Responsibilities are to:

- Assist supervisors in implementing University of Louisiana at Lafayette's Confined Space Plan.
- Provide employee Confined Space Awareness Training and maintain training records.
- Identify and maintain an inventory of all known non-permit and permit required confined spaces and make it available to employees, supervisors, and contractors.
- Conduct confined space classification and reclassification assessments as needed.
- Approve all monitoring equipment, safety equipment, and work materials that will be used during a permit or non-permit required confined space entry.

- Conduct inspections of confined spaces, confined space signage, and review confined space entry permits to evaluate compliance, identify deficiencies, and improve safety.
- Maintain confined space inspection records, if applicable.
- Post and maintain appropriate warning signage on confined space entrances, if applicable.
- Review confined space entry projects that involve a contractor and University of Louisiana at Lafayette employee both entering a confined space.
- Ensure that emergency responders are informed of all permit required confined spaces and have access to those spaces, if applicable.
- Determine permit required confined spaces where standard retrieval systems may not be effective or would create additional hazards.
- Develop equipment-specific procedures for unique confined spaces and equipment within work area(s) in conjunction with Facilities supervisors.
- Update, revise, and edit this Confined Space Plan as necessary

#### **Supervisors**

Responsible for ensuring that University of Louisiana at Lafayette's Confined Space Plan is implemented and followed by employees under their supervision. Responsibilities are to:

- Be informed of the contents of this Confined Space Plan and how it applies to work areas under their responsibility and authority.
- Ensure employees comply with all aspects of this Confined Space Plan.
- Ensure that other university safety programs and procedures such as LOTO, hot work, and hazard communication are followed when relevant.
- Ensure that employees are provided with and use appropriate PPE, if needed.
- Assist EHS with identifying and inventorying confined spaces.
- Ensure that employees under their supervision receive appropriate confined space training.
- Approve and appoint employees to serve as entry supervisors, attendants, and entrants, if required.
- Ensure that Confined Space Entry's that require permits are reported to EHS.
- Ensure contractors post confined space entry permits at the entrance of the confined space while conducting operations.
- Develop equipment-specific procedures for unique confined spaces and equipment within their work area(s) in conjunction with EHS.
- Assist in the investigation of injuries and incidents involving confined spaces.
- Take prompt and corrective action when unsafe conditions or practices are observed.

### **Employees**

University of Louisiana at Lafayette employees who work in confined spaces are expected to comply with this confined space plan. Responsibilities are to:

• Attend confined space training if they are expected to be an entry supervisor, attendant, or entrant for confined space work, if applicable.

- Attend confined space awareness training if they are expected to work around confined spaces.
- Follow the directives and guidance provided in this confined space plan.
- Notify their supervisor and EHS if dangerous work conditions are observed, the confined space plan is not followed, or an accident involving a confined space occurs.
- Use appropriate PPE and follow all relevant university safety programs

#### **Contractors**

Responsible for ensuring that employees under their supervision are competent, trained, understand, and comply with the requirements of OSHA and applicable standards for confined spaces. Contractors must show proof of confined space training for their employees prior to entry. In addition, contractors are obligated by 29 CFR 1910.146 (c)(9) to:

- Obtain information regarding permit required confined space hazards and other safety procedures followed by employees from University of Louisiana at Lafayette.
- Coordinate entry operations with the appropriate University of Louisiana at Lafayette supervisor
  when both University of Louisiana at Lafayette employees and contract personnel will be
  working in a confined space simultaneously.
- Inform the project manager of any hazards confronted or created in permit spaces either through a debriefing or during the entry operation.
- Contractors must supply their own air monitoring and rescue/retrieval equipment.

#### **Confined Spaces**

A confined space is any space which meets the following criteria:

- Large enough and so configured that an employee can enter and perform assigned work
- Has limited or restricted means for entry or exit
- It is not designed for continuous employee occupancy

Confined spaces can either be classified as either non-permit or permit required confined spaces depending on hazards that are or have the potential to be present in the confined space.

#### **Non-permit Confined Spaces & Procedures**

A non-permit confined space is a space that meets the definition of a confined space but does not possess or have the potential to possess any hazardous conditions. All non-permit confined spaces must be evaluated for hazards and documentation of the absence of hazardous conditions must be maintained so long as work is performed within the confined space.

Confined spaces that do not contain or have the potential to contain hazards, as determined by the entry supervisor or EHS, do not require a Confined Space Entry Permit, however, if the confined space has not been previously identified as a non-permit confined space, a permit must be completed by the entry supervisor and monitoring must be conducted to ensure a safe and hazard-free atmosphere. All non-permit confined space work must be conducted in teams of two or more employees to ensure that

at least one employee is able to request help should the entrant encounter unforeseen problems or suffer an injury which prevents them from exiting the space.

#### **Permit Required Confined Spaces**

A permit required confined space is one that meets all the conditions of a confined space and has one or more of the following hazardous characteristics. The university will most likely contract all permit required confined space entry jobs, but employees should still be able to recognize the following and report them to their supervisor:

- 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 which slopes downward and tapers to a smaller cross-section or
- Contains any other recognized safety or health hazard

#### **Hazardous Conditions**

Entry supervisors or EHS shall evaluate all confined spaces to identify permit required confined spaces. Examples of hazards that elevate a confined space to a permit required confined space include:

- Gases or vapors which can displace oxygen
- A potential for low or high levels of oxygen, 19.5% and below or 23.5% and above
- Flammable gases at or above 10% of the lower explosive limit
- The presence of hazardous chemicals at or above the permissible exposure limit (PEL), short-term exposure limit, ceiling, or recommended exposure limit (REL)
- Any condition that can be interpreted as immediately dangerous to life or health (IDLH)
- Temperatures that can contribute to heat stress
- Liquids, steam, or flowable solids which can engulf an entrant
- Sources of radiation
- Bare, exposed, or ungrounded conductive parts of electrical equipment, machinery, wiring, fixtures, or installations
- Sewer systems that have the potential to contain a hazardous atmosphere, low oxygen, or contain high pressure/temperature pipes
- Any other recognized atmospheric hazard or physical hazard

#### **Signage**

Permit required confined space must be identified by posted warning signage notifying all employees of the existence and location of the confined space. Signs may not be removed without approval from EHS. Posted signs shall be prominently displayed on the entrance to the permit required confined space and must contain the following text:

#### DANGER – PERMIT REQUIRED CONFINED SPACE - DO NOT ENTER

#### **Permit Required Confined Space Entry Procedures - Contractor**

All entries into permit required confined spaces must be conducted by a minimum of two employees. Employees will be identified as the entry supervisor, attendant, or entrant. Contractor responsibilities of each position are:

- Entry Supervisor The trained individual with the responsibility to oversee the project and ensure that all provisions of this Confined Space Plan are met
- Attendant The trained individual stationed immediately outside the confined space who
  monitors entrants and records entry activities
- Entrant The trained individual(s) authorized by their supervisor who enters the confined space to conduct work
- Alternate entry procedures may be used to enter confined spaces in which the only hazard is atmospheric and where continuous forced air ventilation alone will eliminate the hazardous condition and maintain a safe atmosphere
- Only EHS must be notified if the contractor will be using an alternate entry procedure.
- Like permit required confined spaces, the alternate entry space must be clearly posted on the confined space signage

#### **Confined Space Reclassification**

A permit required confined space may be reclassified as a non-permit confined space, whenever the condition, design, or environment of a confined space changes. Entry supervisors have the ultimate responsibility for ensuring that the correct entry procedure is followed based upon the configuration of the space, hazards, and testing results. A permit required confined space may be reclassified by EHS (only) as a non-permit confined space whenever the permit required confined space:

- Poses no actual or potential atmospheric hazards and if all the hazards within the space are eliminated without entry into the space; or
- Testing and inspection are conducted to verify that hazards have been eliminated.

If it is necessary for a contracted vendor to enter the space and eliminate the hazards that make it a permit required confined space, entry must be made using permit required confined space entry procedures and will be conducted under the supervision and direction of the EHS office.

#### Monitoring

Monitoring must be conducted prior to entering a confined space, continuously during entry operations, and any time a confined space is reclassified. Monitoring may require multiple instruments, specialized equipment, and specific training. All monitoring equipment used to evaluate confined spaces must be

calibrated and used as directed by the manufacturer's user's manual. This requirement only applies to University of Louisiana at Lafayette employees; contract personnel may choose to use an alternate monitoring method so long as it is consistent with 29 CFR 1910.146.

#### **Training**

All employees expected to work around, or above confined spaces are required to attend Confined Space Awareness Training. Awareness training provides an understanding of what constitutes a confined space, associated hazards, confined space entry procedures, and precautions that should be observed when working around confined spaces. Confined Space Awareness Training is required once, however, refresher training is currently provided as part of the university ORM program requirements, every 3 years. Supervisors are responsible for ensuring that employees attend Confined Space Awareness Training once every three years and whenever one of the following situations occurs:

- There is a change in permit required space operations that presents a hazard in which an employee has not been previously trained; or
- A supervisor has reason to believe that an employee's knowledge of use of these procedures and plan is inadequate

#### **Rescue and Emergency Services**

Retrieval systems or rescue services must be employed for all permit required confined space entry projects by the contracted vendor. Nonentry rescue (use of equipment that does not require additional personnel to enter the confined space) is the preferred method of rescue and should be utilized whenever possible. Any employee who experiences issues during a non-permit required entry and needs rescue, University Police should be contacted at 482-6447 or dial 911 and let the dispatcher know that you are calling about a campus emergency. The Fire Department, HAZMAT unit, is located on the border of our campus and will also be contacted, serving as our on-site rescue.

### **Non-Permit Required Confined Space**

Work in non-permit confined spaces does not require retrieval systems or rescue services to be on site. If an accident or emergency occurs within a non-permit required confined space, any employee may enter a non-permit space to respond to an emergency but only after notifying emergency services (University Police, 482-6447 or 911) and determining no other hazards are present, with the verification of atmospheric testing. If a non-permit required confined space rescue is necessary, the employee is responsible for the following:

- Summoning emergency responders (university police)
- Attempting to rescue entrants if safe
- Monitoring the emergency and informing responders about the location, number of victims, their condition, and the hazards in the space, if applicable

Known Locations of Non-permit required confined spaces include:

- Art Museum Pump Station/mech area underground
- LITE Building Pump Station/mech area underground

- Bourgeois Hall Septic Tank
- Bourgeois Hall Storm Water Pump Station
- Bourgeois Pool Building Lower Level
- Art Annex Crawlspace
- Billeaud Hall Crawlspace
- Broussard Hall Basement/Crawlspace
- Athletic Performance Center Basement/Pool equipment pump room
- Foster Crawlspace
- Montgomery Crawlspace
- Mouton Crawlspace
- Hamilton Basement/Crawlspace
- OK Allen Basement/Crawlspace
- Presidents House Basement
- Cajun Field Pump Station underground
- Practice Field Pump Station underground
- Dupre Basement/Crawlspace
- Elevator Pits All