Purpose

The purpose of this chapter is to establish methods to identify confined spaces, classify them according to their risks, and establish guidelines necessary for the safe preparation, entry and rescue during confined space entry.

Scope

The scope of this program establishes recommended procedures for classifying, preparing, and entering of confined spaces.

It is Fieldwood Energy policy that all confined spaces will be classified as Permit Required Confined Spaces until such time as the space has been evaluated and reclassified per the provisions of this safe work practice.

Note: It is the policy of Fieldwood Energy that no Fieldwood employee will be allowed to enter a “permit required” confined space. Employees may enter areas that have been reclassified as a “non-permit required” confine space.

Permit Required Confined Space

By definition, a permit-required confined space has one or more of these characteristics:

- Contains or has the potential to contain a hazardous atmosphere;
- Contains a material with the potential to engulf someone who enters the space;
- Has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section; and/or
- Contains any other recognized serious safety or health hazards.

Requirements

It is the policy of Fieldwood Energy that only qualified contractors will be allowed to perform a permit required confined space entry. Contractors shall ensure all confined space entry operations conform to the requirements of OSHA 29 CFR 1910.146. This includes the following:

- Suitable personal protective equipment
- Respiratory Protection
- Proper Ventilation
- Permit Processes are being followed
- Rescue Equipment On-Site
- Trained rescue personnel
- Fieldwood Energy’s Process Equipment & Piping Isolation Procedures (Section D Chapter 28)

A Confined Space Entry Permit is valid for one (1) shift. A new entry permit must be filled out and posted at the main access way and reissued every shift or 12 hours. The permit is void and must be reissued whenever a condition develops which was not covered by the permit.
Normal Working Atmospheres require an oxygen concentration between 19.5% and 23.5% and must be free of harmful amounts of flammable gases, dusts, and toxic materials (less than 10% of the LEL and below the PEL or TLV). Anything other than this will be considered an abnormal, unsafe atmosphere and will require additional control measures to continue permitted entry. Personnel shall not be allowed to enter areas where the oxygen content is found to contain less than 19.5% oxygen.

Responsibilities

The Fieldwood Energy Production Foreman, Person in Charge (PIC), Lead Operator, or Consultant is responsible for:

- Assuring that all personnel involved in permit required confined space entry have completed the appropriate training.
- Assisting contract personnel supervisors/superintendents with the permit required confined space job safety analysis (JSA) and ensuring confined space rescue procedures have been considered and equipment is available.
- Verifying that Fieldwood Energy’s Confined Space Entry Permit has been completed and the requirements of this program have been met.
- Verifying that equipment preparation and isolation methods have been completed (including the placement of tags and/or locks as required) and are sufficient to protect personnel and equipment (Refer to Section D, Chapter 5 and 28).
- Maintaining communication with entry supervisor.
- Informing all appropriate personnel when the work has been completed.
- Collecting and filing all completed permits and/or documentation.
- Ensuring the jobsite is returned to a safe, clean condition.

The Entry Supervisor for permit required Confined Space Entry is responsible for:

- Understanding and following the permit required Confined Space Entry Procedure.
- Determining if acceptable entry conditions are present at the permit space where entry is planned.
- Obtaining and/or issue the Fieldwood Energy Confined Space Entry Permit (see Section D, Chapter 2, Part A).
- Ensuring appropriate warning signs at entrances to confined spaces are posted.
- Conducting the permit required confined space job safety analysis (JSA) and ensuring confined space rescue procedures have been considered and equipment is available.
- Verifying that equipment preparation and isolation methods have been completed (including the placement of tags and/or locks as required) and are sufficient to protect personnel and equipment (Refer to Section D, Chapter 5).
- Ensuring atmospheric monitoring is being conducted per permit requirements.
• Alerting all affected personnel to changes in area conditions which could adversely affect personnel or equipment involved.

• Authorizing entry and overseeing the entry operations.

• Terminating entry upon completion of job as required by the Confined Space Entry Procedure.

The **Attendant (Hole Watch) for Confined Space Entry** is responsible for:

• Understanding and following the **permit required** Confined Space Entry Procedure.

• Maintaining an accurate count of all persons in the **permit required** confined space.

• Knowing the requirements and precautions specified on the Fieldwood Energy Confined Space Entry Permit.

• Knowing the potential hazards related to the **permit required** confined space and potential hazards from activities outside the confined space that could affect the confined space.

• Maintaining contact with personnel working in the **permit required** confined space.

• Being able to recognize the signs, symptoms and consequences of over-exposure to potential hazards.

• Ordering evacuation of the **permit required** confined space when:
  - A condition develops which is not allowed by the entry permit.
  - Personnel show behavior indicating over-exposure to hazardous materials.
  - A situation outside the space develops which could endanger personnel in the confined space.
  - The Attendant must leave his/her workstation.

• Keeping unauthorized persons away from the **permit required** confined space.

• Initiating rescue services in emergency situations.

**NOTE:** The Attendant may leave his/her workstation only long enough to summon rescue or emergency services.

• Assisting rescue personnel to the extent possible based on training to do so. The Attendant is not to enter the **permit required** confined space to attempt rescue, except as a trained member of a rescue team.

The **Confined Space Entrant** is responsible for:

• Understanding and following the **permit required** Confined Space Entry Procedure.

• Knowing the requirements and precautions specified on the Fieldwood Energy Confined Space Entry Permit.

• Knowing the potential hazards related to the **permit required** confined space.

• Being able to recognize the signs, symptoms and consequences of over-exposure to potential hazards.
• Maintaining contact with the Attendant (Hole-Watch).

• Evacuating the **permit required** confined space when conditions change, become unsafe or when instructed to do so by the Attendant.

• Using the personal protective equipment required for the job as specified on the Confined Space Entry Permit.

**Reclassification of a Permit Required Confined Space to a Non-Permit Required Confined Space (NPRCS)**

A confined space may be reclassified as a Non-Permit Required Confined Space (NPRCS) under the following procedures:

• The confined space will be evaluated for reclassification using the NPRCS Hazard Assessment Form (Refer to Section D, Chapter 2 Part B).

• The NPRCS Hazard Assessment Form must be completed and attached to the applicable JSA for the scope of work that includes confined space entry.

• Confined spaces that periodically require entry for pre-determined job scopes may be permanently classified as Non-Permit Required Confined Spaces (NPRCS) in the applicable Operating Procedures (i.e. Cement Blenders).

• The entry team for a NPRCS shall consist of a minimum of two people; the entrant and an attendant. These procedures must be understood by the entrant and attendant.

• Atmospheric testing must be conducted prior to entry using an instrument capable of measuring oxygen, LEL, hydrogen sulfide and carbon monoxide. The initial test results will be recorded on the NPRCS Hazard Assessment Form.

• Atmospheric conditions within the confined space must be continuously monitored while personnel are in the NPRCS (requires monitoring device capable of continuous sampling). The space shall be evacuated immediately if any monitor alarms are activated.

• The space must be free of physical or mechanical hazards, such as entrapment, engulfment or other recognized hazards which could incapacitate the entrants.

• Energy Isolation procedures must be performed on all sources of energy that could pose a hazard within the space.

• Welding and burning hot work within a confined space will automatically call for the space to be classified as a Permit Required Confined Space.

**Definitions**

**Confined Space** means that the space consists of any of the following:

• Is large enough and so configured that an employee can bodily enter and perform assigned work.

• Has limited or restricted means for entry or exit.

• Is not designed for continuous employee occupancy.
Permit Required Confined Space means that the confined space also consists of one or more of the following:

- Contains, or has the 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.
- Contains any recognized serious safety or health hazard.

Non-Permit Confined Space a confined space that has been assessed and verified to not contain a hazardous atmosphere, potential for engulfing an entrant, configuration such that an entrant could be trapped or asphyxiated or recognized serious safety or health hazard.

Acceptable Entry Conditions means the conditions that 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.

Attendant means an individual stationed outside the permit space who monitors the authorized entrants and who performs all attendants’ duties assigned by the Confined Space Entry Program.

Authorized Entrant means an employee who is authorized by the employer to enter a permit space.

Blanking or Blinding means the absolute closure of a pipe, line, or duct by fastening with a solid plate that completely covers the bore and is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate. Attempts should be made to blind at the closest point to the confined space.

Double Block and Bleed means the closure of a line or pipe by closing and locking and tagging two (2) in-line valves and by opening and locking and tagging a drain or vent valve in the line between the two closed valves.

Entry means the action by which a person passes through an opening into a permit-required confined space. Entry occurs as soon as any part of the entrant’s body breaks the plane of an opening into the space.

Entry Permit means the written or printed document that is provided by the employer to allow and control entry into a permit space. Acceptable entry conditions are properly noted on the document.

Entry Supervisor means the person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required.

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

- Atmosphere oxygen concentration below 19.5 percent or above 23.5 percent.
• Flammable gas, vapor, or mist in excess of 10 percent of the lower explosive limits (LEL).

• Airborne combustible dusts at a concentration that meets or exceeds its lower explosion limits (LEL).

• Any other atmospheric condition that is Immediately Dangerous to Life and Health (IDLH).

• Atmospheric concentration of any substance for which exposure could result in excess of that substance's permissible exposure limit.

**Hot Work Permit** means the employer’s written authorization to perform operations capable of providing a source of ignition.

**Immediately Dangerous to Life or Health (IDLH)** means any condition that poses an immediate or delayed threat to life, or that would cause irreversible advance health effects, or that would interfere with an individual's ability to escape unaided from a permit space.

**Inerting** means the displacement of the atmosphere in a permit space by a noncombustible gas to such an extent that the resulting atmosphere is noncombustible. Note that this procedure produces an IDLH oxygen deficient atmosphere.

**Isolation** means the process by which a permit space is removed from service and completely protected against the release of energy or material into the space.

**Permit System** means the employer’s written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

**Prohibited condition** means any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

**Rescue service** means the person(s) designated to rescue employees from permit space.

**Retrieval system** means 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 spaces.

**Testing** means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.