



<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 1 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

## **Executive Summary**

To help ensure the safety of individuals entering areas which meet the criteria established by OSHA as a 'confined space' (i.e., locations not designed for continuous human occupancy, are large enough that personnel can bodily enter into them, and which have a limited or restricted means of entry and exit), detailed precautions are outlined in this program regarding hazard identification, control activities necessary prior to entry into the confined space, measures to ensure the ongoing safety of entrants while work is being performed within the confined space, and steps to terminate the entry as work within the confined space is concluded. Completing and posting a Confined Space Entry Permit serves as a checklist for these precautions and provides entrants, along with those individuals monitoring the safety of the confined space, with information regarding potential hazards and appropriate safeguards.

This program details three categories of responsibilities in addressing confined spaces. Those categories are:

the Host Employer;

the Controlling Employer; and

the Entry Employer.

Before implementing any part of this program, the role of Branscome must be determined, communicated to the Safety Specialist, and responsibilities of that role clearly understood by the Department Manager, the Project Manager, and all site supervision.

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W. Stuart Patterson, President

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 2 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

## 1.0 Purpose

The precautions and procedures outlined in this program are designed to ensure that our employees are safe while working in confined spaces. Under no circumstances will our employees enter a Confined Space where hazards have not been identified and eliminated or effectively controlled.

## 2.0 Scope

This confined space program covers the safe entry of all employees into confined spaces at all work locations.

## 3.0 Roles & Responsibilities

- 3.1 Department Management - The Department Manager is responsible for implementing Branscome's Confined Space policy including maintaining designations and proper signage. In addition, the Department Manager will assist in an annual review of the use of this policy and recommend any changes to the Safety Specialist.
- 3.2 Director of Safety - The Director of Safety will work with the Department Manager and Safety Specialist to develop, implement, and administer the Confined Space Entry Program. This includes the following:
- Develop the Confined Space Entry Program;
  - Ensure the appropriate level of training for all employees;
  - Ensure that employees are trained and apprised of the hazards of all confined spaces that they may be required to enter; and
  - Evaluate the program at least annually to determine continued effectiveness.
- 3.3 Safety Specialist - Work with the Department Manager and the Director of Safety to develop and implement the requirements of this program, to include:
- Ensure that all Confined Spaces are identified appropriately at all times;
  - Conduct training making it specific to the type of space and procedure;
  - Identify emergency and rescue services;
  - Ensure that subcontractor employees are apprised of the hazards of the confined spaces that they will enter; and
  - Retain completed permits and other required records.

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 3 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

### 3.4 Supervisors - It is the responsibility of all supervisors to:

- Ensure that all employees have received training before they perform an entry;
- Ensure that employees do not enter Confined Spaces without following the proper procedures for that entry;
- Take disciplinary action whenever procedures are violated;
- Function as Entry Supervisor, when trained and appropriate;
- Perform an evaluation of each space prior to entry;
- Where required, conduct air monitoring of the confined space;
- Ensure that the equipment is properly locked out;
- Ensure that employees wear any personal protective equipment required to perform the entry;
- Cancel the entry authorization and terminate entry whenever acceptable entry conditions are not met;
- Ensure that the permit is posted at the confined space entry point;
- Verify that rescue services are available for all permit entries; and
- Return permit or other documentation to the Safety Specialist upon completion of the entry.

### 3.5 Employees - It is the responsibility of all employees to follow all program requirements and to report previously unidentified hazards associated with the confined space to their supervisor or the Safety Specialist.

## 4.0 Definitions

*Acceptable entry conditions* means the conditions that must exist in a permit space, before an employee may enter that space, to ensure that employees can safely enter into, and safely work within, the space.

*"Attendant"* means an individual with no other duties assigned to remain immediately outside the entrance to the confined space and who may render assistance as needed to employees inside the space.

*Authorized entrant* means an employee who is authorized by the entry supervisor to enter a permit space.

*Barrier* means a physical obstruction that blocks or limits access.

*Blanking or blinding* means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.



<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 4 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

"Calibration" or "Recalibration" means a laboratory or bench-top re-setting of alarm points, spans and zeros, if applicable, according to manufacturer's specifications. "Calibration" or "recalibration" **shall be conducted by a factory authorized service center, a factory trained technician, or a trained company technician.**

*Competent person* means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

*Confined Spaces* - An area that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy.

*Control* means the action taken to reduce the level of any hazard inside a confined space using engineering methods (for example, by ventilation), and then using these methods to maintain the reduced hazard level. Control also refers to the engineering methods used for this purpose. Personal protective equipment is not a control.

*Controlling Contractor* is the employer that has overall responsibility for construction at the worksite. If the controlling contractor owns or manages the property, then it is both a controlling employer and a host employer.

*Double block and bleed* means the closure of a line, duct, or pipe by closing and locking or tagging two inline valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

*Early-warning system* means the method used to alert authorized entrants and attendants that an engulfment hazard may be developing. Examples of early-warning systems include, but are not limited to: Alarms activated by remote sensors; and lookouts with equipment for immediately communicating with the authorized entrants and attendants.

*Emergency* means any occurrence (including any failure of power, hazard control or monitoring equipment) or event, internal or external, to the permit space that could endanger entrants.

*"Engulfment"* means the surrounding and effective capture of a person by finely divided particulate matter or a liquid that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, crushing, or suffocation. There is a potential for engulfment when such particulate matter or liquid exists in a sufficient quantity or at a sufficient pressure to surround a person before normal exit can be affected.



<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 5 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

*Entry* means the action by which any part of a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space, whether or not such action is intentional or any work activities are actually performed in the space.

*Entry Employer* means any employer who decides that an employee it directs will enter a permit space. Failure to decide will be considered to be an implicit decision to allow employees to enter those spaces if they are working in the proximity of the space.

*"Entrant"* means any employee who enters a confined space.

*Entry* - Entry occurs as soon as any part of the employee's body breaks the plane of an opening into the confined space whether the individual intends to fully enter the space or not.

*"Entry permit"* means the employer's written authorization for employee entry into a confined space under defined conditions for a stated purpose during a specified time.

*Entry rescue* occurs when a rescue service enters a permit space to rescue one or more employees.

*Entry supervisor* means the competent person (such as the employer, foreman, or crew chief) 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 by this standard.

*"Field checked"* means a method of checking an instrument for a proper response in the field. It is a check of the instrument's functionality and is a pass-fail or go/no-go check. When an adequate response is not obtained then the equipment should be removed from service and adjusted or repaired by a factory authorized service center, or a factory trained technician, or a trained company technician.

*"Ground-fault circuit interrupter"* means a device whose function is to interrupt the electric circuit to the load when a fault current to ground exceeds a predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.

*Hazard* means a physical hazard or hazardous atmosphere.

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 6 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

*Hazardous Atmosphere* - An atmosphere that may expose an employee to the risk of death, injury, illness, or impairment of ability to escape unaided from a permit space from one or more of the following causes:

- Flammable gas or vapor;
- Airborne dust that exceeds the lower flammable limit;
- Oxygen concentration below 19.5% or above 23.5%; or
- Concentrations of any substance that exceed the permissible exposure limit.
- A condition immediately dangerous to life or health.

*Host employer* means the employer that owns or manages the property where the construction work is taking place.

*Hot work* means operations capable of providing a source of ignition (for example, riveting, welding, cutting, burning, and heating).

*"Immediately dangerous to life or health (IDLH)"* means any condition that poses an immediate threat to life, or which is likely to result in acute or immediately severe health effects.

*"Immediate severe health effects"* means that an acute clinical sign of serious, exposure-related reaction is manifested within 72 hours of exposure

*Inerting* means displacing the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

*Isolate or isolation* means the process by which employees in a confined space are completely protected against the release of energy and material into the space, and contact with a physical hazard, by such means as: Blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; blocking or disconnecting all mechanical linkages; or placement of barriers to eliminate the potential for employee contact with a physical hazard.

*Limited or restricted means for entry or exit* means a condition that has a potential to impede an employee's movement into or out of a confined space. Such conditions include, but are not limited to, trip hazards, poor illumination, slippery floors, inclining surfaces and ladders.

*Line breaking* means 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.



<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 7 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

*Lower flammable limit or lower explosive limit* means the minimum concentration of a substance in air needed for an ignition source to cause a flame or explosion.

*Monitor or monitoring* means the process used to identify and evaluate the hazards after an authorized entrant enters the space. This is a process of checking for changes that is performed in a periodic or continuous manner after the completion of the initial testing or evaluation of that space.

*Non-entry rescue* occurs when a rescue service, usually the attendant, retrieves employees in a permit space without entering the permit space.

*Non-permit confined space* - A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

*Oxygen deficient atmosphere* means an atmosphere containing less than 19.5 percent oxygen by volume.

*Oxygen enriched atmosphere* means an atmosphere containing more than 23.5 percent oxygen by volume.

*Permit-Required Confined Space* - A confined space that has one or more of the following characteristics:

1. contains or has the potential to contain a hazardous atmosphere;
2. contains a material that has the potential for engulfing an entrant;
3. has an internal configuration such that an entrant could be trapped by walls caving in or by a floor which slopes down and tapers to a smaller cross section, contains any other recognized serious safety or health hazard under certain conditions, including welding, burning, grinding, or painting tasks; or
4. Contains any other recognized serious safety or health hazard.

*Permit-required confined space program* (permit space program) means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

*Physical hazard* means an existing or potential hazard that can cause death or serious physical damage. Examples include, but are not limited to: Explosives (as defined by paragraph (n) of § 1926.914, definition of "explosive"); mechanical, electrical, hydraulic and pneumatic energy; radiation; temperature extremes; engulfment; noise; and inwardly converging surfaces. Physical hazard also includes chemicals that can cause death or serious physical damage through skin or eye contact (rather than through inhalation).

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 8 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

*Prohibited condition* means any condition in a permit space that is not allowed by the permit during the period when entry is authorized. A hazardous atmosphere is a prohibited condition unless the employer can demonstrate that personal protective equipment (PPE) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee.

*Qualified person* means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

*Rescue* means retrieving, and providing medical assistance to, one or more employees who are in a permit space.

*Rescue service* means the personnel designated to rescue employees from permit spaces.

*"Rescue team"* means those persons whom the employer has designated prior to any confined space entry to perform rescues from confined spaces. A rescue team may consist of outside emergency personnel.

*Retrieval system* means the equipment (including a retrieval line, chest or full body harness, wristlets or anklets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

*Serious physical damage* means an impairment or illness in which a body part is made functionally useless or is substantially reduced in efficiency. Such impairment or illness may be permanent or temporary and includes, but is not limited to, loss of consciousness, disorientation, or other immediate and substantial reduction in mental efficiency. Injuries involving such impairment would usually require treatment by a physician or other licensed health-care professional.

*Test or 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.

*Ventilate or ventilation* means controlling a hazardous atmosphere using continuous forced-air mechanical systems that meet the requirements of § 1926.57 (Ventilation).





<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 9 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

### 5.0 References

- 29 CFR 1910.146 – Permit-Required Confined Space
- 29 CFR 1910.147 – The Control of Hazardous Energy
- 29 CFR 1926.1200 – Permit Required Confined Spaces - Construction
- ANSI/ASSE: Z117.1 Safety Requirements for Confined Spaces
- SH-3 Branscome Companies Control of Hazardous Energy Program
- SH-5 Branscome Companies Respiratory Protection Program

### 6.0 Program

Before work begins at a worksite, a competent person must identify all confined spaces in which one or more of the employees may work, and identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary.

If the workplace contains one or more permit spaces, all employees shall be informed by posting danger signs or by any other equally effective means, of the existence and location of, and the danger posed by, each permit space. Also, in a timely manner and in a manner other than posting, notify all of the employees’ authorized representatives and the controlling contractor of the existence and location of, and the danger posed by, each permit space.

If Branscome employees are not to work in the confined space, effective measures must be implemented to prevent employees from entering the spaces.

#### 6.1 Permit Space Entry Communication and Coordination

- Before Entry Operations
  - Host Employer Responsibilities

Before entry operations begin, the host employer must provide the following information, if it has it, to the controlling contractor:

- The location of each known permit space;
- The hazards or potential hazards in each space or the reason it is a permit space; and

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 10 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

Any precautions that the host employer or any previous controlling contractor or entry employer implemented for the protection of employees in the permit space.

- Controlling Employer Responsibilities

Obtain the host employer’s information about the permit space hazards and previous entry operations; and  
 Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:  
 The information received from the host employer; and  
 The precautions that the host employer, controlling contractor, or other entry employers implemented for the protection of employees in the permit spaces.

- Entry Employer Responsibilities

Obtain all of the controlling contractor’s information regarding permit space hazards and entry operations; and  
 Inform the controlling contractor of the permit space program that the entry employer will follow, including any hazards likely to be confronted or created in each permit space.  
 The controlling contractor and entry employer(s) must coordinate entry operations when:  
 More than one entity performs permit space entry at the same time; or  
 Permit space entry is performed at the same time that any activities that could foreseeably result in a hazard in the permit space are performed.

- After Entry Operations

The controlling contractor must debrief each entity that entered a permit space regarding the permit space program followed and any hazards confronted or created in the permit space(s) during entry operations;  
 The entry employer must inform the controlling contractor in a timely manner of the permit space program followed and of any hazards confronted or created in the permit space(s) during entry operations; and  
 The controlling contractor must apprise the host employer of the information exchanged with the entry entities pursuant to this subparagraph.

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 11 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

## 6.2 *Evaluation of Confined Spaces*

- Responsible Parties

All confined spaces shall be evaluated. This evaluation is the responsibility of the **supervisor and the Safety Specialist**.

- Documentation

The locations and hazards of confined spaces must be documented. This may be accomplished using the form Confined Space Assessment. These completed assessments must be retained by the Department Manager with copies to the Director of Safety.

Where changes occur in the use or configuration of a confined space that might increase the hazards to entrants, the space will be re-evaluated at the time of the modifications.

- Warning Signs and Labels

Access points to all confined spaces shall be prominently marked. Signs shall be maintained in a legible condition. The signs shall contain a warning that a permit is required before entry.

- No Entry

No entry shall be permitted until the hazard assessment has been reviewed and discussed by all persons engaged in the activity. This includes the potential for changing conditions during the entry.

## 6.3 *Pre-Entry Review*

- Duties of Personnel

- Attendant

The attendant stays outside of the space and monitors the entrant at all times. The attendant must:

- Know and understand the hazards that may be faced during entry;
- Remain outside the space during entry operations until relieved by another attendant;
- The attendant will have no other duties that may distract his attention from the work or require him to leave his post at the confined space at any time;

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 12 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

- Monitor the activities and conditions inside the space, and provide external assistance to those in the space;
- Maintain some form of contact with personnel in the confined space. Visual contact is preferred, if possible;
- Ensure that unauthorized personnel do not enter the space or perform activities that may increase the risk to entrants;
- Order personnel within the space to exit immediately if irregularities are observed, such as subtle behavioral changes in entrants, changes in speech patterns, variations in established communication procedures, and inappropriate actions by unauthorized personnel;
- Be knowledgeable in the method for contacting rescue personnel and immediately initiate those contacts in the event of an emergency; and
- In the event of an emergency, NEVER enter the confined space; instead, contact emergency/rescue services.

- Entrant

The entrant is the person who enters the confined space to perform work. The entrant must:

- Know and understand the hazards of the specific confined space;
- Properly use the equipment required for a safe entry;
- Communicate with the attendant as necessary and as required;
- Comply with the requirements of this procedure and any applicable confined space entry permits; and
- Exit from the space immediately if an order to evacuate is given by the attendant or entry supervisor, any warning signs or symptoms of exposure are recognized, or a prohibited condition is detected, or an evacuation alarm is activated.

- Entry Supervisor

The Entry Supervisor performs oversight and verification activities to ensure that entry requirements are fully implemented. Specific duties of the Entry Supervisor are as follows:

- Know and understand the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of exposure to atmospheric hazards and the types and injury potential of physical hazards anticipated;
- Verify that all entries on the permit have been completed, all monitoring/testing has been conducted, and all procedures and

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 13 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

equipment necessary to affect safe entry are in place prior to endorsing the permit and allowing the entry to begin;

- Verify that emergency/rescue services are available and that the means for summoning them are operable;
- Remove or arrange for removal of unauthorized personnel who enter or attempt to enter the space during entry operations;
- Ensure that entry operations remain consistent with the acceptable entry conditions and permit requirements at all times;
- Maintain or turn over canceled Confined Space Entry Permits for review, follow-up, and placement into the Department's files; and
- Terminate the entry and cancel the permit as required upon completion of task, expiration of the permit period, or upon evacuation of the space due to unforeseen circumstances or emergencies.

#### 6.4 *Permits*

##### 6.4.1 Purpose –

The Confined Space Entry Permit is an essential part of the Confined Space Program for ensuring safety during entry in confined spaces. The entry permit process guides the supervisor and workers through a systematic evaluation of the space to be entered.

##### 6.4.2 Full Completion of Permit

Before each entry into a confined space, an entry permit will be completed. The contents of the permit will be communicated to all employees involved in the operation, and the permit will be posted conspicuously near the work location.

##### 6.4.3 Use For All Entries

**A standard entry permit shall be used for all entries.**

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 14 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

#### 6.4.4 Permit Duration

A permit is only valid for one shift (12 hour max). For a permit to be renewed, the following conditions shall be met before each reentry into the confined space:

- The Entry Supervisor shall verify that all precautions and other measures called for on the permit are still in effect; and
- Only operations or work originally approved on the permit shall be conducted in the confined space.

#### 6.4.5 New Permits

A new permit shall be issued whenever changing work conditions or work activities introduce new hazards into the confined space.

#### 6.4.6 Cancelled Permits

After expiration of the permit, it shall be returned to the Safety Specialist. Canceled entry permits must be retained for at least one (1) year to facilitate the review of the Confined Space Entry Program. Any problems encountered during an entry operation shall be noted on the permit(s) so that appropriate revisions to the confined space program can be made.

### 6.5 *Standard Entry Procedures*

6.5.1 The entire confined space entry permit shall be completed before a standard entry. Entry shall be allowed only when all requirements of the permit are met and it is reviewed and signed by an Entry Supervisor. The following conditions must be met prior to standard entry:

- Affected personnel shall be trained to establish proficiency in the duties that will be performed within the confined space;
- The internal atmosphere within the confined space shall be tested by a competent person with a calibrated, direct-reading instrument;
- Personnel shall be provided with necessary PPE as determined by the Entry Supervisor; and
- All additional control measures will be implemented to protect from other physical hazards.

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 15 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

### 6.5.2 Opening a Confined Space

Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent anyone from falling through the opening. This barrier or cover shall protect each employee working in the space from foreign objects entering the space. If it is in a traffic area, adequate barriers shall be erected.

### 6.5.2 Atmospheric Testing - Atmospheric test data is required prior to entry into a confined space for two distinct purposes:

- evaluation of the hazards of the space; and
- verification that acceptable conditions exist for entry into that space.

Results of testing shall be recorded on the permit by the person performing the tests. The atmosphere shall be periodically retested to verify that atmospheric conditions remain within acceptable entry parameters.

### 6.5.4 The internal atmosphere shall be tested with a calibrated, direct-reading instrument for oxygen, flammable gases and vapors, and potential toxic air contaminants.

All testing equipment shall be approved by a nationally recognized laboratory, such as Underwriters Laboratories or Factory Mutual Systems.

### 6.5.5 Acceptable Limits - The atmosphere of the confined spaces shall be considered to be within acceptable limits when the following conditions are maintained:

- **Oxygen:** 19.5 percent to 23.5 percent;
- **Flammability:** less than 10 percent of the Lower Flammable Limit (LFL); and
- **Toxicity:** less than the recognized American Conference of Governmental Industrial Hygienists (ACGIH) exposure limits or other published exposure levels [i.e., OSHA Permissible Exposure Limits (PELs) or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs)].

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 16 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

- 6.5.6 Lockout/Tagout - All energy sources that are potentially hazardous to confined space entrants shall be secured, relieved, disconnected, and/or restrained before personnel are permitted to enter the confined space. Equipment systems or processes shall be locked out and/or tagged out as required by Branscome Companies Lockout/Tagout Program prior to permitting entry into the confined space.

Where there is a need to test, position, or activate equipment by temporarily removing the lock or tag or both, it shall be done in accordance with the Lockout/Tagout Program.

- 6.5.7 Means for safe entry and exit shall be provided for confined spaces. Each entry and exit point shall be evaluated to determine the most effective methods and equipment that will enable employees to safely enter and exit the confined space.
- 6.5.8 Appropriate retrieval equipment or methods shall be used whenever a person enters a confined space. Use of retrieval equipment may be waived if use of the equipment increases the overall risks of entry or does not contribute to the rescue. A mechanical device shall be available to retrieve personnel from vertical confined spaces greater than five (5) feet in depth.

## 6.6 *Rescue and Emergency Services*

- 6.6.1 Self-Rescue - Self-rescue is performed by the entrant when they recognize a developing hazard in the space and/or observe signs and symptoms of chemical exposures or lack of oxygen.
- 6.6.2 Non-Entry Rescue - Non-entry rescue using a retrieval system or other such methods may be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems must meet the following requirements:
- A chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which presents a profile small enough for the successful removal of the entrant; and
  - The other end of the retrieval line is attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary.
  - A mechanical device is required to retrieve personnel from vertical type permit spaces more than 5 feet deep.



<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 17 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

6.6.3 Rescue Teams - In event of an emergency, where there are not on-site rescue personnel or retrieval devices, arrangements may be made for off-site rescue and emergency services. If used, this service must be informed of the hazards they may encounter if they are summoned.

6.6.4 Off-Site Rescue – Branscome will provide the rescue team or service selected with access to all permit spaces from which rescue may be necessary so that the rescue service can develop appropriate rescue plans and practice rescue operations.

## 7.0 Training

7.1 Training shall be provided to each employee involved in the Confined Space Entry Program:

- Before the employee is first assigned duties involving a confined space;
- Before there is a change in assigned duties;
- When there is a change in permit space operations that presents a hazard for which an employee has not been trained; or
- When the supervisor or management has reason to believe that there are deviations from the confined space entry procedures that are required in this program, or that are inadequacies in the employee's knowledge or use of these procedures.

The training shall establish employee proficiency in the duties required in this program, and shall introduce new or revised procedures, as necessary, for compliance with this program.

7.2 All employees who enter confined spaces or facilitate the entry shall be trained in entry procedures. Personnel responsible for supervising, planning, entering, or participating in confined space entry and rescue shall be adequately trained in their functional duties prior to any confined space entry. Training shall include:

- Explanation of the general hazards associated with confined spaces;
- Discussion of specific confined-space hazards associated with the facility, location, or operation;
- Reason for, proper use, and limitations of personal protective equipment and other safety equipment required for entry into confined spaces;
- Explanation of permits and other procedural requirements for conducting a confined space entry;
- A clear understanding of what conditions would prohibit entry;
- Procedures for responding to emergencies;

<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 18 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

- Duties and responsibilities of the confined space entry team; and
- Description of how to recognize symptoms of overexposure to air contaminants, and method(s) for alerting the Attendant(s).

7.3 Refresher training shall be conducted as needed to maintain employee competence in entry procedures and precautions.

7.4 Training for atmospheric monitoring personnel shall include proper use of monitoring instruments, including instruction on the following:

- Proper use of the equipment;
- Calibration of equipment;
- Sampling strategies and techniques; and
- Exposure limits (PELs, TLVs, LELs, UELs, etc.)

7.5 Periodic assessment of the effectiveness of employee training shall be conducted by the Safety Specialist. Training sessions shall be repeated as often as necessary to maintain an acceptable level of personnel competence.

7.6 When a training session is held, the training will be documented with an attendance sheet showing the employee's name, topic of training, date of training, and the trainer's signature. This documentation shall be retained for 5 years from the date of the training.

## **8.0 Program Review and Documentation**

8.1 The confined space program shall be reviewed at least annually using the canceled permits from the preceding twelve months. The program shall be modified as required.

8.2 Appendices

8.2.1 Confined Space Assessment

8.2.2 Confined Space Entry Permit



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<b>Subject:</b>	<b>SH-25 Confined Space Entry Program - Construction</b>	<b>Page 19 of 19</b>
<b>Issue Date:</b> 07/29/15	<b>Safety &amp; Risk Management</b>	<b>Effective Date:</b> 09/01/15

**9.0 Document History**

<b>Number</b>	<b>Effective Date</b>	<b>Purpose</b>	<b>Author</b>
Original	August 2015	Compliance with NEW Confined Space Program for Construction	Alvin Trotman