

1.0 Introduction

This Permit-Required Confined Space Entry Program (Program) is designed to ensure that the existence, location and danger associated with confined spaces on the campus are identified and that employees are provided with the proper training, procedures and equipment necessary to enter those spaces and perform work safely.

2.0 Definitions

A **confined space** is defined by OSHA as, (1) a space that is large enough and so configured that an employee can bodily enter and perform assigned work; **and** (2) has limited or restricted means for entry or exit; **and** (3) is not designed for continuous employee occupancy.

A confined space which has associated hazards is defined as a "permit-required confined space" and is subject to various requirements under 29 CFR 1910.146. A confined space may or may not be a "permit-required confined space". It is the employers responsibility to identify all permit-required confined spaces using the criteria offered in the following definition:

A **permit-required confined space (permit space)** is defined as, 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 or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- (4) Contains any other recognized serious safety or health hazard."

Entry is defined as, "the action by which 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 <u>any part of the entrant's body breaks the plane of an opening into</u> <u>the space</u>".

3.0 Hazard Overview

The hazards posed within a confined space can result in serious injury or death. It is vitally important to be able to identify a confined space, recognize the associated hazard(s), and control those hazards prior to entry. Entry into confined spaces which pose hazards (permit-required confined spaces) will only be done when absolutely necessary, by trained and authorized personnel, and in accordance with this program. The type of hazard associated with a confined space can be either atmospheric or physical or both.

Atmospheric hazards may include:

- Oxygen deficiency resulting from processes which use up oxygen such as bacterial action, chemical reactions such as oxidation (rusting), or combustion (welding, cutting, brazing). An oxygen deficient atmosphere is one with a concentration of oxygen below 19.5%. Oxygen may also be displaced by the introduction of simple asphyxiants or inert gases such as carbon dioxide, argon, helium, and nitrogen.
- Toxic gas or vapor accumulation resulting from organic decomposition which can liberate hydrogen sulfide and/or carbon monoxide, or from an operation such as welding which can liberate ozone, carbon monoxide, and oxides of nitrogen. Other common toxic gases include chlorine, ammonia, phosgene, arsine, and hydrogen cyanide. Additionally, accumulation of toxic air contaminants can result from activities such as degreasing or cleaning operations where chemicals have introduced into a confined space.

*Note: The presence of a toxic gas, solvent vapor, or any other air contaminant is considered a hazardous atmosphere when its concentration could result in employee exposure in excess of

its dose or permissible exposure limit (PEL) as published by OSHA in 29 CFR Subpart G or Z.

Flammable atmospheres resulting from an enriched oxygen environment or the presence of flammable gases, combustible dusts, or vapors from flammable liquids. Some common flammable gases include: acetylene, butane, propane, methane, and hydrogen. Flammable gases may also be produced by biological action such as the decomposition of vegetable matter to produce methane, or by chemical reaction such as dilute sulfuric acid reacting with iron to produce hydrogen. Vapors from flammable liquids may also produce flammable atmospheres when the temperature of the liquid approaches or exceeds the flash point temperature of the liquid. Examples of "low-flash" liquids include, toluene, acetone, gasoline, and methyl ethyl ketone.

A flammable atmosphere is one in which the flammable gas, vapor or mist, or combustible dust, is in excess of 10% of its lower explosive limit (LEL), also referred to as the LFL- lower flammability limit.

• Oxygen-enriched atmospheres

An oxygen enriched atmosphere is one with an oxygen concentration in excess of 23.5%. Excess oxygen in the atmosphere is a significant fire hazard due to the increase in the combustibility of other materials exposed to higher than normal oxygen concentrations.

Physical hazards may include:

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Suffocation, constriction, crushing, or drowning resulting from **engulfment** in liquid or loose materials such as grain, silage, sludge, coal, sawdust, wood chips, sand, cement, earth, and gravel. Engulfment is the most common hazard associated with silos, hoppers, dry storage bins, grain elevators, and trenches.



Other physical hazards that may be encountered in a confined space include: unguarded mechanical or electrical equipment, release of liquid from lines, falling objects, wet or slippery surfaces, extremes in temperatures, and excessive noise.

4.0 Identification and Warning

Westfield State College has performed an evaluation of the campus and identified spaces which meet the definition of a permit-required confined space (permit space). It is the policy of Westfield State College that employees are informed as to the existence, danger and location of each permit space via a posted sign (illustrated in **Figure 1**) or by another equally effective means, e.g., training. *Note: In some cases, such as outdoor manhole covers, it is impractical to post a sign.*





A sign with the alternative legend, "Permit-Required Confined Space-Do Not Enter" may also be used.

Permit-Required Confined Spaces Currently Identified on Campus

Westfield State, in conjunction with outside consultants specializing in occupational safety issues, has performed an evaluation of the campus and identified the following spaces that may reasonably be considered "permit-required confined spaces" as defined in Sec. 2.0. These



spaces will be referred in this program by their assigned numbers below:

- #1. Manholes accessing underground steam pipe valve, traps and connections (>4 feet deep w/ no lateral access)
- #2. Manholes accessing underground steam pipe tunnels
- #3. Sewer lift station silos located at the Ely and Lammers buildings
- #4. Manhole accessing sewer outflow entering the Ely sewer lift silo
- #5. Manholes accessing underground sewer pipe connections (> 4 feet deep)
- #6. Steam condensate receiver tank in the Power Plant
- #7. Compacting dumpsters
- #8. Crawl space access to below the Dever Auditorium stage located in the Bates tunnel
- #9. Basement area below the swimming pool containing the chlorine solution tank, including outdoor access pit.
- #10. Natural Gas Boilers
- #11. Combustion Chamber of Cleaver Brooks Boiler

5.0 Entry Policy

It is the policy of Westfield State that employees may enter the aforementioned permit spaces provided they are proficiently trained and follow the policies and procedures of this program. It is further the policy of Westfield State that a permit space must not be entered if any of the following circumstances arise:

- The hazards of a space have not been identified;
- The means to render a space safe to enter have not been identified;
- There is a deficiency in training, equipment, or established procedures, necessary to render the space safe for entry;
- It is the opinion of the Authorized Entrant, Attendant, Entry Supervisor, or safety staff of Westfield State, that the space may not be safe to enter;
- The space requires the use of a permit in accordance with Sections 9.0 and 10.0 of this



program and a trained rescue team is not available to enter the space under supplied air within four minutes; or

 The space requires the use of an alternative entry certificate in accordance with Section 11.0 of this program and it has not yet been established that acceptable entry conditions can be maintained through continuous ventilation and monitoring.

6.0 Type of Entry Appropriate for Westfield State Spaces

Permit spaces will be entered according to the safety procedures both required and necessary to keep entrants and other personnel safe. The three different types of entry operations to be performed at Westfield State are:

- 1. Full Permit Entry in accordance with Sec. 9.0 and 10.0
- 2. Alternative c(5) Entry in accordance with Sec. 12.0
- 3. **Temporary Re-Classification c(7) Entry** in accordance with Sec. 8.0.

Based upon an initial hazard assessment, the following entry types are applicable to each space(s) as follows:

Permit	Description	Entry Type
Space No.		
	Manholes accessing underground steam pipe valve,	Alternative c(5) Entry
1	traps and connections	
2	Manholes accessing underground steam pipe	Alternative c(5) Entry
	tunnels	
3	Sewer lift station silos located at the Ely and	Full Permit Entry
	Lammers buildings	
4	Manhole accessing sewer outflow entering the Ely	Full Entry Permit
	sewer lift silo	
5	Manholes accessing underground sewer pipe	Full Permit Entry
	connections	
6	Steam condensate receiver tank in the Power Plant	Alternative c(5) Entry
7	Compacting dumpsters	Reclassification c(7)



8	Crawl space access to below the Dever Auditorium	Reclassification c(7)
	stage located in the Bates tunnel	
9	Basement area below the swimming pool containing	*Corrective Action
	the chlorine solution tank, including outdoor access	
	pit.	
10	Natural Gas Boilers	Alternative c(5) Entry &
		Reclassification c(7)
11	Combustion Chamber of Cleaver Brooks Boiler	Alternative c(5) Entry &
		Reclassification c(7)

7.0 Permit Space Entry Performed by Outside Contractors

If permit space entry is to be done by an employee of an outside company (contractor), then.. regardless of whether a Westfield State intends to allow any of its employees to enter or not, if Westfield State arranges to have an outside contractor enter a permit space, then Westfield State will do the following:

- Inform the contractor that the workplace contains permit spaces and that entry is allowed only through compliance with a permit-required confined space program which meets all the requirements of §1910.146.
- Inform the contractor as to the hazards associated with, experience with, and all other pertinent information concerning, the permit space to be entered.
- Inform the contractor as to what safety measures will be taken to protect employees in or near the permit space to be entered.
- Coordinate entry operations with the contractor if both the host employer's personnel and the contractor personnel will be working in or near the permit



space to be entered.

• At the conclusion of the entry operations, discuss the permit program which was followed and any hazards encountered or created during entry.

In addition to meeting all these requirements for permit space entry, **a contractor retained to perform permit space entry must also do the following:**

- Obtain any available information regarding permit space hazards and entry operations from Westfield State.
- Coordinate entry operations with Westfield State if both employees of Westfield State and the contractor personnel will be working in or near the permit space to be entered.
- Inform Westfield State of the permit space entry program to be followed and discuss any hazards encountered or created during entry operations.

8.0 Temporary Reclassification of Permit Spaces Having Only Physical Hazards

OSHA recognizes that certain spaces can have their hazards removed before entry so that entrants are fully protected without the need for permits, attendants, or other features required by the full permit space program requirements of 146(d) through 146(k). Paragraph (c)(7) of the standard has provisions for reclassifying such spaces as non-permit spaces under certain conditions. It is important to note that the provisions of (c)(7) do not apply to <u>spaces containing</u> or having the potential to contain a hazardous atmosphere- elimination of hazards within those spaces is addressed under paragraph (c)(5) -see Section 11.0 of the is program.



Under paragraph 146(c)(7), an employer may temporarily reclassify a permit space as a nonpermit space if the following conditions are met:

- 1. The permit space poses **no actual or potential atmospheric hazards**,
- 2. all hazards within the space are eliminated **without entry into the space**, and
- 3. the space remains reclassified for **only as long as those hazards are eliminated**.

This exemption is commonly used for spaces which contain mechanical hazards such as mixers, compactors, and air-handlers. The hazards within these spaces can typically be locked out from outside the space in accordance with 29 CFR 1910.147 (the OSHA lockout/tagout standard) and then be entered safely without the need for additional precautions normally necessary for safe entry into permit spaces.

9.0 Permit-Requirement Confined Entry Requirements and Written Program

This permit space entry program is comprised of fourteen specific requirements to be followed by Westfield State as follows:

- **1.** Measures will be implemented necessary to **prevent unauthorized entry**.
- 2. All confined spaces will be **identified and hazards evaluated** before employees enter them.
- **3.** The **means**, **procedures** and **practices necessary for safe permit space entry operations**, will be developed which will include, but is not limited to, the following:
 - i. Specifying acceptable entry conditions;
 - ii. Isolating the permit space;

Isolation meaning 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; misaligning or removing sections of lines, pipes or ducts; a double block and bleed system; lockout/tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

- iii Purging, inerting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards.
- iv. Providing pedestrian, vehicle, or other barriers necessary to protect entrants from external hazards.
- v. Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.

4. Provide, maintain, and ensure the proper use of, the following equipment at no cost to the employees:

- i. Testing and monitoring equipment needed to test conditions, including atmospheric conditions, in the permit space to determine if acceptable entry conditions exist before entry and as necessary during the course of entry operations;
- ii. Ventilating equipment needed to obtain acceptable entry conditions;
- iii. Communications equipment to comply with the two-way communication requirements for both authorized entrants and attendants;
- iv. Personal protective equipment as necessary;
- v. Lighting equipment needed to enable employees to see well enough to work safely and to exit the space quickly in an emergency;
- vi. Barriers and shields necessary to protect entrants from external hazards;
- vii. Equipment, such as ladders and/or fall protection needed for safe ingress and egress;
- viii. Rescue and emergency equipment;
- **5. Evaluate permit space conditions** when entry operations are conducted. The evaluation will be conducted as follows:



- i. Test conditions in the permit space to determine if acceptable entry conditions exist before entry is authorized to begin.
- ii. Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during entry operations.
- iii. When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.
- 6. Provide at least one attendant outside the permit space for the duration of entry operations.
- 7. If multiple spaces are to be monitored by a single attendant, the means and procedures to enable the attendant to respond to an emergency affecting one or more of the permit spaces without compromising any of the attendant's duties under §1910.146(i).

Note*: It is not recommended that a single attendant monitor more than one permit space. It would be very difficult for a single attendant to ensure compliance with all his/her responsibilities under §1910.146(i), particularly in an emergency situation, while attending more than one occupied permit space.

- 8. Designate the persons who are to have active roles (ie. authorized entrants, attendants, entry supervisors, and persons who test or monitor the atmosphere in a permit space) in entry procedures. Identify the duties of each such person and provide them with the training required under §1910.146(g).
- **9. Develop and implement procedures for summoning rescue and emergency services** for rescuing entrants from permit spaces, for providing emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue.



- **10.** Develop and implement a system for the preparation, issuance, use, and cancellation of **entry permits** as required under §1910.146(f). (See next section for permit requirements).
- **11.** Develop and implement procedures to **coordinate entry operations when employees of more than one employer are working simultaneously** as authorized entrants in a permit space, so that employees of one employee do not endanger those of any other employer.
- **12.** Develop and implement procedures (such as closing off a permit space and canceling a permit) necessary for **concluding the entry** after the entry operations are completed.
- 13. Review entry operations when there is reason to believe that the measures taken under the permit space program may not protect employees and revise the program to correct any deficiencies before subsequent entries are authorized.
- **14. Review the permit space program, using the canceled permits** (canceled permits must be retained for at least 1 year under §1910.146(e)(6)) within 1 year after each entry and revise the program as necessary to ensure the safety of employees involved in permit space entry operations.

10.0 The Permit Space Entry Permit System

Before entry into a permit space is authorized, a **confined space entry permit** (permit) which documents the measures taken to ensure safe entry conditions must be completed (the measures are those outlined in Sec. 8.0 of this program). The permitting procedure will be administered as follows:

• Prior to entry, the entry supervisor identified on the permit will authorize entry by signing the permit.



- The completed permit will be made available at the time of entry to all authorized entrants so that the entrants can confirm that pre-entry preparations have been completed. Posting the permit at the point of entry is an acceptable means of complying with this requirement.
- The duration of the permit will not exceed the time required to complete the assigned task identified on the permit.
- The entry supervisor will terminate entry operations covered by the permit when the entry operations covered by the permit have been completed, or when a condition arises in or near the permit space which is not allowed under the permit.
- Any problems encountered during an entry will be noted on the respective permit so that appropriate revisions to the permit space program may be made.
- Each canceled permit will be retained on file for at least one year for the purposes of review of the confined space entry program required annually under §1910.146(d)(14).

11.0 The Permit Space Entry Permit

The purpose of the confined space entry permit (permit) is to document compliance with 29 CFR 1910.146, the OSHA statute regulating permit-required confined spaces, and to authorize the entry into a permit-required confined space.

The permit will identify the following:

• The permit space to be entered.



- The purpose of the entry.
- The date and authorized duration of the permit.
- The names of the authorized entrants.
- The names of the attendants.
- The name of the entry supervisor and signature of the entry supervisor who originally authorized entry.
- The hazards of the permit space to be entered.
- The measures used to isolate the permit space and to eliminate or control permit space hazards before entry.
- The acceptable entry conditions.
- The results of initial and periodic tests (including atmospheric), accompanied by the names or initials of the testers and the time that the tests were performed.
- The rescue and emergency services that can be summoned and the means to do so.
- The communication procedures used by authorized entrants and attendants to maintain contact during entry operations.
- The equipment to be provided for compliance with the regulations (equipment such as: personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment).
- Any other information whose inclusion is necessary to ensure employee safety.
- Any other permits, such as for hot work, that have been issued to authorize work in the permit space.

The Westfield State confined space entry permit is found in **Appendix A** to this program.

12.0 Alternative Entry Procedures under 146(c)(5)



OSHA has determined that there are certain circumstances in which employers can control atmospheric hazards without following the full permit procedures outlined in 146(d) through 146(k). Successful protection of employees in other industries through testing and continuous ventilation of permit spaces has prompted OSHA to include alternative entry procedures in the standard for spaces which contain or have the potential to contain atmospheric hazards. Paragraph 146(c)(5) outlines those procedures.

Under 146(c)(5) employers are allowed, under certain conditions, to control atmospheric hazards within a permit space following the specific procedures outlined in this section in lieu of compliance with the full permit system described in Sections 9.0 and 10.0 of this program. The training requirements under 146(g) are, however, still required when using these alternative entry procedures.

Before using alternative entry procedures may be used, the following conditions must first be met:

- 1. It will be demonstrated that the only hazard posed by the permit space is an actual or potential hazardous atmosphere,
- 2. It will be demonstrated that ventilation alone is sufficient to maintain the permit space safe for entry,
- 3. monitoring and inspection data that supports those demonstrations must be made and that data made available to employees who are to enter the space,
- 4. the work to be performed within the space must not introduce any hazards (work with hazardous quantities of flammable or toxic substances and hot work are not permitted), and



5. if an initial entry is performed to gather the data necessary to demonstrate that alternative entry procedures may be used, it must be conducted in accordance with Sections 9.0 and 10.0 of this program.

The specific requirements for entry under the alternative entry procedures are as follows:

- 1. Any conditions making it unsafe to remove an entrance cover must be eliminated before the cover is removed.
- 2. When entrance covers are removed they must be promptly guarded so as to prevent an accidental fall through the opening and protect each entrant from foreign objects entering the space.
- 3. Before an employee enters the space, the internal atmosphere must be tested with a calibrated direct-reading instrument for the following conditions in the following order:
 - i. Oxygen content (%O2),
 - ii. Flammable gases and vapors (LEL), and
 - iii. Potential toxic air contaminants (specific toxins possibly associated with that space such as hydrogen sulfide, carbon monoxide, etc.).
- 4. There may be no hazardous atmosphere within the space whenever any employee is inside the space.
- 5. Continuous forced air ventilation must be used as follows:
 - i. An employee may not enter the space until the forced air ventilation has



eliminated any hazardous atmosphere.

- ii. The forced air ventilation must be so directed as to ventilate the immediate areas where an employee is or will be present within the space and must continue until all employees have left the space.
- iii. The air supply for the forced air ventilation must be from a clean source and may not increase the hazards in the space.
- 6. The atmosphere within the space must be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.
- 7. If a hazardous atmosphere is detected during entry:
 - i. each employee must leave the space immediately;
 - ii. the space must be evaluated to determine how the hazardous atmosphere developed; and
 - iii. measures must be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.
- 8. The employer must verify that the space is safe for entry and the aforementioned entry conditions have been met. This verification must be in the form of a written certification that contains the **date**, **location of the space**, **and the signature of the person providing the certification**. The certification must be made before entry and be made available to each entrant.



The Westfield State alternative entry certificate form is found in **Appendix B** to this program.

13.0 Training

Westfield State College will provide training so that all employees whose work is regulated under the OSHA confined spaces standard acquire the <u>understanding</u>, <u>knowledge</u>, <u>and skills</u> necessary for the safe performance of the confined space-related duties assigned.

Training will be provided to each affected employee before the employee is first assigned confined space-related duties, before there is a change in assigned duties, whenever there is a change in permit space operations that presents a hazard about which the employee has not been previously trained, and whenever Westfield State College has reason to believe that there are deviations from the permit space entry procedures described in the program or whenever there are inadequacies in the employees' knowledge of those procedures.

The training will be designed to establish <u>employee proficiency</u> in the duties required for **confined space entry** and will introduce new or revised procedures as necessary for compliance with the OSHA standard.

Westfield State will certify that the aforementioned training requirements have been met. The certification will contain each employees name, the signatures of the trainers, and the dates of training. The certifications must be made available for employee inspection.



14.0 Duties of Authorized Entrants

All authorized entrants, prior to beginning entry operations, must:

- 1. Know the hazards that may be faced during entry, including the mode, signs or symptoms, and consequences of exposure to those hazards.
- 2. Properly use the required equipment.
- 3. Communicate with the attendant as necessary to enable the attendant to monitor entrant status and alert entrants of the need to evacuate the space if necessary.
- 4. Alert the attendant whenever the entrant recognizes any warning or symptom of exposure to a dangerous situation, or whenever the entrant detects a prohibited condition.
- 5. Exit from the permit space as quickly as possible whenever an order to evacuate is given by the attendant or entry supervisor, whenever the entrant recognizes any warning or symptom of exposure to a dangerous situation, whenever the entrant detects a prohibited condition, or whenever an evacuation alarm is activated.

15.0 Duties of Attendants

The purpose of an attendant is to monitor and protect the authorized entrants. All authorized entrants, prior to beginning entry operations, must:

1. Know the hazards that may be faced during entry, including the mode, signs or symptoms,



and consequences of exposure to those hazards.

- 2. Are aware of possible behavioral effects of hazard exposure in authorized entrants.
- 3. Continuously maintain an accurate count of authorized entrants in the permit space.
- 4. Remain outside the permit space during entry operations until relieved by another attendant.
- 5. Communicate with the authorized entrants as necessary to monitor entrant status and alert entrants of the need to evacuate the space if necessary.
- 6. Monitor activities inside and outside the space to determine if it safe for entrants to remain in the space and orders the authorized entrants to evacuate the space under the following conditions:
 - i. If the attendant detects a prohibited condition,
 - ii. if the attendant detects the behavioral effects of hazard exposure in an entrant,
 - iii. if the attendant detects a situation outside the space that could endanger the authorized entrants, or
 - iv. if the attendant cannot effectively and safely perform his duties.
- 7. Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.



- 8. Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - i. Warn the unauthorized persons that they must stay away from the permit space;
 - ii. advise the unauthorized persons that they must exit immediately if they have entered a permit space; and
 - iii. inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
- 9. Perform non-entry rescues as specified in the employer's rescue procedure.
- 10. Perform no duties that might interfere with the attendants primary duty to monitor and protect the authorized entrants.

16.0 Duties of Entry Supervisors

An entry supervisor is the individual who oversees a permit entry operation and the entry permit system. The employer must ensure that each entry supervisor:

- 1. Knows the hazards that may be faced during entry, including the mode, signs or symptoms, and consequences of exposure to those hazards.
- 2. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment



specified by the permit are in place before endorsing the permit and allowing entry to begin.

- 3. Terminates entry and cancels the permit when the entry operations covered by the permit are completed or when a condition that is not allowed under the entry permit arises in or near the permit space.
- 4. Verifies that rescue services are available and that the means for summoning them are operable.
- 5. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
- 6. Ensures that entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained whenever responsibility for a permit space entry is transferred.

17.0 Entry and Non-Entry Rescue and Emergency Services

A. Non-Entry Rescue- Retrieval Systems

To facilitate non-entry rescue, retrieval systems or methods will 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 attendant.

Retrieval systems will meet the following requirements:

1. Each authorized entrant must use a chest or full body harness, with a retrieval line



attached to the center of the entrant's back near shoulder level, or above the entrant's head. (Wristlets may be used instead of a chest or body harness if the employer can demonstrate that the use of a chest or body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.)

- 2. The other end of the retrieval line will be attached to a mechanical device¹ 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.
- 3. A mechanical device must be available to retrieve personnel from vertical type permit spaces more than <u>5 feet deep</u>.

Note: It is the policy of Westfield State that these non-entry rescue provisions will be used for all types of entries (full permit entries, alternative (c)5 entries, and reclassification (c)7 entries).

B. MSDS Availability

If an injured entrant is exposed to a substance for which a material safety data sheet (MSDS) is required to be kept at the worksite, that MSDS must be made available to the medical facility treating the exposed entrant.

C. Outside Rescue Services

If Westfield State arranges to have persons other than it's own employees enter permit

¹A mechanical device employed for non-entry rescue of authorized entrants must be one which is specifically designed for lifting personnel.



spaces to perform permit space rescue, then the following will be done:

- 1. The rescue service will be informed of the hazards they may confront when called on to perform rescue on the Westfield State campus.
- 2. The rescue service will be provided 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.

D. In-House Rescue Services

Westfield State does not maintain its own confined space entry rescue team.

18.0 Specific Written Entry Procedures

Specific written procedures for spaces listed in Section 4.0 are found in **Appendix C** of this program. Additionally, certain spaces for which additional equipment, installations, or other considerations are necessary before an entry procedure can be established, are described with written comments and/or corrective actions.