

## CONFINED SPACE ENTRY PLAN

### I. Overview

Monroe One BOCES is committed to providing a safe and healthful work environment for our staff. This plan supports that commitment by meeting the OSHA (Occupational Safety and Health Administration) requirements for a confined space entry program. OSHA's Permit-Required Confined Space Standard, Title 29, Code of Federal Regulations 1910.146 defines a confined space as that which has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere
- Contains material that has the potential to engulf
- Walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate
- Recognized health or safety hazard(s) such as unguarded machinery, exposed live wires or heat stress.

Examples of these spaces may include tanks, storage bins, pits, underground vaults, diked areas, manholes, tunnels, equipment housings, ductwork, and pipelines.

### II. Known Confined Spaces

Known permit required confined spaces in buildings operated by Monroe One BOCES are listed in the following table, highlighted in yellow. These spaces are identified at entry points with a sign: "DANGER –PERMIT-REQUIRED-CONFINED SPACE—DO NOT ENTER – Without Authorization and Permit from O&M Office – Call x2991." Other confined spaces are listed for inclusion in annual safety training and they requires notification to the O&M Foreman and two mechanics before entry.

There may be undiscovered confined spaces. All employees are encouraged to bring any discovered locations to the attention of the O&M Foreman for the safety of all as well as for inclusion within this plan. The O&M Foreman may use the Decision Chart in the appendix to evaluate the space.

Employees whose work may expose them must be notified of the existence, location and hazards of the PRCS. If employees may be expected to enter PRCS then a written plan and a written space entry permit system must be in place. This plan and its permit form intend to be the tools to meet these requirements.

<b>Known Permit Required Confined Spaces</b>			
<b>Building</b>	<b>Space</b>	<b>Reason for Designation</b>	<b>Management Plan</b>
Bldg 1,2,3 41 O'Connor Rd Fairport, 14450	Q-01B Elevator Pit	Entrapment, below grade, crush from elevator above	Use elevator service contractor exclusively to service pit
Bldg 8 Pool 41 O'Connor Rd Fairport, 14450	A-03 Pool Equipment Sumps	Engulfment, water	Permit required
Bldg 9,10 25 O'Connor Rd Fairport, 14450	A-01A Elevator Pit	Entrapment, below grade, crush from elevator above	Use elevator service contractor exclusively to service pit
Bird Morgan School 108-120 East Ave East Rochester, 14445	G7 - M-E-01 Morgan Elevator pit	Entrapment, below grade, crush from elevator above	Permit Required - Use elevator service contractor exclusively to service pit
Bird Morgan School 108-120 East Ave East Rochester, 14445	G8 - B-E-01 Bird Elevator pit	Entrapment, below grade, crush from elevator above	Permit Required - Use elevator service contractor exclusively to service pit
Bird Morgan School 108-120 East Ave East Rochester, 14445	G1 - Access to Chiller's Start/ Stop Under the mechanical courtyard, access through wall hatch behind M010 Boy's locker Room entry	Entrapment, below grade	Permit required
<b>Known Confined Spaces, But NOT Permit Required</b>			
Bldg 8 Pool 41 O'Connor Rd Fairport, 14450	A-03B Pool Chlorine Storage Room	Atmospheric, chlorine gas	Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	G2 - Wall hatch off stair to boiler room M000 floor, access to M001-M006 under grade piping and dwiring.		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	G3 - Wall hatch behind entry door to M-T01, which provided electrical and data wiring access.		Employee training

Bird Morgan School 108-120 East Ave East Rochester, 14445	G4 – Door way from S-08 Crawl Space under Stage and Auditorium provides access to wheel chair lift mechanics and electrical.		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	G5 – Doorway from S-08 Crawl space provides access to under stage storage		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	G6 – Believe there is a floor hatch in M011 or M013 that provides access to under the M013 – M009 wing.		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	F1 – Stage left stair wall hatch provides access behind the lighting and sound control panel		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	F2 – Stage right rear floor hatch access to under stage space		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	F3 – Stage has three grills that provide access to storage under the apron.		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	S1 – Access to Brid Roof through B-S2		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	S-2 Wall hatch on right off hall to M218A to wiring chase access		Employee training
Bird Morgan School 108-120 East Ave East Rochester, 14445	T-1 Wall hatch off back stair M-S6 landing to above auditorium ceiling space catwalks to lighting.		Employee training
<b>Buildings with No Known Confined Spaces</b>			
The Lodge, 41 O'Connor Rd, Fairport 14450			
Bldg 4,5,6, 38 O'Connor Rd, Fairport 14450			
Bldg 7, Safety & Security, 38 O'Connor Rd, Fairport 14450			
Transportation Center, 79 O'Connor Rd, Fairport 14450			

Harris Bldg, 2596 Baird Rd, Penfield 14526
Linden 11, 11 Linden Park, Rochester 14625
Linden 15, 15 Linden Park, Rochester 14625
Radio Transmitter Bldg, 91 Baker Rd, Victor 14450

### III. Management of Known Permit Required Confined Spaces

1. Known PRCS have a sign at the entry which says, "DANGER –PERMIT-REQUIRED-CONFINED SPACE—DO NOT ENTER – Without Authorization and Permit."
2. Known PRCS will have locks that are on the master key system.
3. Known PRCS will be reviewed at the annual employee health & safety meeting in August of every year.
4. New O&M (Operations and Maintenance) employees will receive a review of this plan.

### IV. Entry Procedures for PRCS

1. Identify and evaluate PRCS space hazards before allowing employee entry.
2. Identify the task that needs to be completed in the PRCS;
3. Perform appropriate testing for the following atmospheric hazards in this sequence: oxygen, combustible gases or vapors, and toxic gases or vapors;
4. If a space is thought to have or does have the potential for a hazardous atmosphere, no permit may be granted. Monroe One BOCES does not maintain the equipment for a safe entry into a hazardous atmosphere so work in a hazardous space must be contracted to an enterprise the credentials and ability manage a hazardous atmosphere.
5. Establish and implement the means, procedures and practices to eliminate or control hazards necessary for safe permit space entry operations;
6. Identify the required PPE and any other equipment necessary for safe entry, enter it on the permit and require employees to use it;
7. Identify appropriate procedures for summoning rescue and emergency services, and preventing unauthorized personnel from attempting rescue;
8. Complete the PRCS permit application:
9. Upon the PRCS permit approval:
  - a. Ensure that at least one attendant is stationed outside the permit space for the duration of entry operations;
  - b. Coordinate entry operations when employees of more than one employer are working in the permit space;
  - c. Implement the procedures that any attendant who is required to monitor multiple spaces will follow during an emergency in one or more of those spaces.

### V. Training

1. Annually, the O&M Department will review this PRCS plan with its permit procedures and entry requirements with its Maintenance and Grounds employees. Other job categories may be included to those who may be attendants, entry supervisors, on-site rescue team members, or employees who may potentially enter the space.
2. As part of this training, non-permit confined spaces will also be reviewed for proper safety procedures.
3. The training should test that the employees of the O&M department can identify a PRCS.
4. PPE (Personal Protective Equipment) that might be required for PRCS will be reviewed and inspected at the annual training session.
5. The Director of Safety & Security will notify rescue and emergency services of this plan, subsequent updates and its identification of PRCS.

## VI. Reclassifying a PRCS to Non-PRCS

OSHA regulations also allow permit spaces to be reclassified as non-permit spaces by if the hazards which had required it to be a PRCS have been eliminated.

## VII. Duties for Full PRCS Entry Operations

Entry into any PRCS will require a trained and equipped team that consist of:

- A. **Authorized Entrants** and they shall be required to:
  1. Know the hazards associated with the PRCS space and those hazards' effects.
  2. Properly use the equipment required for entry.
  3. Maintain continuous communication with the attendant.
  4. Alert the attendant in the event of an emergency.
  5. Know the evacuation procedure if an emergency occurs.
- B. **Attendants** and they shall be required to:
  1. Know the hazards associated with the PRCS space and those hazards' effects.
  2. Maintain an accurate account of the authorized entrants.
  3. Maintain continuous communication with the Entrants.
  4. Remain at their assigned station until relieved by another attendant or until the permit space entry is complete.
  5. Monitor conditions in and around the permit space.
  6. Summon rescue and applicable medical services in the event of an emergency.
  7. Perform non-entry rescue procedures.
- C. **Entry Supervisor** and they shall be required to:
  1. Know the hazards associated with the permit space and those hazards' effects.
  2. Verify that the safeguards required by permit are in place.
  3. Verify that rescue services are available and that means for summoning them are operable.
  4. Cancel the written permit and terminate the permit space entry when required.
  5. Remove personnel who are not authorized to enter the permit space during entry operations.

6. Periodically determine that entry operation is being performed in a manner consistent with the requirements of the permit space entry procedures and that acceptable entry conditions are maintained.

**D. Rescue Personnel** and they shall be required to:

1. Respond and aid in rescue efforts should an emergency situation arise.
2. Contact all necessary emergency medical and fire authorities which will be required to lend assistance.

## **VIII. Responsibilities to Contractors**

1. When contractors are involved in permit space entry work performed in the schools supervised by Monroe One BOCES, the District will inform them of the following information and coordinate any entry operations:
2. The location of the permit spaces at our facility and that entry into these spaces is only allowed through a permit space program or alternative procedures or space reclassification. Director of Sustainability will debrief the contractor at the completion of the entry operation, or during if a need arises, and if any hazards were confronted or created during their work.

## **IX. Contractor's Responsibilities to Monroe One BOCES**

When a contractor is hired to perform work in a PRCS in a facility supervised by Monroe One BOCES, the contractor will obtain the following information from the District and ensure the following tasks are performed:

1. Obtain information on the hazards of the permit space and information from the previous entry operations by Monroe One BOCES.
2. Determine if Monroe One BOCES employees will be working in or near the space.
3. If Monroe One BOCES employees will be working in or near the space during the operation, the contractor will coordinate entry operations with a Monroe One BOCES representative.
4. Will inform Monroe One BOCES of the permit space program that will be used.
5. Hold a debriefing conference at the completion of the entry operation or, if needed, during the entry operation to inform Monroe One BOCES of any hazards confronted or created.

## **X. Training**

1. Training **must** be given to each employee who has access or potential access to a permit required confined space. The amount and type of training needed will depend on the individual's duty assignment. For example, some employees may only be required to know the existence, location, and danger posed by a permit space. Others may be members of a PRCS team and would need considerably more training. Still others would need training as it pertains to the type of entry procedures used such as alternative procedures or reclassifying to non-permit space procedures. The overall intent of this

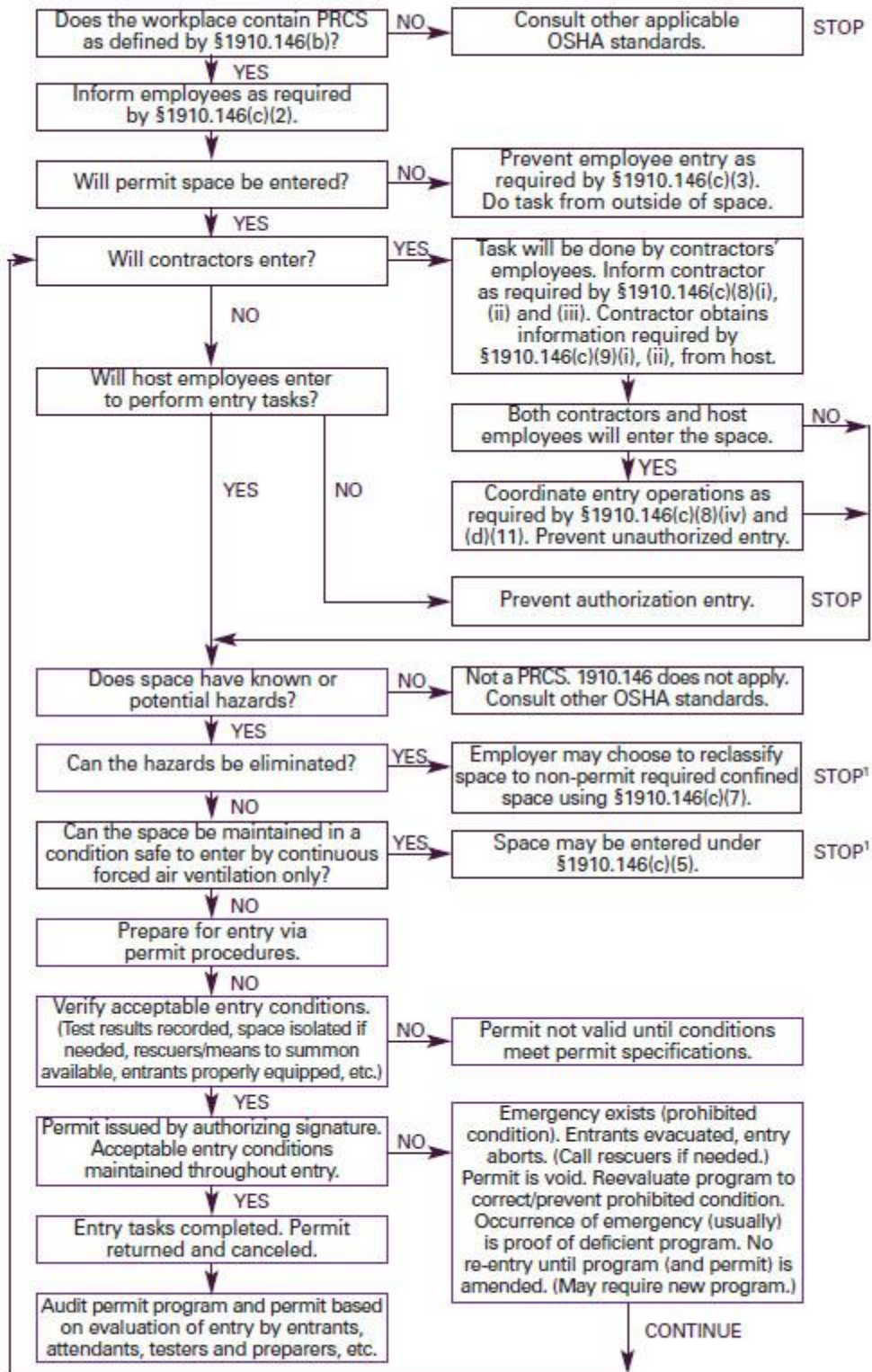
training is to give employees the understanding, knowledge, and skills necessary for the safe performance of their assigned duties in relation to the permit required confined space of concern.

2. If a full permit-required confined space program is required, training is needed on the following topics:
  - a. Types of confined space hazards
  - b. Components of the written PRCS program
  - c. Components of the PRCS work permit
  - d. The need for prompt guarding of the entrance opening
  - e. Atmospheric testing equipment including its use, calibration, and maintenance
  - f. Atmospheric testing protocol:
    - i. Oxygen, combustibles, toxins and test at pre-entry, and frequently thereafter if not continuous testing.
    - ii. Check all levels of the space.
    - iii. Methods for the control or elimination of any atmospheric hazards which include inerting, draining and rinsing, purging and cleaning, continuous forced air ventilation.
  - g. Procedures to follow if an employee detects a hazard
  - h. Evaluation process to be used for reentry if hazards are detected
  - i. Use of entry equipment
  - j. Personal protective equipment that may be required such as full body harness, respiratory protection, chemical protective clothing, eye and face protection.
  - k. Authorized entrant, attendant, entry supervisor, rescue team responsibilities
  - l. On-site or off-site rescue: rescue plan, practice rescue, basic first aid CPR certification, full body harness with retrieval line attached to mechanical retrieval device
  - m. Procedures for annual review of canceled permits
  - n. Documentation of the training

## **XI. Annual Update**

1. Every March, the Director of Sustainability shall solicit comments from the O&M Foreman, Custodial Supervisor, Maintenance Mechanics, and the Director of Safety and Security for this plan's updates and may call a meeting to review the plan and discuss updates.
2. By April 1 of each year, the Director of Sustainability shall send this updated plan to The Genesee Valley Educational Partnership Health, Safety and Risk Management Office to have it reviewed for compliance with current state regulations.
3. By June 1 the updated plan shall be posted on the Monroe One BOCES website, so that the update plan will be ready for the start of the next school year.

## Permit-Required Confined Space Decision Flow Chart



<sup>1</sup> Spaces may have to be evacuated and reevaluated if hazards arise during entry.

Source: 29 CFR 1910.146 Appendix A.

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<b>Confined Space Location:</b>				<b>Date of Application:</b>								
<b>Requester:</b>				<b>Dept:</b>								
<b>Entry Purpose:</b>							<b>Planned Entry Date:</b>					
							<b>Planned Entry Time:</b>					
							<b>Planned Duration:</b>					
							<b>Planned Exit Time:</b>					
<b>HAZARDS Check all that apply</b>	<b>Atmosphere</b>				<input type="checkbox"/> <b>Engulfment</b>		<input type="checkbox"/> <b>Other (explain below)</b>					
	<input type="checkbox"/> Oxygen Deficient <input type="checkbox"/> Oxygen Enriched <input type="checkbox"/> Explosive Gas/Vapor <input type="checkbox"/>		<input type="checkbox"/> Explosive Dust <input type="checkbox"/> Carbon Monoxide <input type="checkbox"/> Hydrogen Sulfide <input type="checkbox"/>		<input type="checkbox"/> Mechanical <input type="checkbox"/> Electrical <input type="checkbox"/> Heat Stress <input type="checkbox"/> Configuration <input type="checkbox"/> Substance Hazard							
<b>SAFETY REQUIREMENTS Check all that apply</b>	<b>Space Isolation</b>		<b>Ventilation</b>		<b>Personal Protective Equipment</b>						<b>Rescue &amp; Retrieval Equipment</b>	
	<input type="checkbox"/> Lock out/ Tag out <input type="checkbox"/> Blanking/Blinding <input type="checkbox"/> Double block & bleed <input type="checkbox"/> Line Break/Misalign <input type="checkbox"/>		<input type="checkbox"/> Natural <input type="checkbox"/> Continuous Forced Air <input type="checkbox"/> Local Exhaust <input type="checkbox"/>		<input type="checkbox"/> SCBA <input type="checkbox"/> SAR <input type="checkbox"/> Air Purifying <input type="checkbox"/> Protective Clothing <input type="checkbox"/> Eye and face protection <input type="checkbox"/> Hearing protection <input type="checkbox"/>		<input type="checkbox"/> Full body harness <input type="checkbox"/> Lifeline <input type="checkbox"/> Tripod w/winch <input type="checkbox"/> Explosion proof lights <input type="checkbox"/> Other (explain)					
	<input type="checkbox"/> Inserting <input type="checkbox"/> Purge/Clean <input type="checkbox"/> Area Secured <input type="checkbox"/> Atmosphere Testing		<b>Entry Equipment</b>				<b>Communications Equipment</b>					
			<input type="checkbox"/> Ladder <input type="checkbox"/>				<input type="checkbox"/> Radio <input type="checkbox"/> Telephone <input type="checkbox"/> Visual/Voice					
			<b>Non Sparking Tools</b>									
			<b>Fire extinguisher</b>									
To the best of my knowledge, information, and belief, all entry permit requirements have been met. Entry is authorized for the operation described, on the date and times requested.												
Entry Supervisor Name Printed			Entry Supervisor Signature			Date & Time						
<b>Required tests prior to and during entry if hazardous atmosphere exists, is suspected, or may be produced by performed tasks.</b>		<b>Test Results</b>		Pre-Entry	At Entry	Intermittent Readings					At Exit	
		Time of test										
		Tester Name/ Initials										
<b>Required Atmosphere Tests</b>		<b>Target Levels</b>										
O2 - Oxygen		19.5% - 23.5%										
LFL – lower flammable limit		< 10%										
CO - carbon monoxide		0 – 50 ppm										
H2S - hydrogen sulfide		< 10 ppm										
Authorized Entrants			Attendants						<b>Note unusual occurrences ABOVE or by memo</b>			
Exit date & time:			Exit Complete Supervisor Signature									