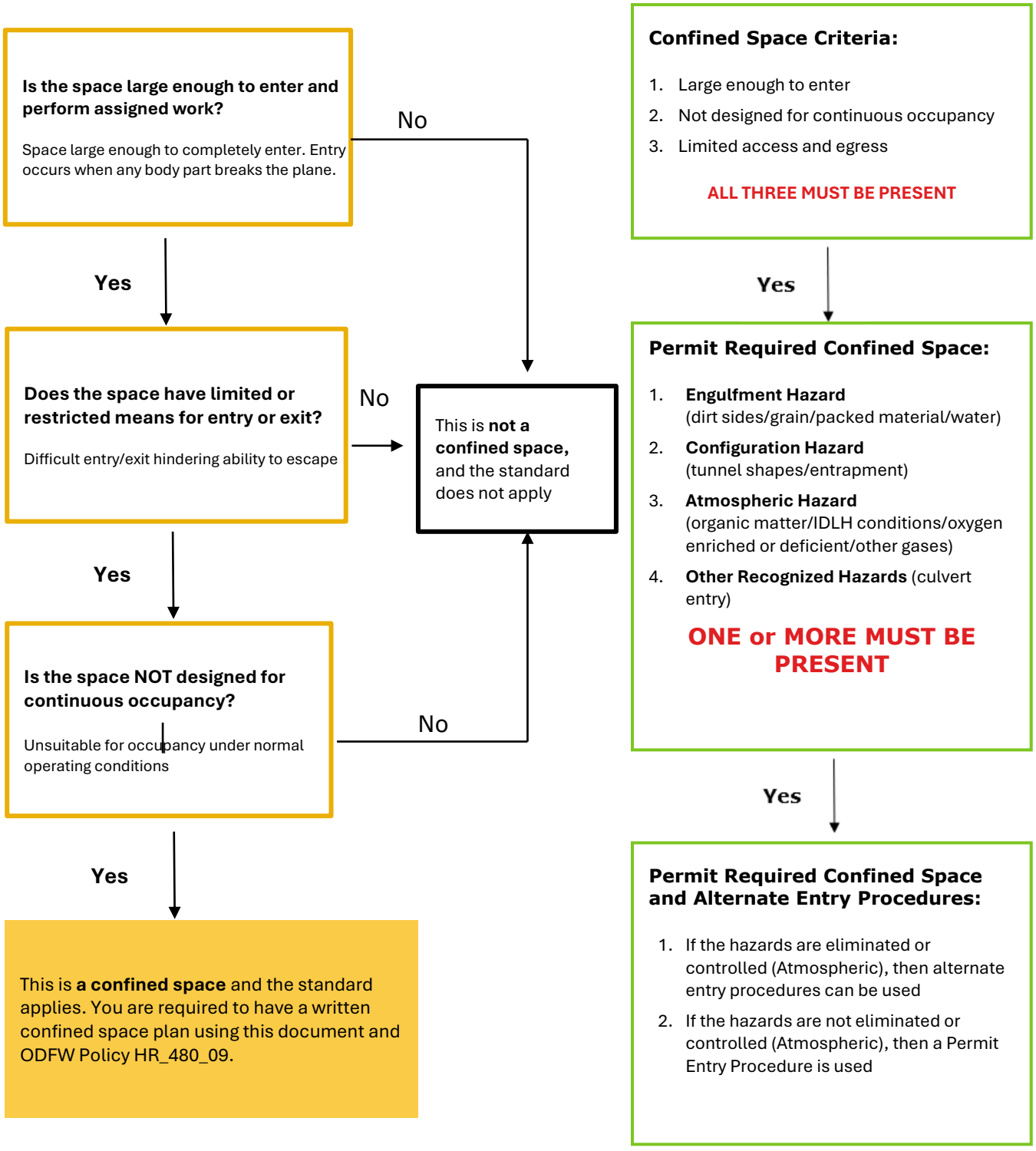
ODFW Confined Space Plan – [Template, Location Name]

ODFW Confined Space Entry HR_480_09_Attachment A

October 2, 2025

This plan provides a foundation to **evaluate confined spaces**, provides **permit required confined space alternate entry procedures** for agency operations of programs and/or facilities**, and aligns with and supports ODFW Policy HR_480_09, Confined Space Entry.**

The below flow chart and Attachment B are available as part of the evaluation process to determine if a space is defined as a Confined Space or Permit Required Confined Space, and if Alternate Entry Procedures apply.



Confined Space Identification and Evaluation

The purpose of this confined space plan is to communicate established procedures to protect employees from the hazards of entry into a confined space and ensure authorized employees will enter, work in, and exit the spaces safely. Permit Required Confined Spaces (PRCS), and appropriate entry procedures are in compliance with OAR 437-02-0146 and ODFW Policy HR_480_09 Confined Space Entry.

When employees enter a confined space to perform work, potential hazards may be encountered that may include, but are not limited to:

- Oxygen deficiency
- Oxygen displacement
- Oxygen enrichment
- Toxic atmosphere
- Flammable atmosphere
- Corrosive atmospheres
- Engulfment hazards
- Configuration hazards
- Thermal hazards
- Physical hazards
- Mechanical hazards
- Trapping or pinch points
- Slips, trips, and falls
- Electrical shock
- Heat or cold stress
- Chemical exposures
- Illumination issues
- Structural failures
- Unstable platforms
- Other potential hazards

Key components of this plan:

- Evaluation and identification of confined space and PRCS (Attachment B)
- Establishment of a local plan for safe entry into PRCS and provision of training materials on specific entry procedures for affected employees to accompany the agency training available through Workday
- Evaluation of all required equipment to ensure it is available and properly maintained prior to any entry into a PRCS with alternate entry procedures
- Specific entry procedures for air monitoring device(s) including manufacturer's use procedures.
- Use of alternative entry procedures to enter the space and ensure an alternate entry procedure is followed (Attachment C)

When feasible and through site evaluation, confined space must be labeled. However, the configuration of some confined spaces does not easily allow for the installation of a warning sign. For example, all sewer and storm drain entered through a manhole greater than 2 feet deep are to be considered a PRCS, whether labeled or not. Labels should include:

- "Danger Confined Space", or
- "Danger Permit Required Confined Space Do Not Enter", or
- "Danger Permit Required Confined Space With Alternate Entry Procedure Ensure Adequate Ventilation"

Space Evaluation

The Program/Facility Manager and their staff evaluated the presence of confined space(s) to determine that the confined space(s) meet the criteria for a PRCS (See Figure 1). Reasons for the classification of each PRCS are included. For all other evaluations, use Attachment B.

Figure 1: Identified Confined Spaces – [Confined Spaces/PRCS with Alternate Entry Procedures]

Location of Confined Space	Is a permit required? Type of Entry Required	Description of Confined Space	Potential hazards	Contaminants/gases

Entering a Permit Required Confined Space with Alternate Entry Procedures

Entry into a PRCS using Alternate Entry Procedures occurs when all hazards of the space are eliminated, and/or atmospheric hazards are controlled by forced-air ventilation. Alternate Entry Procedures include:

- Identify the hazards of space, implement the methods to eliminate the hazards, and verify the methods used to eliminate the hazards were successful
- Methods to eliminate and/or control atmospheric hazard:
    - Open and secure cover/lid, lily pad, knife gate for all compartments of the space
    - Drain water from the tank and verify it is empty
    - Test the air within the space (each compartment and trough) with a direct-reading instrument (Air Monitoring Device)
    - Turn off the valve at the tank, install a lockout device, follow local procedures, i.e. valve for compressed and liquid oxygen tanks. Open petcock valve, flow meter, and ball valves to purge/bleed the supply lines of excess oxygen. Then, close petcock valve, flow meter, and each ball valve. Verify there is no oxygen flow at the flow meter, then open flow meter to test system is effectively closed and no oxygen flow occurs. Close the flow meter.
    - Turn off the valve at the tank, install a lockout device, follow local procedures, i.e. valve for compressed oxygen tanks. Open flow meter and ball valve if applicable to purge/bleed the

supply lines of excess oxygen. Then, close the flow meter, and ball valve if applicable. Verify there is no oxygen flow at the flow meter, then open the flow meter to test that the system is effectively closed and no oxygen flow occurs. Close the flow meter.
    - Turn off the valve at the tank. Open flow meter and ball valve(s) to purge/bleed the supply line(s) of excess oxygen. Remove the valve from the tank and install a lockout device on the tank following local procedures. Verify there is no oxygen flow at the flow meter, then open the flow meter to test that the system is effective and no oxygen flow occurs. Close the flow meter.
    - Retest the air in all spaces (each compartment and trough) with an air monitoring device
    - Oxygen content must be between 19.5% and 23.5%, AND within 0.1% of the oxygen level outside of the space. Conduct air monitoring at different levels of the spaces (each compartment), and in the trough that connects tank compartments
    - If the atmospheric hazard is not eliminated use forced-air ventilation to control the atmospheric hazard within the acceptable range listed above
    - Ensure all other identified atmospheric hazards are absent before entering the space
    - Upon entry, continuously monitor the air content in the space during the entire duration of the entry
- Ensure use of a ladder/step is present when needed for access/egress
- Calibrate and bump test the air monitoring device per the manufacturer's procedures (written process), as directed by SAIF Corporation's Industrial Hygienist
- Ensure the entrant has an effective means of communication while in the space and can evacuate the space if an atmospheric hazard is detected inside the space during entry. Immediately correct the situation before any reentry
- Set up barriers, if necessary, to protect entrants from external hazards
- Following ODFW Policy, HR_480_09 and this plan, do not enter the space to eliminate a hazard or when performing air monitoring tests prior to entering the space
- Document each entry using Attachment C, Alternate Entry Procedures Form
- ODFW Policy, HR_480_09 and the section for Alternate Entry Procedures for PRCS with potential atmospheric hazards
- Document each entry using Attachment C, Alternate Entry Procedures Form, keep the document where the space is located for the duration of the entry and document any deviation from alternate entry procedures

Figure 2: Permit Required Confined Spaces – Alternate Entry Procedures

Identified space	Location	Alternate Enry Procedures (Hazards to be Eliminated)	Atmosphere controlled with continuous ventilation

Hot Work and Alternate Entry Procedures:

Hot work is limited to welding, cutting, and grinding in identified space(s) (See Figure 2) following completion of the Hot Work section of Attachment C, and after prior authorization from the Program/Facility Manager and ODFW Safety and Health Manager(s). Hot Work requires an attendant, who must know how to shut down welding, cutting, and grinding equipment when entrants perform hot work.

- Follow Oregon OSHA Respiratory Protection for Welding-related Taks, Table 2 as applicable to the work performed
- No use of gas or open flame torch that introduces a new potential hazard to the space
- Welding equipment other than the hand unit (electrode/torch) and hoses must not be taken into the space(s)
- Gas cylinders or welding machines must remain outside the space(s). They must be blocked if they are on wheels
- All welding equipment must have quick shutoffs that are under control of an attendant. When welding or cutting is suspended, the gas supply must be turned off at the cylinder and the hand unit (electrode/torch) removed from the space
- Evaluate hand/power tool use in the space(s) for potential source of ignition when atmospheric hazards are not controlled or eliminated
- For more information on welding and cutting in PRCS, refer to Oregon OSHA's Welding Standard
- Alternative tool use – Look to other tool options that may include pneumatic (air-powered) or non-sparking tools that are not a source of ignition in the space

Entering a Permit Required Confined Space with Permit Entry Procedures

All PRCS at this location have been identified as eligible for Alternate Entry Procedures. If modifications are made to existing spaces or new spaces are added (units) that through evaluation are determined a PRCS with Permit Entry Procedures, this plan will be updated to include those identified spaces and entry procedures before entry occurs. Pre-approval and coordination by BOTH the Program/Facility Manager and the ODFW Safety and Health Manager(s) must occur prior to entry. Additional information on PRCS with Permit Entry Procedures is located in ODFW Confined Space Entry HR_480_09_Appendix A.

Training

Employees who work or may work in areas where identified PRCS or enter PRCS using Alternate Entry Procedures shall be trained to ensure they acquire the knowledge, understanding, and skills necessary to safely perform their duties and work while in or in proximity to PRCS.

ODFW Confined Space Training aligns with ODFW Policy HR_480_09 and includes Oregon OSHA Confined Space Entry training modules together with an ODFW Confined Space Entry module. The ODFW module includes information on the specific plans and hazards present in agency environments and an overview of a site-specific Confined Space Plan. As the final element of the training, staff are required to discuss their site-specific Confined Space Plan, including all identified PRCS, the type of PRCS, and the entry requirements of the space(s), with their Program/Facility Manager.

Program/Facility Managers will assign training through Workday to all staff who are authorized to enter or work in areas where PRCS are present. Program/Facility Managers will provide direct training on the sites identified in their Confined Space Plan.

Full training as described above will be provided:

- Before the employee is first assigned duties that involve working in or around PRCS (new employee)
- Before there is a change in the employee's assigned duties that introduce duties that involve working in or around PRCS
- Local training on the site-specific confined space plan
- When there is a change in permit-space operations that presents a hazard for which the employee has not been trained
- When there is a change in the confined-space program or when a performance audit shows deficiencies
- When there is a deviation from the established procedures or when employee knowledge of the procedures is inadequate

Training on the site-specific confined space plan will include, for each identified PRCS:

- The written procedure and entry requirements
- Roles of supervisors and employees
- Methods to find and evaluate hazards
- Instructions on any equipment used during the entry and the maintenance of such equipment
- Methods of communication and the exchange of information with another employer
- The procedures necessary for alternate entry
- Include air monitoring procedures, calibration and bump testing with actual or like devices
- Continuous ventilation and forced air ventilation for the PRCS

Program/Facility Managers are responsible to assign training and verify that employees have been trained. Training completion will be recorded in Workday and locally.

Controlling Employer Requirement of The PRCS Alternate Entry Procedures and Third-Party Access

Before any worker from another employer (third-party) enters any of our PRCS with Alternate Entry Procedures, Program/Facility Manager/ODFW Representative will provide information regarding the evaluation and determination of the space to the respective third-party, including:

- PRCS are present and entered only when the applicable requirements are met, and,

- Identified hazards included in this plan, and ODFW's experience with each PRCS entered include precautions to protect employees in or near the space where work is performed prior to beginning the work

The third party is responsible for informing ODFW of their PRCS program. Third-party's program must be at least as stringent as ODFW's. The program will be documented with the name of the third-party's representative, ODFW representative, date, and include an outline of the procedures discussed, and maintained for two years. PRCS procedures and a third-party include:

Third-party Enter PRCS:

- Program/Facility Manager/ODFW Representative informs the contractor about all hazards in space identified in this plan
- Program/Facility Manager/ODFW Representative will review and discuss the work performed with the third party before the work begins
- The third party will inform Program/Facility Manager/ODFW Representative about their PRCS program. If the third-party PRCS program is less effective than the ODFW's program, the third-party will follow ODFW's procedures.

Third-party and ODFW Workers Enter PRCS:

Program/Facility Manager/ODFW Representative will coordinate entry operations with the third-party and work together on entry procedures used and space evaluations.

Direct-Reading Instrument – Air Monitoring Device

The equipment used to monitor air content must be used and maintained per the manufacturer. For this site, the manufacturer and device information include:

Manufacturer	Model	Unit Number	Calibration and Bump Testing Procedures
RAE Systems	QRAE 3, Personal Four Gas Monitor	[Enter Unit #]	Section 10, page 33 of Manufacturers user guide

Program Evaluation

At least once a year, the Program/Facility Manager will review canceled Alternate Entry Forms (Attachment C) to identify if there are any program deficiencies. The review must be done sooner if there is reason to believe that the program does not adequately protect employees. Actions to correct deficiencies will be documented and affected employees will be retrained.

Recordkeeping

Keep canceled alternate entry forms (Attachment C) for at least one year from the date the permit expires for review.

Attachment B: Confined Space Evaluation Form

Basic Information		
Your name:		Date:
Location of space:		
Description of space:		
Tasks performed in this space:		

Initial Confined Space Determination	**Yes**	**No**
SIZE: Is the space large enough to fully enter to perform work?	☐	☐
ENTRY/EXIT: Is there limited means of entry and exit that could hinder the ability to escape? Doorways and other portals through which a person can walk are normally not considered restricted means for entry or exit.	☐	☐
Occupancy: Is the space **NOT** designed for continuous human occupancy?	☐	☐

ATTENTION: If the answer to **all three** of these questions is "**yes**" then this is a confined space. Continue the evaluation below.

Permit-required Confined Space Determination	**Yes**	**No**
HAZARDOUS ATMOSPHERE: Does the space contain or have a potential to contain a hazardous atmosphere? Examples: combustible dusts, flammable mixtures, oxygen deficient/enriched atmosphere posses risk of death, incapacitation, or acute illness	☐	☐
ENGULFMENT: Does the space contain a material that has the potential for engulfing an entrant? Examples: liquids or granular solids	☐	☐
CONFIGURATION: Does the space have an internal configuration such as inwardly converging walls or a sloping floor that could trap or asphyxiate an entrant?	☐	☐
OTHER HAZRDS: Does the space contain another serious safety or health hazard? Examples: radiation, noise, electricity, and moving parts of machinery	☐	☐

ATTENTION: If the answer to **any** of these questions is "**yes**," then this is a permit space. Continue the evaluation.

Initial Evaluation of This Permit-required Confined Space (Existing hazards, work processes and/or equipment which introduce new hazards)							
Known/Potential Hazard	**Yes**	**No**	**N/A**	**Known/Potential Hazard**	**Yes**	**No**	**N/A**
Extreme temperature	☐	☐	☐	Hot Work and ignition sources	☐	☐	☐
Entrapment	☐	☐	☐	Electrical	☐	☐	☐
Harness or lifeline points	☐	☐	☐	Confined-space signage posted	☐	☐	☐
Mechanical	☐	☐	☐	Inert gas	☐	☐	☐
Noise	☐	☐	☐	Abrasive blasting	☐	☐	☐
Vibration	☐	☐	☐	Use of solvents or chemicals	☐	☐	☐
Pressurized lines	☐	☐	☐	Use of internal combustion motor	☐	☐	☐
Tripping/slipping hazards	☐	☐	☐	Painting or coating	☐	☐	☐
Unguarded equipment	☐	☐	☐	Demolition activities	☐	☐	☐
Radiation	☐	☐	☐	Non-approved equipment:	☐	☐	☐
Other hazard:	☐	☐	☐	Other hazard:	☐	☐	☐

Attachment C: Alternate Entry Procedure Form

Location of Space:	Entry Date:
Work Scope:	Duration of Entry:

ATTENTION: If any hazards are noted prior to or during entry that are not listed on this form, **cancel entry**, evacuate the space, and report to your supervisor. Retain canceled entry forms for one-year.

Entrant(s)	
Physical Hazard (Eliminated)	**Atmospheric Hazard (Eliminated or Controlled)**

List Each Action Required to Eliminate Physical Hazards in the Space		**Initial when completed**
Hazard:	**Required Action:**	

Ventilation Required? YES ☐ NO ☐	
Passive/Natural Ventilation: ☐	Amount of forced ventilation (cfm or AC/hr):
Mechanical/Forced Air Ventilation: ☐	

Lockout Device(s) Required? YES ☐ NO ☐ If yes, include location(s) and Specific Hazard(s)

Air Monitoring Test Result (Atmospheric)

Substance	**Unit**	**Permissible Levels**		**Results**	**Results**	**Results**	**During Entry – Peak Result**
Oxygen	**%**	**> 19.5**	**< 23.5**				
LEL (Flammable)	**%**	**< 10**					
H2S	**ppm**	**< 5**					
CO	**ppm**	**< 25**					

Air-Monitoring Instrument	
Manufacturer, Model Name & #:	Calibration and/or Bump Test Date:

Hot Work Requirements: YES ☐ NO ☐	**Entry Attendant:**
Hot Work (Define precautions to be followed when hazards are eliminated):	

Equipment Necessary for Entry – Personal Protective Equipment (PPE)

Additional Notes About the Space and Entry (Including Whether Evacuation Was Necessary)

Person Responsible for Ensuring the Space is Safe to Enter Using Alternate Entry Procedure	
Name:	Job Title:
Signature:	