# **Purpose**

This Instruction Sheet provides guidance for proper completion of the “*Penn State Confined Space Entry Assessment, Classification and Permit” or CSACP*. The dual-purpose form provides a preliminary confined space assessment tool (Page One), AND where required, a Confined Space Entry Permit (Page Two). These instructions guide the user to document an initial confined space assessment, and to classify the space as either “non-permit” or permit-required” for a particular confined space entry. This form supports documentation of the control measures, air monitoring data (where applicable), and trained supervisor signature authorization, necessary to support safe entry to the confined space to perform work.

# **Instructions**

Use the following sequence of steps to properly assess and classify the confined space before entry. These steps assume the confined space has been correctly identified.

## A. Complete Table 1 – Identification

* **Entry Purpose / Task**: Describe why the space must be entered and/or the tasks performed inside the space (e.g. instrument adjustment, pesticide fumigation, tank cleaning, welding repair, painting, valve replacement).
* **Unit/Department:** Indicate college/department affected by the entry (e.g. department entrant assigned to).
* **Space Identification / Location**: Concise description-location of the space (Room #, equipment ID, etc.). Information should be clear to inspectors, emergency responders, etc.
* **Responsible Person Completing Assessment:** Person qualified/authorized to complete the assessment and verify information accuracy.
* **Responsible Person Unit:** Likely same as Unit/Department, but may differ.

## B. Complete Table 2 – Hazards and Controls

* **Hazards** 
  + Check every Potential Hazard line item, as appropriate. All blanks must be checked (“Yes”, if potential hazard exists, and “No” if the hazard type does not exist or does not apply to the planned entry). All lines must be completed to support the Controls section.
  + Notate “Other Hazards” if not listed in table (e.g. dangerous pests, animals). Provide details as needed (e.g. Electrical hazard exposure to 480V, radiation hazard (x-ray), engulfment (corn silo)
* **Controls**
  + At Controls section, check each control item as “Yes” or “No,” and as needed to control (isolate/eliminate) the corresponding Potential Hazard.
* **Related SOPs/Other Controls**
  + List control methods not listed to address Other Hazards (e.g. nitrogen gas flush, auger will be locked/tagged out, entry delayed 24 hours to allow for temperature to regulate). List/reference any related SOPs needed for safe shut down or entry.

## C. Complete Table 3 – Atmospheric Assessment

* **Check if Potential Atmospheric Hazards are Present** 
  + Check box Yes if applicable, or “No” if not applicable. If not applicable, Check corresponding box at Table 3A, and proceed to Table 4.
* **Hazards**
  + Similar to Table 2, check each blank as “Yes” or “No” for potential atmospheric hazards with potential to cause harm. List applicable sources of hazards (e.g. welding, potential soil gas, gasoline, etc.).
* **Controls** 
  + Similar to Table 2, check each blank as “Yes” or “No” whether implemented or not needed to control the corresponding atmospheric hazards.
* **Respiratory Protection**
  + List respiratory protection if required (e.g. respirator model, OVP100 cartridge no., etc.). NOTE: If respirators are required, the space will be permit-required, since respirators do not eliminate/isolate) the atmospheric hazard.

## D. Complete Table 3A – Initial Air Monitoring and Instrument Information

* **Initial Checkbox**
  + Check preliminary box, if potential atmospheric hazards are not present, and proceed to Table 4.
* **Meter Reading**
  + Obtain a properly calibrated air monitor and fill-in meter readings. Measurements must be completed by a trained user, with an extension tube or hose, throughout the space (vertically and horizontally, as required). Entry into the space is not permitted to obtain readings. The hazards required to be monitored depend on the Hazards identified. If uncertain what atmospheric hazards/gases may be present or what to monitor, STOP, and contact your work unit Safety Officer or EHS.
* **Additional Information**
  + Fill out all information concerning the meter and person taking test data.

## E. Complete Table 4 – Additional PPE – Equipment Requirements

* Check each pertinent PPE type, and Equipment type required for safe entry to the confined space. Describe the intended use for any additional equipment.

## F. Complete Table 5 – Assessment Classification

* Box 1 – **Non-Permit Entry**
  + Check this box if there are no hazards/potential hazards present that can cause serious harm. All hazards have been isolated or eliminated using the control methods listed in Table 2. Page Two (Permit) is not required. Contact your unit SO, or EHS to determine if an SOP may be needed.
  + Responsible Person authorizing this assessment must sign and date Page One at blanks indicated. Retain this form. If hazards do not change, and all controls are implemented before entry, this hazard assessment and non-permit entry may apply until confined space work or conditions change.
* **Box 2 – Permit-Required** 
  + Check this box if one or more hazards cannot be isolated, eliminated or assessed, and the space is permit-required. Uncertainty to the level of risk or existence of a hazard necessitate treatment of the space as permit-required. Continuous forced air ventilation is required, if potential atmospheric hazards exist (e.g. welding fume generated may cause unknown toxic gas levels), which should be continuously monitored by personal monitor or the confined space attendant.
  + As noted above, Responsible Person authorizing this assessment must sign and date Page One at the correct blank. Proceed to Page Two and complete all information. The completed Page One and Two must be posted near the confined space entry point, and available for inspection during the entry.

## G. Complete Table 6 – Continuous Air Monitoring Readings (entry is permit-required)

* **Complete preliminary blanks.** This Page Two section must be completed if confined space is permit-required.
  + If the space has a potential atmospheric hazard, continuous monitoring and continuous forced air ventilation will be required.
* **Meter Reading**
  + As noted per Table 3A, obtain a properly calibrated air monitor and fill-in meter readings. Measurements must be completed by a trained user, with an extension tube or hose, throughout the space (vertically and horizontally, each 15-30 minutes), or by personal monitor. Note the location, time and gas reading. If the instrument will datalog readings (capture and record for future download), then this table is not required to be filled out. This must be indicated “Yes” or “No” in the last row of Table 6. Attach data upon completion of the entry. Space entry must be discontinued, and entrants must leave the space, if atmospheric hazards/gases alarms are indicated.

## H. Complete Table 7 – Attendant (entry is permit-required)

* **Name(s) of Attendant(s)**
  + List name of trained/authorized person(s) that will observe, and continuously monitoring entrants and conditions for permit-required entry. This person must be trained on confined space attendant duties.
* **Means of communication with Entrant(s)**
  + Check or list what methods of communication will be used.

## I. Complete Table 8 – Entrants (entry is permit-required)

* **List of Entrants**
  + List names of trained/authorized persons that will enter the confined space to perform work.

## J. Complete Table 9 – Conditions Required for Safe Entry (entry is permit-required)

* **Description of conditions**
  + Briefly summarize what conditions must be met before entry is authorized (e.g. LOTO applied and verified by entrants, attendant in place, rescue team is on site, or available and ready to respond). Proper response equipment must be ready at the site.

## K. Complete Table 10 (entry is permit-required) – Emergency Plan

* Check the boxes that apply to the rescue plan:
  + **On-site:** This indicates a rescue team is on site and will perform emergency extraction.
  + **911**: If 911 is the only means of rescue, hazards must be such that immediate extraction is not required.
  + **Non-entry**: Check this box if non-entry rescue means will be used (e.g. tripod and winch)
  + **Stand-by**: This means the risk associated with identified hazard does not require rescue to be on site, but ready and on standby to expedite response.
* **Name of nearest street of building**: Identify how the space will be conveyed to emergency responder if needed (e.g. building address, “one acre behind the barn at the corner of 68 and main”)
* **Describe Escape Plan**: Describe what the rescue crew will do to extract an entrant. What will happen if emergency extraction is needed?
* Indicate if rescue team is familiar and competent to perform their duties. Do not proceed if the answer is “No”, until rescuers are prepared.

## L. Complete Table 11 (if entry is permit-required) – Other Comments, Notes, Instructions

* Add any pertinent information regarding needed SOPs or other supporting information, related to this Permit. Content is optional.

## M. Complete Table 12 (if entry is permit-required) – Permit Authorization

* **Supervisor Name**
  + Name of the entry Supervisor. Responsible person trained and qualified in confined space operations (entrant/attendant/supervisor roles). This does not have to be the entrants’ immediate supervisor. A permit entry Supervisor can be an entrant, or attendant.
* **Check box** to indicate if all safe entry conditions listed in Table 9 are met.
* **Supervisor Signature**
  + Responsible entry supervisor must sign (signify) they have reviewed the assessment and permit information and are responsible for the safe work entry. They must also separately sign up completion/closure of the entry permit.
* **Start date/time**
  + Time listed by the entry Supervisor indicating when safe entry can begin. Time must be after all required conditions for entry are met.
* **Termination date/time**
  + Time entry Supervisor indicates the permit expires and or is closed. A permit can only be issued for a defined time-period. All safe entry conditions must be maintained until it is terminated, and no unauthorized entry may occur during this time.