A. **SCOPE AND APPLICATION**

The Permit Required Confined Space Entry program is established in accordance with 29 CFR 1910.146, “Permit – Required Confined Spaces” and describes the required program elements necessary for safe permit required confined space entry and work accomplishment; and to comply with all applicable safety and health rules.

B. **COMPLIANCE WITH PROGRAM**

This procedure applies to all UNLV employees and anyone else who performs work in a permit required confined space at UNLV. The written program is available for review at the Occupational tab on the UNLV Risk Management and Safety website at (http://rms.unlv.edu/occupational/confined-space/).

C. **DEFINITIONS**

(1) **Confined Space** – A space that (all three must be true):

   a. Is large enough and so configured that an employee can bodily enter and perform assigned work.

   b. Has limited or restricted means for entry or exit.

   c. Is not designed for continuous occupancy.

(2) **Permit Required Confined Space (PRCS)** – A confined space that has at least one of the following characteristics:

   a. Contains or has a potential to contain a hazardous atmosphere.

   b. Contains a material that has the potential for engulfing an entrant.

   c. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward or tapers to a smaller cross-section.
d. Contains any other recognized serious safety or health hazard.

(3) Additional definitions are found in 29 CFR 1910.146, “Permit – Required Confined Spaces.”

D. DUTIES AND RESPONSIBILITIES

(1) Risk Management and Safety (RMS)
   a. Establish the PRCS entry program for UNLV.
   b. Conduct an annual review if a PRCS entry has occurred with the previous 12 months.
   c. Perform PRCS entry assessments and evaluate those completed by other departments.
   d. Update inventory and requirements of PRCSs on campus and make available to all departments through the website at rms.unlv.edu.
   e. Providing PRCS entry training to authorized entrants, attendants, entry supervisors and others who have responsibility for PRCS operations.
   f. Provide atmospheric testing equipment if necessary and instructions for use to department personnel who will be entering PRCSs.

(2) Departments
   a. Identify and assign personnel to perform entry supervisor, attendant and authorized entrant duties as outlined in this program.
   b. Ensure that employees assigned to perform PRCS duties have attended PRCS entry training prior to performing such duties.
   c. Perform PRCS assessments (Appendix A) and provide information to RMS.
   d. Identify confined space prior to entry and confirm with RMS to determine if PRCS designation exists.

(3) Project Manager
   a. Attend PRCS entry training.
   b. Coordinate PRCS entry projects with contractor.
c. Notify RMS of projects prior to entry.

d. Provide RMS with the following completed documents when entry is finished:

   i. Signed copy of the PRCS permit which shows start and stop date/time.

   ii. Signed copy of the Host Employer/Contractor Agreement.

   (4) **Entry Supervisor**

   a. Complete PRCS entry training.

   b. Know and understand the hazards associated with the specific PRCS that will be entered and the methods that will be used to eliminate or minimize the hazards.

   c. Prepare PRCR entry permit completely.

   d. Notify RMS that a PRCS entry is planned.

   e. Conduct pre-entry briefing, if necessary, with attendants and authorized entrants to discuss the permit, potential hazards of the space to be entered, protective measures and the collection of atmospheric test data.

   f. Verify that all required tests have been conducted and that all conditions for safe entry have been met.

   g. Terminate the entry and cancel the permit when operation has been completed or when a condition, not allowed by the permit, arises in/near the PRCS.

   h. Remove unauthorized individuals who attempt to enter PRCS.

   i. Maintain the permit at the site during entry into the PRCS.

   j. Forward the completed and signed PRCS permit to RMS upon conclusion of entry activities.

   (5) **Attendant**

   a. Complete PRCS entry training.
b. Know and understand the hazards associated with the specific PRCS that will be entered and the methods that will be used to eliminate or minimize the hazards.

c. Monitor atmospheres (if required) prior to and during the entire entry in the PRCS.

d. Remain outside the PRCS during entry and prevent unauthorized persons from entering the PRCS area.

e. Ensure all entrants performing work in the PRCS are listed on the PRCS permit.

f. Not perform duties that could interfere or distract from the primary duty of monitoring and protecting authorized entrants.

g. Maintain constant communication with authorized entrants.

h. Monitor authorized entrants for signs of unusual behavior that may indicate undue stress or exposure to hazardous conditions.

i. Evacuate authorized entrants from the PRCS immediately, via communication or through rescue equipment, if entrants are not responding and/or any of the following occur:

   i. The attendant detects a prohibited condition.

   ii. The attendant detects the behavioral effects of hazard exposure.

   iii. The attendant detects a situation outside the space that could endanger the authorized entrants.

   iv. The attendant cannot effectively and safely perform all the duties required.

   j. Atmospheric alarm is activated.

   j. Summon emergency services by call 911.

k. The attendant may only participate in **non-entry** rescue operations. At no time shall an attendant enter a PRCS to facilitate a rescue.

(4) **Authorized Entrant**

a. Complete PRCS entry training.
b. Know and understand the hazards associated with the specific PRCS that will be entered and the methods that will be used to eliminate or minimize the hazards.

c. Use all required equipment properly.

d. Enter PRCS according to the conditions identified on the permit.

e. Maintain constant communication with the attendant.

f. Alert attendant and exit the PRCS as quickly as possible when any of the following situations occur:

   i. Warning signs/symptoms of exposure to hazardous environments or atmospheres are detected, such as odors, irritation, dizziness, or headaches.

   ii. Conditions that are not in accordance with the entry permit.

   iii. Instrument alarms are activated.

h. Exit the PRCS as quickly as possible when instructed to do so by either the entry supervisor or attendant.

E. **ALL OTHERS PERFORMING WORK in PRCS at UNLV**

   (1) Contractors who enter PRCS shall comply with the requirements of 29 CFR1910.146 “Permit-Required Confined Spaces.”

   (2) Coordinate with UNLV personnel, all projects requiring confined space entry.

   (3) Complete “Host Employer/Contractor Agreement” (Appendix B) and return to project manager.

   (4) Maintain a copy of the PRCS on-site during entry operations.

   (5) Provide project manager with the following completed documents when entry is finished:

      a. Signed copy of the PRCS permit which shows start and stop date/time.

      b. Signed copy of the Host Employer/Contractor Agreement.

   (6) Follow all pertinent standards to ensure a safe operation.
F. **PERMIT SYSTEM**

(1) A written permit (Appendix C) must be acquired from the RMS website and completed prior to entry into a PRCS.

(2) The written permit is valid for one uninterrupted entry and must be maintained at the site during entry.

(3) PRCS permit must be turned into RMS when entry has been completed or terminated.

(4) PRCS may be reclassified (Appendix D) if the hazards are completely eliminated through appropriate control measures.

G. **EMERGENCY PROCEDURES**

(1) Las Vegas Fire Rescue (Station No. 44) is the primary technical rescue team that would be used.

(2) Attendants are only authorized to perform non-entry rescue operations (as a secondary team) after being trained on this process.

H. **TRAINING**

(1) Training shall be provided prior to employee assignment to PRCS duties.

(4) Re-training shall be provided whenever:

   a. There are PRCS program changes.

   b. There is a change in permit space operations.

   c. There is reason to believe that there are inadequacies in the employee's knowledge or use of entry procedures.

I. **APPENDICES**

(1) Appendix A – “Confined Space Assessment Form”

(2) Appendix B – “Host Employer/Contractor Agreement”

(3) Appendix C - “Permit Required Confined Space Entry Permit”

(4) Appendix D – “Permit-Required Confined Space Reclassification Form”
Appendix A
Confined Space Assessment Form

Confined Space Assessment Form

Space No. ____________________________________________
Location: ___________________________________________
Description: ________________________________________

(attach photo)

A. Confined Space Criteria

If the answer is YES to EACH question below, the space is considered a confined space.
Continue to Part B to determine if the space requires an Entry Permit to enter.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the space large enough and configured to enter and perform work?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the space limited or restricted means for entry and/or exit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the space not designed for continuous occupancy?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Permit-Required Confined Space Criteria

If the answer is YES to ANY of the following questions, the space is considered a Permit-Required Confined Space. An Entry Permit must be obtained before entering the space.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the space contain or have the potential to contain a hazardous atmosphere?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the space contain a material that has the potential for engulfment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the space have inwardly sloping walls or floor that slopes downward?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the space contain any other recognized serious safety or health hazard?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Additional Comments

Assessment Conducted By: ____________________________ Date: ________________

Rev. 4/09

Page 7
Appendix B
Host Employer/Contractor Agreement

Permit Required - Confined Space Entry Program
Host Employer/Contractor Agreement

Contractor Name: ________________________________ Date of Work: ___________

Location of Work: __________________________________________

Host Employer:

☐ Provided information about permit required confined spaces and potential hazards contained in these spaces at UNLV.

☐ Apprised contractor of any precautions or procedures that UNLV has implemented for the protection of employees in/near permit required confined spaces where contractor will be working.

☐ Coordinated entry procedures if contractor and UNLV employees will be working together in/near permit required confined spaces.

☐ Will de-brief at the conclusion of work in/near permit required confined spaces on the confined space program used and any hazards confronted/created and corrected during entry.

__________________________________________ Date
UNLV Representative Signature

Contractor:

☐ I have received the information specified above from the host employer.

☐ I have an established program permit required confined space entry program that conforms to the requirements specified in OSHA Standard 1910.146.

☐ I have coordinated entry operations with host employer if host employees will be involved and will follow all safe work practices that pertain to the job.

☐ I will provide host employer a copy of the confined space entry permit used for this job upon completion of work and/or termination of entry.

__________________________________________ Date
Contractor Representative Signature
Appendix C
Permit Required
Confined Space Entry Permit

Confined Space Entry Permit

Date
Permit Number
Work Order Number

Space Number to Enter

Entry Supervisor

Location and Type of Space (e.g. vault, manhole, etc.)

Attendant(s)

Purpose of Entry

Authorized Entrant(s)

Will Contractors make this Entry?  Yes  No

Has each employee above been trained?  Yes  No

If yes, the contractor must have a Confined Space Program before entry.

Check the box for each PHYSICAL hazard present in the space.

□ Converging Walls
□ Electrical Shock
□ Engulfment
□ Hazardous Material

Check the box for each ATMOSPHERIC hazard present in the space.

□ Low Oxygen (<19.5%)
□ High Oxygen (>23.5%)
□ Flammable gases (>10% LEL)
□ Toxic gases (> PEL)

Will HOT WORK be performed in the space?  Yes  No

If yes, HOT WORK Permit will be required in addition to this Confined Space Permit.

Will any PHYSICAL hazard be eliminated before entry (e.g. Lockout/Tagout)?  Yes  No

If yes, use Reclassification Form.

Check the box for each step completed BEFORE ENTRY.

□ Notify affected department(s)
□ Ensure proper equipment (PPF, Rescue, etc.) is available
□ Monitor space for atmospheric hazards (record below)
□ Conduct pre-entry briefing on specific hazard and control methods
□ Other:

List EQUIPMENT needed to complete entry.

□ Personal Protective Equipment

□ Communication Equipment

Other:

ATMOSPHERIC TESTING (Record results every 30 minutes). Test Equipment Used:

<table>
<thead>
<tr>
<th>Gas</th>
<th>Acceptable Conditions</th>
<th>Pre-Entry Results</th>
<th>Time Initialed</th>
<th>Time Initialed</th>
<th>Time Initialed</th>
<th>Time Initialed</th>
<th>Time Initialed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen (O2)</td>
<td>19.5% to 23.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>&lt;10% LEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2S</td>
<td>&lt;10 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>&lt;25 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NEVER ENTER A CONFINED SPACE TO ATTEMPT A RESCUE.
Use the following non-entry rescue equipment.

□ Tripod
□ Body harness and line
□ Contact Combined Communications Center
Phone Number: 702-291-9291

In the event of an emergency, call 9-1-1.

Entry Time: Start: ________ to Stop: ________

I certify that all precautions for a safe entry have been taken and all necessary safety equipment have been provided:

Signature of Entry Supervisor

This permit must be kept at the job site during the entire entry operation. When entry has been terminated, send the signed permit to Risk Management and Safety.
Appendix D
Permit-Required
Confined Space Reclassification Form

Permit-Required Confined Space Reclassification Form

A Permit-Required Confined Space may be reclassified as a non-permit confined space if:

1. The space does not contain actual or potential atmospheric hazards; and
2. All hazards may be eliminated without entry into the space.

The reclassification is valid only while the confined space remains free from hazards. If hazards arise during the course of entry, the space must be evacuated immediately and re-evaluated for hazards.

The reclassification is valid only for the specific entry indicated below.

---

Location: ________________________________

Space Description: ________________________________

Purpose of Entry: ________________________________

<table>
<thead>
<tr>
<th>Hazards Originally Existing in Space</th>
<th>Methods of Eliminating Hazards</th>
<th>Verified By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Comments:

Certifying Employee: ________________________________ Date: ________________________________