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Confined Space Entry

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I. **Purpose:**
To establish the minimum standards necessary to ensure that all entries into confined spaces at Intel facilities are performed utilizing safe work practices. It is understood that site-specific Confined Space programs shall be written which contain requirements, which exceed or supplement those found in this document.

II. **Scope**
This document applies to anyone who enters confined spaces at Intel owned or leased facilities.

III. **Program Requirements:**

a. **GENERAL REQUIREMENTS**
   
i. Evaluations shall be conducted of Intel facilities to determine if any spaces are classified as confined spaces.
   
ii. In order for a space to be considered a confined space, it must have all three of the following characteristics:
      
1. Is large enough and so configured that an individual can bodily enter and perform assigned work. Note: Bodily enter means 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 the entrant’s head and or shoulder breaks the plane of an opening into the space.
2. Has limited or restricted means for entry or exit.
3. Is not designed for continuous employee/contractor occupancy.
   
iii. In order for a confined space to be designated as permit-required confined space (PRCS), it must have 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;
4. Contains any other recognized serious safety or health hazard.
   
iv. Confined spaces found to have none of the hazards in section iii, at the time of entry, may be treated as a non-permit confined space (NPSCS). However, Non-permit spaces may be upgraded to Permit-required upon the introduction of any serious safety or health hazard.
   
v. If confined spaces are identified; employees with access to those spaces shall be notified of their existence, location and danger in accordance with the requirements of this document.

b. **POLICIES/PROCEDURES**
   
i. **Worksite Evaluation and Confined Space Classification and Notification**
      
1. The workplace shall be evaluated to determine if any Confined Spaces exist.
2. All identified Confined Spaces must then be further evaluated to determine if they are Permit-required Confined Spaces (refer to General Requirements Section iii and Appendix A - Permit Required Confined Space Flow Chart).
3. Intel sites shall have processes in place to identify the existing status of the space as Non-permit or as Permit-required. At a minimum permanently identified Permit-required spaces shall be labeled identifying the space utilizing Danger signs or any equally effective means. The signage content identifying Non-permit confined spaces is at the discretion of the individual site.

   *Note: A sign reading “Danger-Permit-required Confined Space, Do Not Enter” or using other similar language would satisfy the requirement for a sign.*
ii. Alternate Entry Procedures

1. If the only hazard posed by a PRCS is an actual or potential hazardous atmosphere and monitoring and inspection data supports that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry and an assessment of the space hazards and conditions can be performed without entering the space, the space may be entered according to the following requirements:
   a. Classification and determination data for the space shall be documented and made available to any employee who enters the space under alternate entry procedures.
   b. Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.
   c. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.
   d. Before an employee enters or re-enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for the following conditions in order: (1) Oxygen content, (2) Flammable gases and vapors and (3) Potential toxic air contaminants.
   e. If a hazardous atmosphere develops within the space, persons in the space shall exit immediately. The space shall be evaluated to determine how the hazardous atmosphere developed and re-entered if necessary, following the requirements in section 5.5.
   f. Entry is prohibited until forced air ventilation has controlled any hazardous atmosphere.
   g. The forced air ventilation shall ventilate the immediate employee work area, shall continue until all employees have left the space, and shall be from a clean source.
   h. The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.
   i. If entering a space using the practices in this section, a written certification shall be used to verify that the space is safe for entry and that the pre-entry measures have been conducted. The certification shall contain the date, the location of the space, and the signature of the person providing the certification (i.e. entry supervisor). The certification shall be made before entry and shall be made available to each employee entering the space.
   j. The space shall be reevaluated, and reclassified if necessary, in the event that changes in the use or configuration have increased hazards to the occupants.

iii. Reclassification of Permit-Required Confined Spaces

1. A space classified as a PRCS may be reclassified as an NPRCS using the following procedures:
   a. If the PRCS poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, it may be reclassified as a NPRCS for as long as the non-atmospheric hazards remain eliminated.
   b. If it is necessary to enter the PRCS to eliminate hazards, such entry shall be performed according to section v.
   c. If entering a space using the practices in this section, a written certification shall be used to verify that the space is safe for entry and that the pre-entry measures have been conducted. The certification shall contain the date, the
location of the space, and the signature of the person providing the certification. The certification shall be made before entry and shall be made available to each employee entering the space.

d. If a hazardous atmosphere develops within the space, persons in the space shall exit immediately. The space shall be evaluated to determine how the hazardous atmosphere developed and re-entered if necessary, following the requirements in section v.

iv. Contractor Coordination

1. Site specific confined space programs shall outline the expectations for contractors specific to that site. Contractors at Intel facilities shall be informed that the workplace contains confined spaces and that entry is allowed only through compliance with the site confined space program.

2. Contractors shall be notified of the hazards identified, Intel’s experience with the space and any precautions or procedures implemented for the protection of employees in or near confined spaces where contractor personnel will be working.

3. Site specific procedures such as the Site Incident Prevention Plan (SIPP) shall include steps to coordinate entry operations when contractors and Intel employees are working simultaneously as authorized entrants in a confined space, so that employees of one employer do not endanger the employees of any other employer.

4. Contractors shall be debriefed at the conclusion of PRCS work regarding issues and hazards confronted or created in a PRCS during operations.

5. Contractor responsibilities:
   a. Complying with the confined space requirements mandated by the site confined space program.
   b. Obtaining any available information regarding hazards and entry operations from site EHS or authorized Intel designee.
   c. Coordinating entry operations with Intel, when contractor personnel will be working in or near PRCS.
   d. Informing the host employer or authorized designee of the PRCS program that the contractor will follow and of any hazards confronted or created in a PRCS, either through a debriefing or during the entry operation.

v. Permit-Required Confined Spaces (PRCS)

1. Unauthorized access to PRCS shall be prohibited.

2. The PRCS hazards shall be identified and evaluated immediately prior to personnel entry.

3. A PRCS shall not be entered unless oxygen levels have been determined to be between 19.5% and 23.5%, flammable gas or vapor levels are less than 10% of the LEL for that gas or vapor and any recognized potential toxic compound level is below the Intel Threshold Limit (ITL). Entrants should understand the reason for any significant atmospheric deviations from normal atmospheric conditions.

4. Permit Required Confined Spaces shall be tested or monitored for oxygen, then for combustible gases and vapors, then for toxic gases and vapors, and then for any other recognized hazard (i.e. temperature or radiation) to determine if acceptable entry conditions are being maintained during the course of entry operations.

5. Hazardous energy sources shall be isolated in accordance with Intel Control of Hazardous Energies Guidelines.

6. The space shall be purged and ventilated prior to entry if a hazardous atmosphere exists.
7. The entrance to the PRCS shall be barricaded if entrants face a substantial risk of injury due to unauthorized entry, due to objects falling into the space or due to vehicular hazards.

8. Pre-entry atmospheric testing shall be performed to ensure that acceptable entry conditions are present. Where feasible continuous atmospheric monitoring, and regular inspection shall be performed throughout the duration of entry operations.

9. Any equipment necessary for safe entry into and rescue from permit spaces shall be maintained in operating condition and provided when necessary.

10. An attendant shall be stationed outside a PRCS into which entry is authorized for the duration of entry operations.

11. An attendant may be assigned to monitor more than one space, provided they can perform the duties identified in section 5.9 have received authorization from site EHS and have developed written procedures to enable response to emergencies without distraction from their responsibilities.

12. Intel site programs shall ensure employees or groups who are to have active roles in entry operations (such as ERT, SIPP, EHS etc), identify their duties, and provide such employees with applicable training.

13. Intel site programs shall include specific policies and procedures for summoning rescue and emergency services and for preventing unauthorized rescue.

14. Entry operations shall be reviewed when the measures taken under the permit program may no longer protect employees. Procedures must be revised; responding to problems brought out by the review, before any subsequent entry is authorized.

vi. Permitting Process Overview

1. Prior to authorized, PRCS entry, the requirements in section v shall be documented on an entry permit.

2. The entry supervisor shall be identified by name and by signature prior to PRCS entry.

3. The completed permit shall be posted at the entry portal, so that the entrants can confirm that performance of all necessary pre-entry measures have been conducted.

4. The duration of a permit shall not exceed the lesser of the time required to complete the assigned task or one shift.

5. The entry supervisor shall terminate the entry and cancel the permit when the entry operation has been completed or when a prohibited condition arises in or near the permit space.

6. Cancelled or (Closed) entry permits shall be retained for at least 1 year to facilitate the annual review of the permit space program. Any problems encountered during an entry operation shall be noted on the permit so that appropriate revisions to the PRCS program can be made.

vii. Entry Permit

1. PRCS entry permits shall identify the following information (see Appendix B - PRCS Entry Permit):
   a. The PRCS to be entered.
   b. The purpose of the PRCS entry.
   c. The date and the authorized duration of the entry.
   d. A listing of the authorized entrants by name or other equally effective means.
   e. The name of the current attendant.
   f. The name of the current entry supervisor and the signature or initials of the entry supervisor who authorized entry.
   g. A listing of the hazards of the PRCS to be entered.
   h. A list of the specific measures to be used for isolating the PRCS and for eliminating or controlling hazards before entry.
i. A list of the acceptable entry conditions for the PRCS.

j. The results of initial and periodic tests performed, the names or initials of the testers and an indication of when the tests were performed.

k. The rescue and emergency services that can be summoned and the means for summoning those services.

l. A list of the communication procedures to be used by attendants and authorized entrants during entry.

m. A list of equipment to be provided for compliance with the PRCS standard, including PPE, testing equipment, communications equipment, alarm systems, rescue equipment, and other equipment.

n. Any other information or permits (i.e. EEW) whose inclusion is necessary, given the circumstances of the PRCS, in order to ensure employee safety.

viii. Duties of Authorized Entrants

1. Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

2. Properly use any protective and/or rescue equipment necessary for safe entry into and rescue from permit spaces.

3. Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert them of the need to evacuate the space.

4. Alert the attendant when the entrant recognizes any warning sign or symptom of exposure to a dangerous condition or when the entrant detects a prohibited condition.

5. Exit from the permit space as quickly as possible whenever the attendant or entry supervisor orders evacuation, whenever the authorized entrant recognizes any warning sign or symptom of exposure to a hazardous substance, whenever the entrant detects a prohibited condition, and whenever an evacuation alarm is activated.

ix. Duties of Attendants

1. Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

2. To be aware of possible behavioral effects of hazard exposure on authorized entrants.

3. Maintain a continuous accurate count of all authorized entrants in the PRCS and to ensure that the means used to identify authorized entrants accurately identifies who is in the space.

4. Remain outside the permit space during entry operations until another authorized relieves him or her attendant.

5. Maintain communication at all times with entrants to monitor entrant status and to alert authorized entrants of the need to evacuate the space.

6. Monitor activities inside and outside the permit space to determine if it is safe for entrants to remain in the space.

7. Order authorized entrants to exit the permit space as quickly as possible whenever the attendant detects a prohibited condition, behavioral effects of hazard exposure in an authorized entrant, or a situation outside the space that could endanger the authorized entrants, or whenever the attendant, for any reason, can no longer perform the duties required in this section.

8. Execute the rescue protocol required by the entry permit and the site emergency rescue procedures as soon as it is determined that emergency exit from the space is necessary.

9. Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
   a. Warn the unauthorized persons that they must stay out of the permit space.
b. Advise the unauthorized persons that they must exit immediately if they have entered the permit space.
c. Inform the authorized entrants and any other persons specified by the employer if unauthorized persons have entered the permit space.

x. Duties of Entry Supervisors
1. Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
2. Verify, by checking that the appropriate entries have been made on the permit, that all tests specified on the permit have been conducted and that all procedures and equipment specified on the permit are in place, before endorsing the permit and allowing entry to begin.
3. Ensure that MSDS information for all chemicals known to be present or encountered is available and has been reviewed by the entry team prior to entry.
4. Terminate the entry and cancel the permit when the entry operation has been completed or when a prohibited condition arises in or near the permit space.
5. Verify that rescue services are available and that the means for summoning them are operable.
6. Remove unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
7. Determine, when responsibility for a PRCS entry operation is transferred and at intervals dictated by hazards and operations, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.
8. Ensure that the entry team is trained, certified and equipped according to site Confined Space requirements and this document, prior to allowing the entry to begin.

xi. Rescue and Emergency Services
1. Prior to entry into any Permit-Required Confined Space (PRCS) a rescue plan shall be developed by the entry team that will ensure proper, timely rescue for all entrants based upon the likely hazards to be encountered.
2. Non-Entry Rescue provisions shall be applied to all Permit-Required Confined Space entries unless it can be demonstrated that those provisions increase the overall risk of entry.
3. Authorized entrants shall wear a full body harness with retrieval line at the center of the entrant's back, near shoulder level, or above the entrant's head so that the entrant will present the smallest possible profile during any necessary removal.
4. Authorized attendant must be trained and familiar with the use of all non-entry rescue equipment.
5. Wristlets may be used in lieu of the full body harness if the use of a full body harness is infeasible or creates a greater hazard and the use of wristlets is the safest and most effective alternative.
6. The other end of the retrieval line shall be attached to a mechanical device 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.
7. A mechanical device is required for vertical permit spaces more than 5 feet deep.
8. All Intel sites shall designate prior to entry a group/service that will be utilized if entry rescue is deemed necessary.
9. The determination of whether this service is brought in to “stand-by” at the point of entry or whether the service is “on-call”, is to be based upon the most likely potential hazard that would warrant an emergency exit situation. The entry team is responsible for making this determination prior to the entry and shall include the details within the written permit.
10. Example scenarios of when a “stand-by” rescue service may be warranted versus an “on-call” can be found in Appendix 9.4 - Rescue Services Scenario Tool.

11. Intel must evaluate the abilities and characteristics of any group/service which is to be designated by the site Confined Space process as an entry rescue resource. Example evaluation criteria can be found in Appendix 9.5 - Rescue Services Evaluation Tool.

12. Each member of any group/service designated to perform entry rescue shall have at a minimum the following characteristics:
   a. Trained as Permit-required Confined Space entrants. The rescue service shall be informed of the hazards they may confront when called on to perform rescue at an Intel site.
   b. Trained in the use of rescue equipment such as SCBA, backboards, fall arrest devices, mechanical advantage, air monitoring equipment, PPE etc.
   c. Trained in First Aid/CPR.
   d. Trained in elevated high-angle rescue techniques if applicable to the spaces to be entered.
   e. Must have practiced making a permit-required confined space rescue at least once in the prior year (may include an actual rescue).
   f. Must have the expertise and the processes in place to maintain rescue equipment in a safe manner.

13. If an injured entrant is exposed to a substance for which a Material Safety Data Sheet (MSDS) or other similar written information is required to be kept at the worksite, that MSDS or written information shall be made available to the first responders and the medical facility treating the exposed entrant. (See Intel MSDS search website for additional substance information.)

14. Intel has the responsibility to provide any entry rescue service with information required to perform rescues in a safe and timely manner.

15. Intel must inform the service of all known hazards they may confront.

16. Provide the rescue service access to any and all spaces from which they may be called out to perform rescue.

### IV. Training

<table>
<thead>
<tr>
<th>Course Title</th>
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<td>Confined Space Entry (Initial)</td>
<td>00001527</td>
<td>▪ Employees that enter a PRCS, potential PRCS or perform attendant or entry supervisor duties shall receive training giving them the understanding, knowledge, and skills necessary allowing for the safe performance of requirements in this guideline.</td>
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<tr>
<td>Confined Space Entry (Refresher)</td>
<td>00007326</td>
<td>▪ Confined space training requirements shall be described by the site Confined Space Entry program. This program shall outline the site-specific curriculum for entrant, attendant, supervisor and rescue services.</td>
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<td>▪ Training shall be provided before the employee is first assigned or given new duties covered in this guideline; whenever there is a change in Confined Space operations that presents a new hazard; and whenever there are deviations from the Confined Space entry procedures or inadequacies in the employee's knowledge or use of these procedures.</td>
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<td>▪ Training shall establish employee proficiency in the entrant; attendant or entry supervisor duties identified within the site Intel program and introduce new or revised procedures, as necessary, to assure compliance with this program.</td>
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|                           |             | ▪ Training shall be certified. This certification must contain each employee's name, the signature or initials of the trainers, and the dates of training. The certification shall be available to employees or their representatives. Site
Confined Space Entry programs shall ensure that a training certification records keeping process is in place.

V. Roles and Responsibilities

a. Employees
   i. To follow procedures and requirements of Intel’s and site’s Confined Space Entry guideline.
   ii. To ensure that assigned duties in PRCS entry activities is performed according to the duties set out in sections 5.8 - 5.10.
   iii. Participate in and complete all required training as required by the site Confined Space Entry guideline.
   iv. Record any problems encountered during an entry operation on the permit so that appropriate revisions to the PRCS program can be made.
   v. Shall notify site EHS in the event they are made aware of a new confined spaces or potential PRCS due to hazard, tool or configuration changes.

b. Supervisors/Managers
   i. To ensure all employees who need to enter PRCS’s has received the appropriate training and is certified.
   ii. Ensure the entry permit for all PRCS entries is archived according to the site process.

c. Site Environmental Health and Safety
   i. Ensure that the site Confined Space Entry Guideline is maintained and reviewed annually and that it meets or exceeds the requirements of this document.
   ii. Ensure that confined spaces and potential PRCS relating to the specific design of equipment are identified and communicated per the New Equipment Procurement Process (NEPP).
   iii. Ensure that site specific training for confined space entry is developed and the curriculum is documented in the site Confined Space Entry Guideline.

d. Global Environmental Health and Safety
   i. Logic Facilities Technology Design (LFTD) shall attempt to prevent the creation of a PRCS during the design process.
   ii. Corporate Safety shall ensure that the Corporate Confined Space Entry Guideline is maintained and reviewed bi-annually and that it meets or exceeds the requirements of this document.
   iii. Corporate Equipment shall ensure that confined spaces and potential PRCS relating to the specific design of equipment are identified and communicated per the NEPP during new equipment selections.

e. Intel University
   i. To maintain training records of all employees included in the site-specific training process.

VI. Definitions

Acceptable Entry Conditions: The conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required space entry can safely enter into and work within the space.

Attendant: An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant’s duties assigned in the employer’s permit space program.

Authorized Entrant: An employee who is authorized by the employer to enter a permit space.

Blanking or Blinding: The absolute closure of a pipe, line or duct by fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line or duct with no leakage beyond the plate.
Confined Space Program: The employer's overall program for controlling and, where appropriate, for protecting employees from, confined space hazards and for regulating entry into permit spaces.  
Double Block and Bleed: The closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.  
Elevated High Angle Rescue: Specific techniques used to package and transport injured employees from spaces greater than 4 feet in depth.  
Emergency: Any occurrence or event internal or external to the permit space that could endanger entrants.  
Engulfment: That surrounding and effective capture of a person by a liquid or finely divided solid substance that can be aspired to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.  
Entry: The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuring work activities in that space and is considered to have occurred as soon as any part of the entrant’s body breaks the plane of an opening into the space.  
Entry Permit: The written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified. Refer to Appendix C.  
Entry Supervisor: The person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required.  
Hazardous Atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness for one or more of the following causes: (1) Flammable gas, vapor, or mist in excess of 10 percent of its lower explosive limit (LEL), (2) Airborne combustible dust at a concentration that meets or exceeds its LEL, (3) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent, (4) Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in 29 CFR 1910 could result in employee exposure in excess of that dose or limit and (5) Any other atmospheric condition that is immediately dangerous to life or health (IDLH).  
Hot Work Permit: The employer’s written authorization to perform operations capable of providing a source of ignition. Immediately Dangerous to Life or Health (IDLH): Any condition that poses as immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.  
Intel Threshold Limit (ITL): The limit of acceptable exposure defined as the lower of either the local regulatory limit or the American Conference of Governmental Industrial Hygienists Threshold Limit Value (TLV)- except where specifically stated in the body of the Intel IH Program Guidelines. Intel may choose to establish a lower limit or its own limit where no standard exists.  
Inerting: The displacement of the atmosphere in a permit space by a noncombustible gas to such extent that the resulting atmosphere is noncombustible.  
Isolation: 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 or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.  
Line Breaking: The intentional opening of a pipe, line, or duct that is or has been carrying flammable corrosive or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.  
Non-Permit Confined Space: A confined space that does not contain or with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.  
Oxygen Deficient Atmosphere: An atmosphere containing less than 19.5 percent oxygen by volume.  
Oxygen Enriched Atmosphere: An atmosphere containing more than 23.5 percent oxygen by volume.  
Permit-Required Confined Space (PRCS): 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

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converging walls or by a floor which slopes downward and tapers to a smaller cross-section; (4) Contains any other recognized serious safety or health hazard. An example permit is shown in Appendix 9.3.

**Permit System:** The employer’s written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

**Prohibited Condition:** Any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

**Rescue Service:** The personnel designated to rescue employees from permit spaces.

**Retrieval System:** The equipment used for non-entry rescue of persons from permit spaces.

**Testing:** The process by which the hazards that may confront entrants of a permit space are identified and evaluated; either through atmospheric monitoring or chemical sampling analysis.

### VII. References

- Federal OSHA 29 CFR 1910.146, Permit-required Confined Spaces
- Applicable local regulations shall be referenced for additional requirements
- Intel Corporate Safety - Raised Floor Entry Guideline
- EHS Safety Leadership Team
- EHS Industrial Hygiene JET
- EHS Logic Technology Development Team (TD EHS)

### VIII. Change Control

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<th>Section</th>
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<td>All</td>
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Appendix A

Permit-Required Confined Space Decision Flow Chart

Evaluate each Confined Space. A "YES" answer to any of the questions results in a Permit required Confined Space.

- Does the space contain, or have the potential to contain, a hazardous atmosphere?
  - Yes
    - Permit Required Confined Space
  - No

- Does the space contain a material that has the potential for engulfing an entrant?
  - Yes
    - Permit Required Confined Space
  - No

- Does the space have 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?
  - Yes
    - Permit Required Confined Space
  - No

- Does the space contain any other recognized serious safety hazards?
  - Yes
    - Permit Required Confined Space
  - No

Appendix A

Permit-Required Confined Space Decision Flow Chart

- An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury or acute illness from one or more of the following:
  1. Flammable gas, vapor or mist > 10% of LFL
  2. Airborne combustible dust at or above its LFL
  3. Atmospheric oxygen concentration < 19.5% or > 23.5%
  4. Atmospheric concentration of any substance for which a dose or PEL is published in Subpart G, Occupational Health and Control, or Subpart Z, Toxic and Hazardous Substances, and which could result in employee's exposure in excess of its dose or PEL.
  5. Any other atmospheric condition that is immediately dangerous to life or health.

- The surrounding and effective capture of a person by a liquid or particulate matter that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

- Hazardous Energies for example

Not a Permit Required Confined Space.
Follow procedures for Confined Spaces.
## Appendix B

### PRCS Entry Permit

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<th>Date and Time Issued:</th>
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<th>PM</th>
<th>Date and Time Expires:</th>
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<th>PM</th>
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<th>Job Supervisor:</th>
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<table>
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<tr>
<th>Equipment to be worked on:</th>
<th>Work to be performed:</th>
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</table>

<table>
<thead>
<tr>
<th>Authorized Entrant(s):</th>
<th>Authorized Attendant:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Entry Supervisor:</th>
<th>Training Verified/Date:</th>
</tr>
</thead>
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<table>
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<tr>
<th>Entry Supr Signature:</th>
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</table>

### Hazards of Confined Space:

- ...

## HAZARD CONTROL

### PRECAUTIONS TAKEN

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
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<tbody>
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</table>

### EQUIPMENT (Bold indicates required.)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
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<tr>
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</table>

- Mechanical Ventilation
- Natural Ventilation
- Source of Isolation
- Lockout / Tagout
- Line(s) are Disconnected
- All trained in Confined Space

### Protective Clothing -

- Type:
- Respirator -
- Type:
- SCBA (Rescue)
- Communications:

### THE EVENT OF AN EMERGENCY CONTACT

- Visual
- Verbal
- Radio
- Other:

### INTEL SECURITY AT:

### RESCUE AND EMERGENCY

### SUMMONS INFORMATION.

- SIPP - Permit

### IF USING RADIO:

- Job #________

### MONITORING INFORMATION

<table>
<thead>
<tr>
<th>Monitoring Equipment Used:</th>
<th>Serial Number:</th>
<th>Cal Date:</th>
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<tbody>
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</table>
**Corporate Environmental Health & Safety (EHS) Standard**

**Confined Space Entry**

<table>
<thead>
<tr>
<th>ANALYTE</th>
<th>Permissible Entry Level</th>
<th>Initial Reading</th>
<th>Tester’s Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>19.5% - 23.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive (LFL)</td>
<td>Less than 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>25 PPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**PERIODIC ATMOSPHERIC TESTS:**

<table>
<thead>
<tr>
<th>Time:</th>
<th>% Explosive:</th>
<th>% Toxic:</th>
<th>Time:</th>
<th>% Explosive:</th>
<th>% Toxic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>%</td>
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<td>02</td>
<td>%</td>
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We have reviewed the work authorized by this permit and the information contained herein. Written instructions and safety procedures have been received and are understood. Return Copy of canceled (closed) permit to EHS for 1-year archiving.

<table>
<thead>
<tr>
<th>Printed Name</th>
<th>Signature</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit prepared by:</td>
<td>Entry Supervisor</td>
<td></td>
</tr>
<tr>
<td>Permit Cancelled (Closed):</td>
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</tbody>
</table>

**NOTE:** List Below any unexpected hazards encountered during entry or procedure recommendations.

**Additional Authorized Entrants.**

<table>
<thead>
<tr>
<th>Date and Time of Entry/Exit</th>
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</table>

**Current Entry Supervisor**

<table>
<thead>
<tr>
<th>Date and Time of Entry/Exit</th>
</tr>
</thead>
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