



**DEPARTMENT OF CORRECTIONS
Human Resources**



Title:	Confined Space & Permit Confined Space	DOC Policy: 20.6.11
Supersedes:	None	
Applicability :	All functional units	
Reference:	OAR 437, Division 2, Subdivision J, 1910.146	

I. PURPOSE

To establish safe and effective requirements and standardized practices for the protection of employees/contractors from hazards associated with entry into Permit Required Confined Spaces.

II. DEFINITIONS

- A. Acceptable Entry Conditions: The conditions that must exist in a permit space to allow entry and to ensure that the employee(s) involved can safely enter and work within the confined space.
- B. Attendant: An individual stationed outside the permit space who monitors the authorized entrants and who performs all the attendant's duties assigned in the permit space program. The attendant may also be the entry supervisor.
- C. Authorized Entrant: An employee who is authorized to enter a permit space.
- D. Blanking and Blinding: The absolute closure of a pipe, line, or duct, by the fastening of a solid plate 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.
- E. Confined Space: A space that:
 - 1. Is large enough and so configured that an employee can bodily enter and perform assigned work;
 - 2. Has limited or restricted means of entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, and pits are spaces that have limited means of entry); and
 - 3. Is not designed for continuous employee occupancy.
- F. 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/tagging a drain or vent valve in the line between the two closed valves.

- G. Engulfment: The surrounding and capture of a person by a liquid or a flowable solid substance (powder, grain, sand, etc.) 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.
- H. Entry: The action by which a person passes through an opening into a permit required confined space.
- I. Entry Permit: The completed document and containing the required information described in this program which allows and controls entry into a permit space.
- J. 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 operations, and for terminating entry as required. Entry supervisor may also be an attendant.
- K. Hazardous Atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:
 - 1. Flammable gas, vapor, or mist, in excess of 10% of its lower flammable limit (LFL). If the product is unknown, LFL shall be based upon 10% of the flammable level of methane.
 - 2. Airborne combustible dust at a concentration that meets or exceeds its LFL. Concentration may be based on approximation of LFL when the dust obscures vision at a distance of 5 feet.
 - 3. Atmospheric oxygen concentration below 19.5% or above 23.5%.
 - 4. Atmospheric concentration of any substance above the permissible exposure limit as published in OAR 437, Division 2, Subdivision Z, Toxic and Hazardous Substances.
 - 5. Any other atmospheric condition that is Immediately Dangerous to Life and Health (IDLH).
- L. Hot work Permit: The employers written authorization to perform operations capable of providing a source of ignition, e.g., welding, cutting, burning, heating, etc within or around the confined space.
- M. Immediately Dangerous to Life and Health (IDLH): Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individuals ability to escape unaided from a confined space.
- N. Isolate: 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:

1. Blanking or blinding; or
 2. Line breaking or misaligning sections of lines, pipes, or ducts; or
 3. A double block and bleed system; or
 4. Lockout or tagout of all sources of energy; or
 5. Blocking or disconnecting all mechanical linkages.
- O. 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.
- P. 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.
- Q. Permit Required Confined Space: 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 converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
 4. Contains any other recognized serious safety or health hazard.
- R. Retrieval System: The equipment used for non-entry rescue of persons from permit spaces. This includes but is not limited to a retrieval line, full body harness, and/or a lifting device or anchor.
- S. Testing: The process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying on the permit the tests that are to be performed in the permit space.

III. POLICY

- A. An evaluation of the workplace shall be made to determine if there are any confined spaces and if any are permit required confined spaces. This will be attached to the units assigned safety managers confined space program. Appendix A is to help in determining if it is a confined space and/or a permit confined space.
- B. Permit required spaces shall be clearly posted with signs indicating the

following message:

DANGER - PERMIT REQUIRED CONFINED SPACE - DO NOT ENTER.

- C. Personnel are not allowed to enter permit-confined spaces unless they are trained and follow the requirements of this program.
- D. Non-permit confined spaces shall be re-evaluated by a qualified person whenever there are changes in the use or configuration of the confined space that might increase the hazards to entrants thus causing it to be a permit confined space.
- E. A permit confined space shall be re-evaluated and may be reclassified to a confined space if it poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space and remain eliminated.
- F. All permit confined spaces shall have written procedures on how to isolate the space. See "Isolate" in definitions above.
- G. All sewer entry shall be considered a permit confined space entry.
- H. Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.
- I. Upon removal of any entrance cover, the opening shall be promptly guarded to prevent an accidental fall through the opening and to protect entrants working in the space from foreign objects entering the space.
- J. Before entry, the internal atmosphere shall be tested with a calibrated direct-reading instrument for the following conditions in the order given:
 - 1. Oxygen content must be no less than 19.5% or more than 23.5%;
 - 2. Flammable gasses and vapors, and;
 - 3. Potential toxic air contaminants.
- K. If entry into the permit space is necessary to test for or to eliminate hazards prior to entry for work, entrants shall be trained according to this policy. An entry permit will be issued listing the tasks to be performed to test and/or elimination of hazards. The permit shall be cancelled/terminated when work to eliminate hazards is completed. A new permit will be issued for entry to complete the duties of the entry into the permit space.
- L. Retrieval systems or methods shall be used to facilitate non-entry rescue whenever an entrant enters a permit space unless the equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. This can include but not limited to:

1. A chest or full body harness with a minimum one (preferably two) "D-Rings" located high on the back centered.
 2. Tri-pods with retrieval systems or equivalents.
 3. Approved safety lines of sufficient length to reach the farthest recesses of the permit space.
- M. Continuous forced air ventilation shall be used as follows:
1. Employees may not enter the permit confined space until the forced air ventilation has eliminated any hazardous atmosphere;
 2. The forced air ventilation shall be so directed as to ventilate the immediate areas where the employee(s) will be present within the space and shall continue until all employees have left the space.
 3. The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.
 4. The atmosphere within the space shall be periodically tested (continuously or at least every 15 minutes) to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.
- N. There may be no hazardous atmosphere within the space when an employee enters the space for work.
- O. One attendant or entry supervisor shall be outside the permit space for the duration of entry operation.
- P. The entry supervisor/attendant shall have authority to alter, suspend, or terminate any and all activities associated with the permit space when existing conditions are determined to be potentially or immediately dangerous to life and health (IDLH).
- Q. Equipment necessary for permit confined spaces:
1. Approved testing and monitoring equipment for hazardous atmospheres.
 2. Ventilation equipment necessary to obtain and maintain acceptable entry conditions.
 3. Communications equipment capable of contacting emergency rescue services.
 4. Personal protective equipment insofar as feasible engineering and work practice controls do not adequately protect employees.
 5. Lighting equipment needed to enable employees to see well enough

to work safely and to exit the space quickly in an emergency.

6. Barriers and/or shields to protect the opening.
 7. Equipment such as ladders needed for safe ingress and egress by authorized entrants.
 8. Rescue equipment except to the extent that equipment is provided by rescue services. Rescue and emergency equipment to include but not limited to: Self Contained Breathing Apparatus (SCBA), approved life lines, body harnesses, and rescue lifts complete with winch and cable (a mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.) Any other equipment necessary for safe entry into and rescue from the permit space.
- R. Entry procedures shall be reviewed and revised whenever present entry operations may not protect staff.
- S. Functional units shall review each permit space annually using canceled permits to revise entry and isolation procedures into confined spaces.
- T. Contractors:
1. All contractors engaged in permit space entry shall assure and furnish upon demand certified training records of all employees associated with the entry and a written copy of their confined space entry permit program.
 2. Prior to entry into a permit required space by an outside contractor, all requirements of this program must be met for the contractor employees or agency personnel assigned to help the contractor.
 3. Contractors shall be apprised of the elements, including the hazards identified in the permit space, precautions and/or procedures implemented for employee protection in and around the permit space, isolation procedures, and prior experience with the permit space.
 4. The permit space facility shall assure the contractor is aware of all rescue service requirements and shall coordinate rescue operations with the contractor.
 5. At the conclusion of the contracted operations within the confined space a debriefing shall be held documenting any and all hazards confronted or created in the permit space.
- U. Hot work within a confined space (NOTE: ANY CONFINED SPACE) has the potential to increase the hazards that employees may be exposed to, therefore all hot work within any confined space shall require the following:

1. A hazard assessment shall be completed in the confined space in relationship to the hot work performed.
 2. A completed hot work permit (Attachment C) and a confined space permit (Attachment B).
 3. Fire hazards shall be identified so that precautions can be implemented.
 4. Combustibles shall be removed from the work area (at least 35 feet away) or protected with flameproof covers or shields.
 5. A "fire watch" is stationed outside the work area with an appropriate fire extinguisher.
 6. Adequate ventilation is supplied to prevent the build-up of toxic materials or possible oxygen deficiency.
 7. Air monitoring/testing shall be performed before and during all hot work in confined spaces.
 8. All required PPE for welding and confined space entry is on hand and used properly.
- V. Permit confined space procedure and practices for entry:
1. Identify and isolate the hazards in the permit space before entry and note or attach list to the confined space permit. See definition, isolate. Provide barriers to protect entrants.
 2. Test conditions in the permit space to determine if acceptable entry conditions exist.
 3. Ventilate the permit space as necessary to eliminate or control atmospheric hazards.
 4. Test as necessary to verify that conditions are acceptable for entry into the permit space throughout the duration of the authorized entry. Test first for oxygen, then combustible gases and vapors, and then for toxic gases and vapors.
 5. Sewer entry conditions shall be continuously monitored where entrants are working.
 6. Prior to entry into a permit space an entry permit (Attachment B) shall be completed, signed and reviewed, with all authorized entrants and attendants, as follows:
 - a. All pre-entry preparations completed and the results of any tests performed.

- b. The date and time duration of authorized entry as listed on the permit.
 - c. The permit space to be entered.
 - d. The purpose of the entry.
 - e. The authorized entrants by name as listed on the permit.
 - f. The entry attendant/supervisor (and any assistants if applicable) listed on the permit. If the entry supervisor is also the attendant it shall be noted on the permit.
 - g. The hazards of the permit space to be entered.
 - h. The measures used to isolate the permit space and to eliminate or control permit space hazards prior to entry.
 - i. The acceptable entry conditions.
 - j. Testing and monitor results.
 - k. Communication procedures during entry and in the event of an emergency.
 - l. Rescue and emergency procedures and or equipment on hand.
 - m. Any additional information or permits authorizing work in the area, e.g., hot work permits (Attachment C), material safety data sheets (MSDS), etc.
7. The duration of the permit may not exceed the time required to complete the assigned job identified on the permit.
8. If a hazardous atmosphere is detected:
- a. All personnel shall leave the space immediately;
 - b. The space shall be evaluated to determine the source of the hazardous atmosphere; and
 - c. Measures shall be implemented to protect personnel from the hazardous atmosphere before any subsequent entry takes place.
9. The entry attendant/supervisor shall terminate entry and cancel the entry permit if:
- a. A hazardous atmosphere is detected;

- b. The entry operations covered by the entry permit have been completed; or
 - c. When a condition that is not allowed under the entry permit arises in or near the permit space.
10. Re-entry into a terminated/cancelled confined space work area shall not occur until:
- a. All hazards are identified and isolated; and
 - b. A new entry permit is completed, signed, and communicated to all personnel involved.
11. At the completion of the work in the permit confined space the permit will be cancelled and the process reviewed.
12. All signs and barriers to the permit confined space will be replaced.

W. Rescue and Emergency services

- 1. At no time will any DOC personnel attempt a non-entry/entry rescue unless they have been properly trained according to this procedure and rescue practices.
- 2. At no time shall an attendant leave his/her post to enter a confined space to attempt a rescue until he/she is relieved by another trained attendant and has had proper emergency rescue training.
- 3. In the event of an emergency the unit's emergency preparedness procedures will be implemented to notify emergency services personnel.
- 4. When possible, local emergency rescue services shall be utilized.
 - a. A letter of agreement shall be completed between the functional unit and the local emergency rescue services.
 - b. Emergency rescue service personnel should be trained in confined space rescue.
 - c. The rescue service shall be notified before entry into a permit required confined space.
 - d. The rescue service shall have access to all confined spaces for training purposes.
- 5. If local emergency services are not available contract services may be obtained.

- a. Contract providers should be trained and qualified in confined space rescue.
 - b. Contracting services shall be provided with a tour of permit confined spaces that they are to provide rescue from.
 - c. The contractor shall own all equipment used for confined space rescue.
6. If external rescue services are not available, internal rescue teams can be used.
- a. Teams shall consist of at least three employees who are trained in the use of PPE, SCBA respirator use and rescue procedures utilizing the equipment to be used.
 - b. Internal rescue teams shall be trained and physically qualified.
 - c. Each functional unit shall review and evaluate the physical capacity of each team member annually to determine their ability to perform confined space rescue duties. The review and evaluation shall be accomplished through physical examination and stress testing (OAR 437-02-182(4)(a)).
 - d. Employees with known heart disease, epilepsy, or emphysema will not be assigned to confined space rescue teams (OAR 437-02-182(4)(b)).
 - e. At least two of the three members shall be available within five minutes to the confined space in the event of an emergency.
 - f. Team members shall be trained in basic CPR and first aid.
 - g. All rescue equipment shall be readily available.
 - h. Anytime the rescue team is activated an unusual incident report shall be completed with measures needed to prevent similar occurrences.

X. Training

1. Training for each affected employee shall be conducted initially upon assignment, before a change in assigned duties or if there is a change in the permit space operations that presents a hazard that has not been trained to before.
2. Training shall establish employee proficiency in understanding, knowledge, and skills necessary for the safe performance of duties within a confined space.

3. Training will be repeated whenever there is reason to believe that entry procedures have been violated or there are inadequacies in the employees knowledge, skill, or understanding of confined space procedures and duties.
4. Attendants/Entry Supervisors shall also:
 - a. Be trained in all duties of authorized entrants including knowledge of the hazards faced in the permitted entry, behavioral effects, and the signs, symptoms, and consequences of hazard exposure.
 - b. Have a high level of proficiency and knowledge of non-entry rescue equipment and techniques and all methods of available communication with additional personnel, such as rescue services.
 - c. Be trained to be familiar with the unit's emergency procedures.
5. All training shall be documented to include the employee's name, the signature of the trainers, and the dates of training.
6. Functional unit's rescue and emergency teams:
 - a. Each member of the rescue team shall be provided with and trained to use properly the personal protective equipment (PPE) and rescue equipment necessary for making rescues from the permit space. This may include but is not limited to; retrieval systems, SCBA's, body harness systems, etc.
 - b. Each member of the rescue team shall be trained to perform the assigned rescue duties.
 - c. Each member shall also receive the training required of authorized entrants.
 - d. All members of the rescue team shall perform simulated confined space rescues at least annually in those types of structures they are expected to perform rescues within. Simulated rescues must include removing a dummy, mannequin, or personnel through openings or portals that represent the size, configuration and accessibility of actual confined spaces.

Y. Authorized entrants shall:

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

2. Know how to use equipment necessary for the entry and work within the permit space.
3. Communicate with the attendant as necessary, so that the attendant may monitor entrant(s) status and to enable the attendant to alert the entrant(s) of the need to evacuate the space.
4. Alert the attendant whenever:
 - a. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation; or
 - b. When a prohibited condition is detected.
5. Exit from the permit space:
 - a. Upon recognizing any warning sign or symptom of exposure to a dangerous situation; or
 - b. When a prohibited condition is detected; or
 - c. When an evacuation alarm is activated.

Z. Attendants shall:

1. Know the hazards that may be faced during entry including information on the mode, signs, or symptoms and consequences of the exposure.
2. Be aware of possible behavioral effects of hazard exposure on authorized entrants.
3. Continuously maintain an accurate count of entrants in the permit space and means used to identify entrants.
4. Remain outside the permit space during entry operations until relieved by another trained attendant.
5. Assure that acceptable entry conditions are maintained.
6. Communicate with the authorized entrants as necessary to monitor their status and to alert them of the need to evacuate the space if needed.
7. Monitor the activities inside and outside the space to determine if it is safe for entrants to remain in the space and shall order the entrants to evacuate if any of the following conditions occur:
 - a. A prohibited condition is detected; or

- b. The entrants show behavioral effects of hazard exposure; or
 - c. A situation is detected outside the permit space that could endanger the entrants; or
 - d. The attendant cannot effectively and safely perform all the duties required of the position.
- 8. Summon rescue and emergency services as soon as it is determined that the entrants may need assistance to escape from the permit space.
 - 9. Take the following action when unauthorized persons approach or enter a permit space while entry is underway:
 - a. Warn the unauthorized persons that they must stay away from the permit space.
 - b. Advise the unauthorized persons that they must exit immediately if they have entered the permit space.
 - c. Inform the entrants and the entry supervisor that unauthorized persons have entered the permit space.
 - 10. Perform non-entry rescues as specified by the employer's rescue procedure.
 - 11. Perform no other duties that might interfere with the primary duty to monitor and protect the entrants.
- AA. Entry supervisors shall, (If the entry supervisor is also the attendant all the duties of the attendant shall also apply):
- 1. Know the hazards that may be faced during the entry including information on the mode, signs, or symptoms and consequences of the exposure and communicate this to entrants and attendants.
 - 2. Verify that all tests specified by the permit have been conducted.
 - 3. Verify that all procedures and equipment needed are in place before signing the permit to allow entry into the permit space.
 - 4. Terminate the entry and cancel the permit if:
 - a. The operations covered by the permit are completed; and
 - b. Conditions that are not allowed under the permit arise in or near the permit space.
 - 5. Verify that rescue services are available and that the means for

summoning them are operational.

6. Remove unauthorized individuals who enter or who attempt to enter the permit space during entry operations. If the entry supervisor is also the attendant other personnel shall be notified to remove unauthorized individuals.
7. Assure that operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained.

III. IMPLEMENTATION

This policy shall be adopted immediately without further modification.

CONFINED SPACE ASSESSMENT

Location of Space: _____

Date Assessment Made: _____

Description _____ of _____ Space:

Evaluator: _____

IS THE SPACE A CONFINED SPACE?

1. Is the space large enough and so configured that an employee can bodily enter and perform assigned work? Yes No
2. Does the space have limited or restricted means for entry or exit? Yes No
3. Is the space not designed for continuous occupancy? Yes No

IF THE ANSWER IS YES TO ALL THREE OF THE ABOVE, THE SPACE IS A CONFINED SPACE

DOES IT REQUIRE A PERMIT?

1. Does the space have the potential to contain a hazardous atmosphere? Yes No

A hazardous atmosphere is one 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:

- ◆ *Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL)*
- ◆ *Airborne combustible dust at a concentration that meets or exceeds its LFL*
- ◆ *Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent*

- ◆ Atmospheric concentration of any substance for which a dose or a permissible exposure limit (PEL) is published in OR-OSHA regulations (OAR 437, Division 2, Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances) and which could result in employee exposure in excess of its dose or PEL.
- ◆ Any other atmospheric condition that is immediately dangerous to life or health (IDLH). The IDLH is any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects of that would interfere with an individual's ability to escape unaided from a permit space.

2. Does the space contain material that has the potential for engulfing an entrant? Yes No

Engulfment means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be inhaled 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.

3. 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 No

4. Does the space contain any other recognized serious safety or health hazard (OAR 437, Division 2 Subdivision J)? Yes No

IF THE SPACE HAS ONE OR MORE OF THE ABOVE CHARACTERISTICS, IT IS A PERMIT REQUIRED CONFINED SPACE.

SPACE CLASSIFICATION:

- NOT A CONFINED SPACE
- NON-PERMIT CONFINED SPACE
- PERMIT CONFINED SPACE

Safety Manager or Authorized Individual

Date

CONFINED SPACE PERMIT

Date: _____ Time: _____ Authorized Duration: _____

Entrant Supervisor: _____

Confined Space Location: _____

Purpose of Entry: _____

Authorized Entrants	Authorized Attendants
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

PERMIT SPACE HAZARDS

- Oxygen Deficiency (less than 19.5%)
- Oxygen Enrichment (greater than 23.5%)
- Flammable Gases or Vapors (greater than 10% of LFL)
- Airborne Combustible Dust (meets or exceeds LFL)
- Toxic Gases or Vapors (greater than PEL)
- Mechanical Hazards
- Electrical Hazards
- Engulfment
- Other _____

PREPARATION FOR ENTRY

- Notification of Affected Departments
- Notification of Master Control and Emergency Rescue Services that a Permit Confined Space Entry is to Begin.
- Personnel Awareness:
 - Pre-Entry Briefing on Specific Hazards and Control Methods
 - Other _____
- Confined space preparation:

<input type="checkbox"/> Equipment Cleaned	<input type="checkbox"/> Equipment Flushed	<input type="checkbox"/> Purged
<input type="checkbox"/> Ventilated	<input type="checkbox"/> Atmosphere test	<input type="checkbox"/> Barriers
- Isolation Methods:

<input type="checkbox"/> Electrical Lock-Out	<input type="checkbox"/> Tagged	<input type="checkbox"/> Tested
<input type="checkbox"/> Lines Blinded	<input type="checkbox"/> Disconnected	<input type="checkbox"/> Tested
<input type="checkbox"/> Mechanical Uncoupled	<input type="checkbox"/> Blocked	<input type="checkbox"/> Other: _____
- Additional Permits:

<input type="checkbox"/> Hot work	<input type="checkbox"/> _____	Other: _____
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Date: _____ Time: _____
Time: _____

Date: _____

CONFINED SPACE ENTRY HOT WORK PERMIT

THIS PERMIT IS TO BE USED WITH THE CONFINED SPACE WORK PERMIT WHEN ANY WORK IS TO BE DONE IN A CONFINED SPACE.
ATTACH TO CONFINED SPACE PERMIT.

Location of Work: _____

Nature of Work: _____

Special Fire Hazards: _____

Supervisor in Charge of Work: _____

CHECK LIST-SPECIAL REQUIREMENTS

- | | | | |
|----|---|------------------------------|-----------------------------|
| 1. | Vessel/Tank Purge – Flush & Ventilate | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Type of Deposit or Material in Tank: _____ | | |
| | ◆ Method of Cleaning: _____ | | |
| 2. | Fire Prevention Precautions (fire watch, etc) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. | Ventilation for Welding Fumes: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | Types: _____ | | |
| 4. | Isolation: Lock-out | | |
| | ◆ Electrical: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Mechanical: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Gas Lines: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Other: _____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Types: _____ | | |
| 5. | Additional Personal Protective Equipment Needed | | |
| | ◆ Respirator: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Types: _____ | | |
| | ◆ Welding Helmet: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Hearing Protection: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | ◆ Protective Clothing: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Date & Time: _____

Issued: _____ Expired or Cancelled: _____

Entrants: _____

Attendants: _____

Supervisor's Signature: _____