

Confined Space Program

(EHS Program Manual 7.3)



1.0 Overview

Environmental Health and Safety (EHS) at Weill Cornell Medicine (WCM) has developed this Confined Space Program. The Confined Space Program promotes a safe work environment and complies with the Occupational Safety and Health Administration (OSHA) Permit-Required Confined Space Standard (29 CFR 1910.146).

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3.0 Objectives

Many workplaces contain spaces considered "confined" due to configurations that hinder the activities of employees entering, working in, or exiting spaces.

OSHA defines a confined space as any space that meets all of the following criteria:

- Is large enough and so configured that an employee can bodily enter and perform assigned work., and;
- Has a restricted means of entry or exit, and;
- Is not designed for continuous employee occupancy.

Examples of confined spaces include tanks, pits, certain tunnels, utility vaults, and boilers.

There are many instances where employees who work in confined spaces may face an increased risk of exposure to serious hazards. In some cases, confinement poses entrapment hazards. In other instances, working in a confined space forces employees to work close to physical hazards, such as the moving parts of machinery. Confinement could lead to the creation of hazards, such as asphyxiating or oxygen-depleted atmospheres. OSHA uses the term "permit-required confined space" to describe those spaces that meet the definition of a confined space and also pose serious health or safety hazards.

The Confined Space Program should be used in conjunction with other EHS safe work practices, including but not limited to: the use of Personal Protective Equipment (PPE), the safe handling of hazardous materials, or isolation of energy sources (Lockout/Tagout).

This Program aims to protect WCM staff and outside contractors from the health and safety risks associated with working in confined spaces.

4.0 Applicability

The procedures described in this manual apply to all WCM employees and contractors who may encounter or work in or around confined spaces during the course of their work.

5.0 Responsibilities

5.1 ENVIRONMENTAL HEALTH AND SAFETY (EHS)

EHS duties include:

- Develop, administer, and manage the Confined Space Program.
- Audit all WCM facilities for spaces that meet the definition of a "Permit-Required" space and ensure appropriate signage and identification is posted as necessary.
- Identify and document all the hazards associated with each permit-required space.
- Provide annual training for all personnel whose work may require entry into confined spaces, and as needed for others who may encounter confined spaces.
- Evaluate all temporary reclassifications of permit spaces containing atmospheric, biological, or chemical hazards to determine if safe entry is possible.
- Review Confined Space Entry Permits prior to entry where entry requires full permit procedures.
- Conduct annual review of this written program to include all completed entry permits and reclassification checklists.
- Inspect identified permit-required confined spaces to evaluate if unauthorized entry has occurred or if new hazards have been introduced.
- Review outside contractors' written Confined Space policies, training certificates, and Safety Data Sheets (SDS's).

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5.2 ENGINEERING AND MAINTENANCE (E&M)

E&M responsibilities include:

- Recognize confined spaces and differentiate between Permit-Required and Non-Permit-Required Confined Spaces.
Note: WCM employees may not enter “Permit-Required” confined spaces unless that space is temporarily reclassified as “non-permit” based upon the requirements of Section 7 of this program and all procedures for reclassifying the space have been properly executed. Additionally, E&M will not reclassify and enter any permit-space that is listed as having an atmospheric, biological, or chemical hazard in Appendix A of this program unless entry is authorized by EHS.
- Notify EHS when confined space entry work is scheduled to be performed by outside contractors.
- Provide EHS with their Contractor’s Confined Space Program and training records at least 7 days prior to entry to ensure that it is consistent with the WCM Confined Space Program.
- Notify EHS of any incidents that occur in connection with any confined space entry.

5.3 DEPARTMENTS AND SUPERVISORS

WCM Department and Division Supervisors must:

- Implement the Confined Space Program.
- Request initial and refresher training from EHS as needed.
- Notify EHS upon discovery of any potential Permit-Required Confined Spaces that have not been labeled or documented.
- Inform EHS of any scheduled confined space entry work to be performed by outside contractors.
- Notify EHS of any incidents that occur in connection with any confined space entry.

5.4 CAPITAL PLANNING AND PROJECT MANAGERS

Capital Planning and Project Managers must:

- Implement the Confined Space Program.
- Notify EHS upon discovery or construction of any potential Permit-Required Confined Spaces, or of planned work that would potentially impact Permit-Required Confined Spaces.
- Inform EHS of any scheduled confined space entry work to be performed by outside contractors.
- Notify EHS of any incidents that occur in connection with any confined space entry.

5.5 CONTRACTORS

Contractor duties include:

- Provide EHS with their Confined Space Program and training records at least 7 days prior to entry to ensure that it is consistent with the WCM Confined Space Program requirements.
- Implement their (Contractor’s) Confined Space Program when working in any confined space at WCM.
- Provide all safety equipment necessary to make entry, including but not limited to: O₂/CO/H₂S/LEL monitors, lifelines, harness, retrieval systems, etc.
- Conduct all required testing of the space.
- Develop rescue plans when entry is to be made under full permit conditions and submit to EHS for review.
- Provide a copy of all completed permits to EHS following entry.

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6.0 Classification of Confined Spaces

Many spaces on the WCM campus can be considered "confined" due to configurations that hinder the activities of employees or contractors entering, working in, or exiting the spaces.

OSHA defines a confined space as a space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work,
- Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits).; and
- Is not designed for continuous employee occupancy.

WCM is required to evaluate each "confined space" and determine its classification as either a "Non-Permit" or a "Permit-Required" space.

6.1 NON-PERMIT CONFINED SPACE

The term "non-permit confined space" refers to 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.

When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, EHS should be contacted to reevaluate that space and, if necessary, reclassify it as a permit-required confined space. EHS will conduct air monitoring if a hazard will be temporarily created in a non-permit confined space during work.

6.2 PERMIT-REQUIRED CONFINED SPACE

A Permit-Required Confined Space has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere.
- Contains a material that has the potential to engulf an entrant.
- Has an internal configuration such that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazard.

Examples of Permit-Required Confined Spaces at WCM include the acid neutralization tanks in the basement of the 1300 York Avenue complex and the S Building. Refer to Appendix A for a full list of Permit-Required Confined Spaces at WCM.

7.0 Temporary Reclassification of a Permit-Required Space

7.1 TEMPORARY RECLASSIFICATION

A space classified by EHS as permit-required may be temporarily reclassified as a non-permit confined space if all of the following specific conditions listed below are met at the time of entry:

- There are no atmospheric, biological, or chemical hazards listed for the space in Appendix A of the WCM Confined Space Program, and;
- All hazards within the space can be eliminated without entry, and;
- No hazards (including atmospheric) will be introduced to or created within the space during the entry operation.

The authority to temporarily reclassify a "permit-required" space to non-permit status applies only to "Permit-Required" spaces that are not listed as having an atmospheric, biological, or chemical hazard in Appendix A of this program.

If the space to be reclassified is listed as having an atmospheric, biological, or chemical hazard under normal permit-required conditions, EHS must evaluate the space, the work to be performed, and the required personal protective equipment in order to determine whether reclassification is possible and authorize the entry if the criteria are met.

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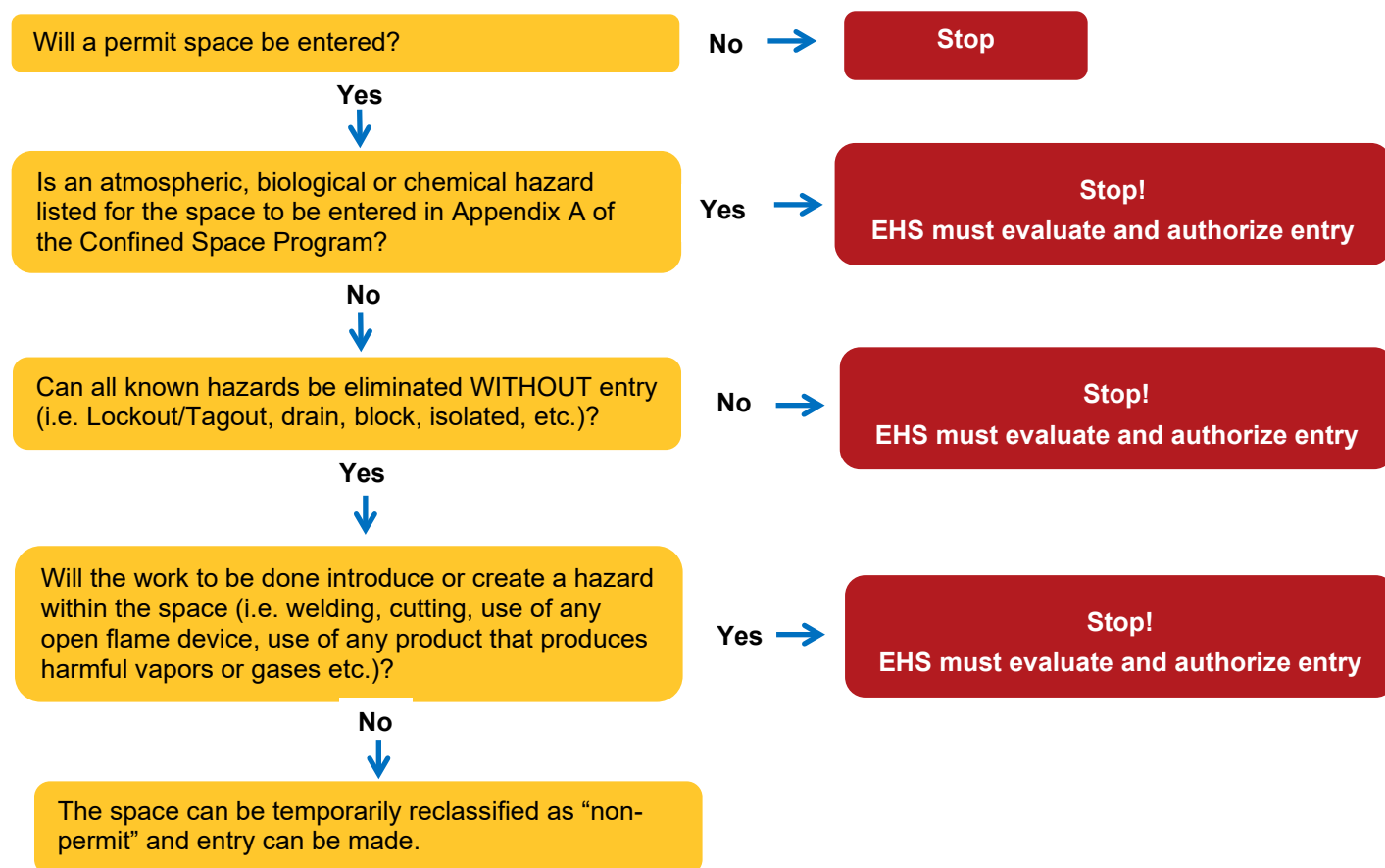
This reclassification is valid only for the specific entry taking place on the date and time annotated on the reclassification checklist. If personnel leave the space/worksite and then return, the space must be re-evaluated to ensure conditions have not changed and a new reclassification checklist completed, otherwise, the space is considered permit-required.

If the conditions for reclassification listed above are met, then entry into the space can be made by following the procedure in [Section 7.3](#) of this program without an Attendant or the need to establish a rescue plan.

After all work in the space has been completed and the entry terminated, the classification of this space returns to "Permit-Required."

7.2 DECISION TREE FOR TEMPORARY RECLASSIFICATION

WCM Employees can determine if a Permit-Required Confined Space can be Temporary Reclassified as a non-permit space by following this decision tree.



7.3 PROCEDURE FOR TEMPORARY RECLASSIFICATION

Employees wishing to temporarily reclassify a permit-required confined space to a non-permit space must document their evaluation of the space and the work to be performed within the space on the WCM Permit-Required Confined Space Temporary Reclassification Checklist. A sample of the Reclassification Checklist Form is shown in [Appendix B](#).

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- **Section 1:** General information about the space to be entered must be documented in Section 1 of the Checklist. Information required includes the location and description of the space; the EHS tag number, and the purpose for entry.
 - EHS tag numbers are listed in [Appendix A](#) as well as on a label affixed to the signage that identifies the space as Permit-Required.
- **Section 2:** Hazards associated with the space to be entered must be documented in Section 2. This can be determined by reviewing [Appendix A](#), as well as evaluating the space and the work to be performed within the space. Section 2 is also be used to document the methods used to eliminate all hazards identified.
 - If an atmospheric, biological, or chemical hazard is listed for the space in Appendix A, EHS must evaluate and authorize entry in Section 5.C.
 - If a hazard cannot be eliminated without entry, EHS must evaluate and authorize entry in Section 5.C.
 - If the work to be performed within the space creates a hazard (i.e., use of open flame or spark-producing equipment, products that emit harmful vapors or gases, etc.), EHS must assess and authorize entry in Section 5.C.
- **Section 3:** If all conditions can be met for reclassification, employees will complete the checklist by dating, printing, and signing in Section 3.
- **Section 4:** When the entry is complete, employees will terminate the reclassification of the space by dating and signing the checklist in Section 4.
 - The completed checklist must be posted at the confined space during the period of entry. When the entry is complete, the form must be returned to the E&M department supervisor.
- **Section 5:** Section 5 is to be completed by EHS when;
 - An atmospheric, biological or chemical hazard is listed for a space to be entered, or;
 - An identified hazard cannot be eliminated, or;
 - A hazard will be introduced into or created within the space by the work to be performed.

8.0 Identification and Warning

EHS has identified, classified, and recorded the location of permit-required confined spaces at WCM. A list of these spaces is available in [Appendix A](#) and is kept on file in the EHS office and on the EHS Salute platform.

Project Managers should provide this manual to contractors working at WCM.

Contractors working at WCM must read and ensure all work is performed in compliance with this manual and 29 CFR 1910.146.

If a location on campus appears to meet the definition of a permit-required confined space, but is not posted as such, and does not appear in Appendix A, contact EHS.

Permit-Required Confined Spaces inside buildings are identified and posted with appropriate signs to guard against the entry by unauthorized individuals. Permit-Required Confined Space signs at WCM must state, "Danger- Confined Space Enter by Permit Only" (see Figure 7.1 below).



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When a new confined space is introduced, EHS will identify the space, evaluate it to determine if it is permit-required, add it to the existing list of permit-required confined spaces located at WCM, and post a sign and EHS tag on the outside of the space. The results of the evaluation will be recorded in writing and available to all personnel.

If an existing permit-required confined space is removed from service, then EHS will update the list of permit-required confined spaces to reflect that change.

9.0 Unauthorized Entry

Unauthorized entry into Permit-Required Confined Spaces will be prevented using a combination of signs and placards, training, and physical barriers to bar or lock the entrance or entrance cover.

If any employee is found entering the space who is not authorized to do so, EHS and the employee's supervisor must be notified immediately.

10.0 Introducing Hazards into Non-Permit Confined Space

A variety of tasks and work activities have the potential to create serious safety or health hazards in Non-Permit Confined Spaces. If hazards will be introduced into a space, Permit-Required Confined Space or alternate entry procedures may be required.

All work that will introduce hazards into a non-permit confined space must first be coordinated and evaluated by EHS. This includes all hot work and/or work involving the use of chemicals or products which have inhalation hazards associated with them. EHS will conduct an assessment of the space and make recommendations for Personal Protective Equipment and/or engineering controls. EHS will also conduct air monitoring for all WCM work activities that may introduce atmospheric hazards into a non-permit confined space.

Contractors whose work will introduce hazards into non-Permit confined spaces must also have that work evaluated by EHS. The WCM Project Manager or representative from the contractor must contact EHS prior to entry to have the work evaluated.

If the hazards created by the work cannot be eliminated, the contractor must implement their permit-required confined space entry procedures or alternate entry requirements. Any required atmospheric monitoring, additional PPE, or other work equipment must be provided by the contractor. If any unforeseen hazards are found during entry into a non-permit space, the contractor must notify EHS immediately.

11.0 Permit-Required Confined Space Entry

Due to the extensive training, equipment, and personnel requirements, WCM employees will not enter Permit-Required Confined Spaces unless the space has been temporarily reclassified as a non-permit space.

Entries into permit-required confined spaces that cannot be reclassified must be authorized by EHS or will be conducted by authorized contractors whose confined space plans have been reviewed by EHS personnel.

12.0 Contractors

When a contractor is required to perform work that will involve entry into a permit-required confined space, project managers must arrange for a contractor briefing from EHS prior to the entry.

EHS will review the scope of the work/project and if entry into a permit-space is necessary.

The following information must be shared with the contractor:

- That the workplace contains permit spaces and that permit space entry is allowed only through compliance with a written permit space program that must be provided to EHS for review.

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- The location of all permit-required confined spaces that the contractor may encounter as part of their normal work activities.
- The elements, including the hazards identified and WCM's experience with the space, that make it a permit space.
- Any precautions or procedures that WCM has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.

EHS will also:

- Coordinate entry operations with the contractor when both WCM personnel and contractor personnel will be working simultaneously in or near permit spaces.
- Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed as well as regarding any hazards confronted or created in permit spaces during entry operations.

Contractors must:

- Submit their written Confined Space policies, programs or procedures, training certificates, and Safety Data Sheets (if appropriate) to EHS at least seven days prior to the commencement of work for review.
- Implement their policies, programs, or procedures when working in any WCM permit space.
- Provide all safety equipment necessary to make entry, including but not limited to: O₂/CO/H₂S/LEL monitors, lifelines, harness, retrieval systems, etc.
- Conduct all required testing prior to entry and document results.
- Develop a plan for means of rescue when entry is to be made under full permit procedures and submit to EHS for review.
- Coordinate entry operations with EHS, when both WCM and contractor personnel will be working simultaneously in or near permit spaces.
- Inform EHS of any hazards confronted, or created in permit spaces, either through a debriefing or during the entry operation.
- Provide copies of all cancelled permits and monitoring records to EHS following permit space entry.

13.0 Training

EHS will provide confined space training to WCM employees whose work may require entry into a temporarily reclassified permit-required confined space, and to other employees who may encounter confined spaces during their normal duties as needed.

This training must be attended by supervisors who have employees that may work near or encounter permit-required confined space, supervisors and employees that have confined spaces in their work areas, and employees who hire contractors that will be entering WCM spaces. Refresher training will be provided annually for these employees.

Contractors must provide proof of confined space entry training to EHS for review prior to all scheduled entries. In addition, contractors who are required to monitor the atmosphere in a confined space must be trained on the use of the monitoring equipment. Proof of this training must be provided to EHS.

14.0 Record Retention, Availability, and Review

14.1 RECORDKEEPING

All records with respect to entry and work in a confined space are retained for no less than:

- 1 year if no incident or unplanned event occurred during the entry.
- 2 years if an incident or unplanned event occurred during the entry.

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14.2 TRAINING RECORDS

Contractor training documents and confined space programs will be kept on file for one year from the date of entry completion.

14.3 PROGRAM REVIEW

EHS will review this program as well as completed permits and checklists on a yearly basis and make revisions to the program as necessary.

The review will include a formal investigation of any incidents that occurred or nonconformities found during confined space entry, and will consist of:

- Categorization of the incident.
- Investigation of nonconformities.
- Identification of the root cause.
- Preventative actions that should be implemented.
- Analysis of the results.
- Effectiveness of corrective and preventative actions.

If a systemic issue is found during the review, or if major policy changes are needed or made by any program stakeholders, a formal program update will occur.

15.0 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 confined 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, performing all attendant duties assigned in the employer's permit space program.
- **Authorized Entrant:** An employee who is authorized by the employer to enter a permit space.
- **Confined space:** A space that:
 - Is large enough and so configured that an employee can bodily enter and perform assigned work; and
 - Has limited or restricted means for entry or exit; and
 - Is not designed for continuous employee occupancy.
- **Dangerous Air Contamination:** An atmosphere capable of causing death, injury, acute illness, or disablement due to the presence of flammable, explosive, toxic, or incapacitating substances.
- **Emergency:** Any occurrence (including any failure of hazard control or monitoring equipment) or event, internal or external to the permit space, that could endanger entrants.
- **Engulfment:** The surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance 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.
- **Entry:** 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 any part of the entrant's body breaks the plane of an opening into the space.
- **Entry Permit:** The written or printed document provided by the employer to allow and control entry into a permit space.
- **Entry Supervisor:** The person (such as the employer, foreman, or crew chief) 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.

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Note: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required for each role he or she fills. The duties of an entry supervisor may also be passed from one individual to another during the course of an entry operation.

- **Hazardous Atmosphere:** An atmosphere that may expose employees to the risk of death, incapacitation, and/or 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:
 - Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
 - Flammable gas, vapor, or mist in excess of 10 percent of its lower explosive limit (LEL) or lower flammable limit (LFL);
 - Airborne combustible dust at a concentration that meets or exceeds its LFL
(Note: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less);
 - Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, of 29 CFR 1910; and which could result in employee exposure in excess of its dose or permissible exposure limit;
(Note: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, or impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision);
 - Any other atmospheric condition that is immediately dangerous to life or health.
- **Immediately Dangerous to Life or Health (IDLH):** Any condition that poses an immediate or delayed threat to life by causing irreversible adverse health effects or interfering with an individual's ability to escape unaided from a permit space.
- **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.
- **Permit-Required Confined Space:** A confined space that has one or more of the following characteristics:
 - Contains or has a potential to contain a hazardous atmosphere
 - Contains a material that has the potential for engulfing an entrant
 - 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
 - Contains any other recognized serious safety or health hazard
- **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 (including a retrieval line, chest or full-body harness, wristlets if appropriate, and a lifting device or anchor) 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. Testing includes specifying the tests that are to be performed in the permit space.

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Appendix A – Permit-Required Confined Spaces at WCM

Location	Salute ID	Room Type	Description of Space	Hazard(s)
1300 York				
A0034	1010000135	Mechanical Equipment	Acid neutralization tank	Engulfment, chemical, atmospheric
A0034	1010000136	Mechanical Equipment	Ejector pumps pit	Engulfment
A0034	1010000303	Mechanical Equipment	Duct leading to Exhaust Fan EF-A-SB-17	Physical-unguarded rotating fan blades
A-1101A	1010000137	Roof	Domestic Water Tank	Engulfment
B00003	1010000138	Mechanical Equipment	Ejector pumps pit	Engulfment
D0016	1010000139	Mechanical Equipment	Acid neutralization tank	Engulfment, chemical atmospheric
1305 York				
Y1498B	1010000305	Mechanical Equipment	Duct to Exhaust Fan Unit EF-Y-14-1	Physical- unguarded rotating fan blades
Y1498B	1010000306	Mechanical Equipment	Duct to Return Fan Unit RF-Y-14-1	Physical- unguarded rotating fan blades
Y1498B	1010000307	Mechanical Equipment	Duct to Return Fan Unit RF-Y-14-2	Physical- unguarded rotating fan blades
Y1498B	1010000308	Mechanical Equipment	Duct to Return Fan Unit RF-Y-14-3	Physical- unguarded rotating fan blades
Y1498B	1010000309	Mechanical Equipment	Duct to Return Fan Unit RF-Y-14-4	Physical- unguarded rotating fan blades
Y1598	1010000310	Mechanical Equipment	Duct to Return Fan Unit RF-Y-15-1	Physical- unguarded rotating fan blades
Y1598	1010000311	Mechanical Equipment	Duct to Return Fan Unit RF-Y-15-2	Physical- unguarded rotating fan blades
Y1598	1010000312	Mechanical Equipment	Duct to Return Fan Unit RF-Y-15-3	Physical- unguarded rotating fan blades
Y0098C	1010000304	Mechanical Equipment	Duct to Return Fan Unit RF-Y-SB-1	Physical- unguarded rotating fan blades
Y0004	1010000377	Fuel Storage	Diesel Fuel Tank	Engulfment, chemical, atmospheric

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Location	Salute ID	Room Type	Description of Space	Hazard(s)
Y00098C	1010000301	Mechanical Equipment	Sewage Ejector Pumps Pit #1	Engulfment, atmospheric, biological
Y00098C	1010000302	Mechanical Equipment	Sewage Ejector Pumps Pit #2	Engulfment, atmospheric, biological
Y00098C	1010000140	Mechanical Equipment	Ground Water Sump Pit	Engulfment
S Building				
Roof	1010000141	N/A	Domestic Water Tank	Engulfment
Roof	1010000640	Mechanical Equipment	Upper level of Cooling Tower CT-S-13R-1A	Physical-unguarded rotating fan blades, pulleys and belts
Roof	1010000641	Mechanical Equipment	Upper Level of Cooling Tower CT-S-13R-1B	Physical-unguarded rotating fan blades, pulleys and belts
S-0.09	1010000142	Mechanical Equipment	Acid neutralization tank	Engulfment, chemical, atmospheric
S-0.09	1010000484	Mechanical Equipment	Duct leading to Return Air Fan (P.O.150-01-RF-1)	Physical-unguarded rotating fan blades
S-0.09	1010000485	Mechanical Equipment	Ground water, condensation ejector pumps pit	Engulfment
S-0.09	1010000486	Mechanical Equipment	AHU Condensation Sump Pit	Engulfment
S-1100	1010000483	Mechanical Equipment	A/C Unit 11-2	Physical- unguarded rotating shaft
S-1100	1010000482	Mechanical Equipment	A/C Unit 11-1	Physical- unguarded rotating shaft
S-1100	1010000481	Mechanical Equipment	A/C Unit 11-1A	Physical- unguarded rotating shaft
S-1195	1010000480	Mechanical Equipment	Duct leading to exhaust fan (EX-3)	Physical- unguarded rotating fan blades
S-1100	1010000479	Mechanical Equipment	Duct leading to exhaust fan (EX-7)	Physical- unguarded rotating fan blades
S-1100	1010000477	Mechanical Equipment	Duct leading to exhaust fan (EF-6)	Physical- unguarded rotating fan blades
S-1100	1010000478	Mechanical Equipment	Duct leading to exhaust fan (EF-5)	Physical- unguarded rotating fan blades
S-1100	1010000645	Mechanical Equipment	R.O. Water System Bulk Storage Tank	Engulfment

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Location	Salute ID	Room Type	Description of Space	Hazard(s)
Roof	1010000642	Mechanical Equipment	Cooling Tower CT-3 Fan Motor Compartment	Physical- unguarded rotating fan blades
Roof	1010000643	Mechanical Equipment	Cooling Tower CT-2 Fan Motor Compartment	Physical- unguarded rotating fan blades
Roof	1010000644	Mechanical Equipment	Cooling Tower CT-1 Fan Motor Compartment	Physical- unguarded rotating fan blades
SI Building				
S055	1010000144	Mechanical Equipment	Sewage Ejector Pumps Pit	Engulfment, atmospheric, biological
Olin Hall				
OH003	1010000145	Mechanical Equipment	Sewage Ejector Pumps Pit	Engulfment, atmospheric, biological
OH-Roof	1010000313	Mechanical Equipment	Duct leading to Exhaust/Return Air Fan Unit #1	Physical- unguarded rotating fan blades
OH-Roof	1010000314	Mechanical Equipment	Duct leading to Exhaust/Return Air Fan Unit #2	Physical- unguarded rotating fan blades
OH-Roof	1010000146	N/A	Domestic Water Tank	Engulfment
OH-0045	1010000475	Mechanical Equipment	Storm Water Pump Pit	Engulfment
Oxford Building				
OX-B	1010000927	Garage (Room off ramp)	Cooling Tower	Entrapment
Lasdon House				
LH06	1010000147	Mechanical Equipment	Sewage Ejector Pumps Pit	Engulfment, atmospheric, biological
LH-Roof	1010000315	N/A	Cooling Tower CT-LH-R16-1A	Physical-low clearance beneath rotating drive shaft and fan blades (<4')
LH-Roof	1010000491	N/A	Cooling Tower CT-LH-R16-1B	Physical-low clearance beneath rotating drive shaft and fan blades (<4')
LH-Roof	1010000492	N/A	Cooling Tower CT-LH-R16-1C	Physical-low clearance beneath rotating drive shaft and fan blades (<4')
Feil Building				
RR-098H	1010000148	Fuel Storage	Diesel Fuel Tank	Engulfment, chemical, atmospheric

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Location	Salute ID	Room Type	Description of Space	Hazard(s)
RR-098D	1010001197	Mechanical Equipment	R.O. Water System Bulk Tank 1	Engulfment
RR-098D	1010001198	Mechanical Equipment	R.O. Water System Bulk Tank 2	Engulfment
RR-098D	1010001199	Mechanical Equipment	R.O. Water System Bulk Tank 3	Engulfment
RR-098D	1010000150	Mechanical Equipment	Acid neutralization tank #1	Engulfment, chemical, atmospheric
RR-098D	1010000151	Mechanical Equipment	Acid neutralization tank #2	Engulfment, chemical, atmospheric
RR-098D	1010000149	Mechanical Equipment	Storm Water Ejector Pumps Pit	Engulfment
RR-098D	1010000378	Mechanical Equipment	Sewage Ejector Pumps Pit	Engulfment, atmospheric, biological
Belfer Research Building				
Roof	1010000271	Cooling Tower	#1, upper platform	Physical- rotating Fan Blades
Roof	1010000272	Cooling Tower	#2, upper platform	Physical- rotating Fan Blades
Roof	1010000273	Cooling Tower	#3, upper platform	Physical- rotating Fan Blades
1898-D	1010000274	Mechanical Equipment	Liquid Tank	Engulfment
1898-B	1010000275	Mechanical Equipment	Diesel Generator #1, exhaust air duct, louver access	Physical- excessive heat
1898-B	1010000276	Mechanical Equipment	Diesel Generator #2, exhaust air duct, louver access	Physical- excessive heat
1898-B	1010000277	Mechanical Equipment	Diesel Generator #3, exhaust air duct, louver access	Physical- excessive heat
1798A	1010000278	Mechanical Equipment	Liquid Tank #1, R.O. System	Engulfment
1798A	1010000279	Mechanical Equipment	Liquid Tank #2, R.O. System	Engulfment
298A	1010000280	Elevator Mechanical	Hydraulic fluid tank	Engulfment/Chemical
122	1010000281	Acid Waste Collection	Tank 1	Engulfment, chemical, atmospheric

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Location	Salute ID	Room Type	Description of Space	Hazard(s)
122	1010000282	Acid Waste Collection	Tank 2	Engulfment, chemical, atmospheric
Loading Dock	1010000283	N/A	Trash Compactor	Physical-Crush
Loading Dock	1010000494	N/A	Animal Waste Container	Biological
B-1 West	1010000284	Mechanical Equipment	Liquid Tank, R.O. System	Engulfment
B-1 East	1010000285	Mechanical Equipment	Liquid Tank #1 R.O. System	Engulfment
B-1 East	1010000286	Mechanical Equipment	Liquid Tank #2, R.O. System	Engulfment
B-1 0.98C	1010000287	Mechanical Equipment	Storm Water Tank	Engulfment
B-3 000.98G	1010000288	Mechanical Equipment	Sewage ejector pump pit #1	Engulfment, atmospheric, Bio
B-3 000.98G	1010000289	Mechanical Equipment	Sewage ejector pump pit #2	Engulfment, atmospheric, Bio
B-3 000.98G	1010000290	Mechanical Equipment	Ground water drain pit	Engulfment/Fall
B-3 000.12B	1010000291	Mechanical Equipment	Acid ejector pump pit	Engulfment, Chemical, Atmospheric
B-3 000.12B	1010000292	Mechanical Equipment	Pit adjacent to acid ejector pit	Physical- excessive heat/burns
B-3 000.98F	1010000293	Mechanical Equipment	Sewage ejector pump pit #1	Engulfment, atmospheric, Bio
B-3 000.98F	1010000294	Mechanical Equipment	Sewage ejector pump pit # 2	Engulfment, atmospheric, Bio
B-3 000.98F	1010000295	Mechanical Equipment	Ground water drain pit	Engulfment
B-3 000.98C	1010000296	Fuel Storage	Fuel tank	Engulfment, Chemical, Atmospheric
B-3 000.98E	1010000297	Fuel Storage	Fuel tank	Engulfment, Chemical, Atmospheric
B-3M 000.M.98h	1010000298	Aquatics pump	Tank #1	Engulfment
B-3M 000.M.98h	1010000299	Aquatics pump	Tank #2	Engulfment

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Location	Salute ID	Room Type	Description of Space	Hazard(s)
B-3M 000.M.98h	1010000300	Aquatics pump	Tank #3	Engulfment
Roof	1010000493	Cooling Tower	#4, upper platform	Physical- rotating Fan Blades

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Appendix B: Permit-Required Confined Space Temporary Reclassification Checklist

Permit-Required Confined Space Temporary Reclassification Checklist



A space classified by EHS as a **permit-required** confined space can be **temporarily** reclassified to a non-permit space and entered by employees **only** if the conditions in Section 3 can be met. (See decision tree in Section VI of form.)

This reclassification is valid only for the specific entry being made at the date and time annotated on this form. If employees leave the worksite and then return, the space must be re-evaluated, and a new checklist completed to ensure conditions have not changed. Once completed, please submit this form to the supervisor.

SECTION I: General Information

Building:	Room #:	EHS Tag #:	Description of Space:
Purpose of Entry (Required):			

SECTION II: Hazard Checklist

Review **Appendix A** of the WCM Confined Space Program, evaluate the space and the work to be performed within the space.

For any hazard marked, yes, describe how the hazard will be eliminated without entry

Hazard	Yes	No	If Yes, how was hazard eliminated
Atmospheric	<input type="checkbox"/>	<input type="checkbox"/>	(Note- If yes, EHS must evaluate and authorize entry in Section V)
Biological	<input type="checkbox"/>	<input type="checkbox"/>	(Note- If yes, EHS must evaluate and authorize entry in Section V)
Chemical	<input type="checkbox"/>	<input type="checkbox"/>	(Note- If yes, EHS must evaluate and authorize entry in Section V)
Electrical	<input type="checkbox"/>	<input type="checkbox"/>	
Engulfment	<input type="checkbox"/>	<input type="checkbox"/>	
Mechanical	<input type="checkbox"/>	<input type="checkbox"/>	
Extreme temperatures	<input type="checkbox"/>	<input type="checkbox"/>	
Other (Specify)	<input type="checkbox"/>	<input type="checkbox"/>	

SECTION III: Certification That Conditions for Temporary Reclassification Were Met

Place checkmark in the box if the condition can be met

<input type="checkbox"/>	There are no atmospheric, biological or chemical hazards identified for the space in Appendix A of the WCMC Confined Space Program; and
<input type="checkbox"/>	All hazards within the space can be eliminated without entry; and
<input type="checkbox"/>	No hazards (including atmospheric) will be introduced into or created within the space during the entry operation

Employee's signature below certifies that the hazards associated with the space, and the work to be performed within the space were evaluated, all conditions necessary to temporarily reclassify the space to non-permit status were met, and entry can be safely made.

(If any of these conditions cannot be met, EHS must evaluate and authorize the entry.)

Date:	Time:	Employee's Name (Print):	Employee's Signature:
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**Weill Cornell
Medicine**

Revised Jan-19

Environmental Health and Safety

TEL 646-962-7233 WEB weill.cornell.edu/ehs EMAIL ehs@med.cornell.edu
Weill Cornell Medicine | 402 East 67th Street, Room LA-0020 | New York, NY 10065

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**SECTION IV: Cancellation of Reclassification**

When entry is complete, sign and date below to return this space to Permit-Required status.

Date:	Time:	Employee's Name (Print):	Employee's Signature:
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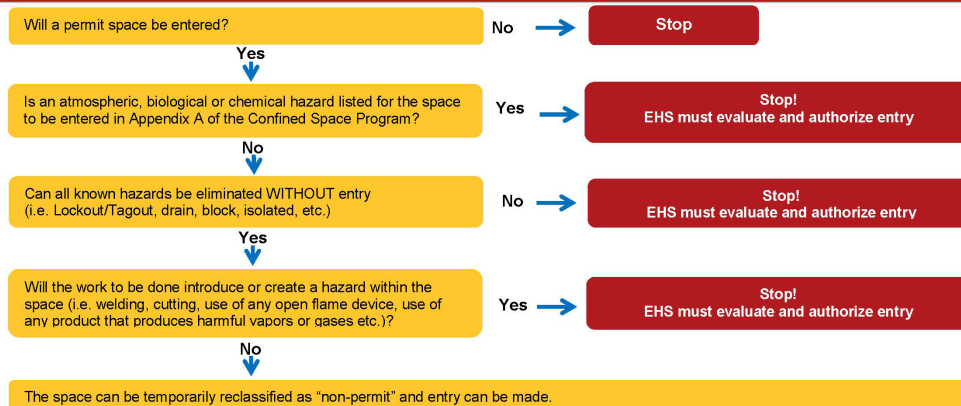
SECTION V: EHS ONLY**V-i: Atmospheric Testing of Space (Required if the atmospheric hazard is identified in Section II)**

Gas Monitor:		Make	Model		Serial No.				
Atmospheric Hazard	Acceptable Concentrations	Tester's Name (PRINTED) and Initials							
		Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8
Time									
Oxygen	>19.5 & <23.5%								
LEL	<10%								
CO	<35 ppm								
H ₂ S	<10 ppm								
Continuous mechanical ventilation required?		Yes		No					

V-ii: List required PPE for entry if biological or chemicals hazards were identified in Section II

V-iii: Signature below verifies that the space and work to be completed within the space were evaluated by EHS and that entry is authorized provided any precautions listed in Section II and V-ii are followed.

Date:	Time:	EHS Authorizing Employee's Name (Print):	Employee's Signature:
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SECTION V: Confined Space Program Decision TreeEnvironmental Health and Safety | Weill Cornell Medicine TEL 646-962-7233 WEB weill.cornell.edu/ehs EMAIL ehs@med.cornell.edu

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