

ATTACHMENT 3-A

CERTIFICATION FOR RECLASSIFICATION OF A PERMIT-REQUIRED CONFINED SPACE TO A NON-PERMIT SPACE

The following confined spaces have been evaluated and determined to be permit-required spaces. Whenever possible, alternative procedures shall be developed to allow the work to be performed without entry into permit-required spaces. Permit-required confined spaces must be posted with signs and may only be entered by qualified employees under compliance with a Confined Space Entry Program. Entrant, attendants, and rescue team members must be trained.

Permit-required spaces may be reclassified as non-permit if there is no potential for atmospheric hazards and if all hazards within the space are eliminated without entry. Elimination of hazards for reclassification must be documented on this certification form.

BUILDING NAME: MCAD Main Building		SIGNATURE:		DATE:
Classification	Description of Space, Location & Comments <i>(Circle space to be entered)</i>	Basis for Determination	Steps to Eliminate Hazards Before Entry	Check Off Steps Completed to Reclassify as <i>Non-Permit</i> Space
Permit-Required Confined Spaces	<ul style="list-style-type: none"> 1. Air Handling Units <ul style="list-style-type: none"> • Rm 203 AHU – Air Handler Rm (Door 1), Fresh Air Chamber (Door 2) • 3rd Floor Mech Rm. AHU #7 - Supply Air Fan Motor Access • Rooftop Units AHU's #1, #2, #3, #4, #5, #6, #12 – 	<ul style="list-style-type: none"> • Hazardous atmosphere? • Engulfment? • Internal configuration? • Other? <p>Potential hazards:</p> <ul style="list-style-type: none"> • Hazardous Energy 	<ol style="list-style-type: none"> 1. Complete lockout/tagout/tryout procedures 2. Verify no serious hazards in space 3. Verify no additional hazards from work activities 	<ul style="list-style-type: none"> <input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No serious hazards in space <input type="checkbox"/> No additional hazards created by work activities

MCAD Confined Space Entry Program

<p>Permit-Required Confined Spaces</p>	<p>Supply Air Fan Motor Access, Return Air Fan Motor Access</p> <ul style="list-style-type: none"> 3rd Floor Restaurant Penthouse AHU's #8, #9 – Supply Air Fan Motor Access 	<p>Potential hazards:</p> <ul style="list-style-type: none"> Hazardous energy 	<p>1. Complete lockout/tagout/tryout procedures 2. Verify no additional hazards from work activities</p>	<p><input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No additional hazards created by work activities</p>
<p>2. Elevator Pits</p> <ul style="list-style-type: none"> South Freight Elevator Pit (Does not communicate with tunnel system.) Cafeteria Elevator Pit (Does not communicate with tunnel system.) <p>Note: Elevator pits that are connected to building tunnel systems may require Confined Space Entry Permit.</p>	<p>Potential hazards:</p> <ul style="list-style-type: none"> Hazardous energy Fall hazards 	<p>1. Complete lockout/tagout/tryout procedures 2. Verify no additional hazards from work activities</p>	<p><input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No additional hazards created by work activities</p>	<p><input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No additional hazards created by work activities</p>
<p>3. Elevator Shafts</p> <ul style="list-style-type: none"> South Elevator North Elevator Cafeteria Elevator 	<p>Potential hazards:</p> <ul style="list-style-type: none"> Hazardous energy Fall hazards 	<p>1. Complete lockout/tagout/tryout procedures 2. Verify no additional hazards from work activities</p>	<p><input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No additional hazards created by work activities</p>	<p><input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No additional hazards created by work activities</p>

Work Performed _____ Date/Time _____ Authorized Employee _____

ATTACHMENT 3-A (continued)

**CERTIFICATION
FOR RECLASSIFICATION OF A
PERMIT-REQUIRED CONFINED SPACE
TO A NON-PERMIT SPACE**

The following confined spaces have been evaluated and determined to be permit-required spaces. Whenever possible, alternative procedures shall be developed to allow the work to be performed without entry into permit-required spaces. Permit-required confined spaces must be posted with signs and may only be entered by qualified employees under compliance with a Confined Space Entry Program. Entrant, attendants, and rescue team members must be trained.

Permit-required spaces may be reclassified as non-permit if there is no potential for atmospheric hazards and if all hazards within the space are eliminated without entry. Elimination of hazards for reclassification must be documented on this certification form.

BUILDING NAME: Morrison Building		SIGNATURE:		DATE:	
Classification	Description of Space, Location & Comments (Circle space to be entered)	Basis for Determination • Hazardous atmosphere? • Engulfment? • Internal configuration? • Other?	Steps to Eliminate Hazards Before Entry	Check Off Steps Completed to Reclassify as Non-Permit Space	
Permit-Required Confined Spaces	1. Vault Exhaust Space	Potential hazards: • Hazardous Energy	1. Complete lockout/tagout/tryout procedures 2. Verify no serious hazards in space 3. Verify no additional hazards from work activities	<input type="checkbox"/> Locked and tagged out <input type="checkbox"/> No serious hazards in space <input type="checkbox"/> No additional hazards created by work activities	

Work Performed _____ Date/Time _____ Authorized Employee _____

ATTACHMENT 3-B

SHORT-FORM ENTRY FORM & PROCEDURES

(To be completed before entry, posted during entry, and filed after work is done.)

- Lockout and tagout hazardous energy.** Lockout and tagout all hazardous energy sources.
- Eliminate hazards to remove entrance cover.** Conditions making it unsafe to remove an entrance cover must be eliminated before cover is removed.
- Guard opening.** The opening must be promptly **guarded** by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and protect each employee working in the space from foreign objects entering the space.
- Test atmosphere.** Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument. Air tests must be performed in the following order: (1) **oxygen content**, (2) **flammable gases and vapors** (3) **toxic air contaminants**. Employees must have the opportunity to observe pre-entry testing. **Record test results.**
- Safe atmosphere.** There may be **no hazardous atmosphere** in the space whenever any employee is inside.
- Provide Adequate Forced Air Ventilation.** Continuous forced air ventilation shall be used, as follows:
An employee may not enter the space until forced air ventilation has eliminated any hazardous atmosphere. Forced air ventilation must be directed to ventilate the immediate areas where each employee is working and continue until all employees have left the space. The air supply for forced air ventilation must be from a **clean source** and must not increase hazards in space. Recommended minimum air volume is **5 times the volume of the confined space before entry, and 6 air changes per hour during entry.**
- Continue Air Tests.** The atmosphere within the space shall be periodically **tested before and during entry as necessary** to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Employees shall have the opportunity to observe the testing. **Record test results.**
- If a hazardous atmosphere is detected during entry:**

Each employee shall leave the space **immediately**, and

The space shall be evaluated to **determine how the hazardous atmosphere developed**, and

Measures shall be taken to protect employees from the hazardous atmosphere before any more entries occur.
- Certification.** The *Lead Maintenance Mechanic* certifies that the space is safe for entry and that the required pre-entry measures have been taken.
Date: _____ Location of space: _____

Specifications of ventilation equipment to be used: _____

Signature of *Lead Maintenance Mechanic*: _____

This certification shall be completed before entry and made available to each employee entering the space (or that employee's authorized representative). THIS SHORT FORM IS ONLY TO BE USED WHEN POTENTIAL HAZARDOUS ATMOSPHERE IS THE ONLY HAZARD, AND CONTINUOUS FORCED AIR VENTILATION IS SUFFICIENT TO MAINTAIN THE SPACE SAFE FOR ENTRY.

ATTACHMENT 3-B (continued)

**- Short-Form Continued -
Initial and Periodic Atmospheric Tests
(Must show acceptable entry conditions exist
throughout the entry operations)**

Time: _____
 Oxygen: _____ % (normal is 20-21%)
 Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)
 Toxic: _____ ppm Hydrogen Sulfide*OR:
 List other Toxics: _____

*NOTE :
*Normal is -2 to +2 ppm hydrogen sulfide on most instruments.
 List expected normal range for other toxics, such as less than 20% (or 1/5) of the
 PEL:* _____

Time: _____
 Oxygen: _____ % (normal is 20-21%)
 Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)
 Toxic: _____ ppm Hydrogen Sulfide*OR:
 List other Toxics: _____

Time: _____
 Oxygen: _____ % (normal is 20-21%)
 Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)
 Toxic: _____ ppm Hydrogen Sulfide*OR:
 List other Toxics: _____

Time: _____
 Oxygen: _____ % (normal is 20-21%)
 Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)
 Toxic: _____ ppm Hydrogen Sulfide*OR:
 List other Toxics: _____

Tester's Signature: _____

List of Instruments Used for Atmospheric Tests:	Calibrated? (Yes - Frequency - Last cal. date)
1.	1.
2.	2.
3.	3.

Tester's Signature: _____

ATTACHMENT 3-C

STANDARD (FULL) CSE PERMIT PROCEDURES

Each standard **Confined Space Entry Permit** must cover the following procedures, if applicable:

1. **Isolating the Space.** The space must be isolated from serious hazards. Circuits must be de-energized and locked out, mechanical equipment must be locked out or guarded, chemical or gas lines that are open must be isolated by blanking/blinding, misaligning or removing a section of the line/pipe/duct, or with a double block and bleed system.
2. **Purging and Ventilating.** Atmospheric hazards must controlled or eliminated.
3. **Barriers.** Pedestrian, vehicle or other barriers must be provided as necessary.
4. **Required Equipment.** Identify and purchase required equipment, including:
 - Remote and personal air monitoring equipment** with appropriate sensors (oxygen/combustible gas/toxic gas) and alarms
 - Ventilation blower(s)** and accessories appropriate for space to be entered
 - Communications equipment** for attendant and authorized entrant(s),
 - Personal protective equipment** for hazards which have been controlled but not been eliminated (gloves, respiratory protection, coveralls, boots, etc.)
 - Lighting equipment** needed to enable employees to see well enough to work safely and exit the space quickly in an emergency
 - Barriers** for pedestrians, vehicles or other external hazards
 - Equipment necessary for safe entrance and exit (**ladders, retrieval systems, etc.**)
 - Rescue and emergency equipment** (unless provided by **Rescue Service**)
Note: Retrieval systems or methods must be used whenever an Authorized 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.** A mechanical device must be available to retrieve personnel from vertical type permit spaces more than **5 feet (1.52 m)** deep.
 - Any other equipment necessary** for safe entry into and rescue from permit spaces. (**Example:** thermometer(s) with remote sampling capabilities for spaces with potential for temperature extremes.)

5. **Equipment Inspections and Maintenance.** Inspect equipment **before and after each use.** Calibrate and check air monitoring equipment **before and after each use.**
6. **Testing and Monitoring.** **Prior to entry,** conditions in the permit space must be tested to determine if acceptable entry conditions exist. Additional testing is required to verify conditions are safe.
7. **Outside Attendant.** For standard entries, **at least one Outside Attendant** must be available.
8. **Assigned Roles.** For standard entries, each person with an active role in entry operations will be identified in advance and provided with required training.
9. **Summoning Rescue Services.** Emergency procedures for standard entries shall include: summoning rescue and emergency services, rescuing entrants from permit spaces, providing necessary emergency services to rescued employees, and preventing unauthorized personnel from attempting rescue.
10. **System for Managing Permits.** The Entry Supervisor shall sign and post the permit when all required conditions specified on the permit are met. The Entry Supervisor shall terminate entry and cancel the entry permit when **operations are complete, or prohibited conditions develop in or near the space.**
11. **Coordination with Contractors.** The **Program Administrator** shall coordinate entry operations when more than one employer is involved.
12. **Review Entry Operations.** The **Program Administrator** shall review entry operations annually, and any time problems occur.

ATTACHMENT 3-C (continued)

SUMMARY OF PROCEDURES FOR STANDARD (FULL) CSE PERMITS

Each standard permit must cover the following procedures, if applicable:

- Isolate the space.
- Purge and ventilate to eliminate or control atmospheric hazards.
- Provide pedestrian, vehicle or other barriers must be provided as necessary.
- Provide required equipment.
 - **Remote and personal air monitoring equipment**
 - **Ventilation blower(s) and accessories**
 - **Communications equipment** for Attendant and Authorized Entrant(s),
 - **Personal protective equipment** for hazards which have been controlled but not been eliminated (gloves, respiratory protection, coveralls, boots, etc.)
 - **Lighting equipment** needed to enable employees to work safely and exit quickly in an emergency
 - **Barriers** for pedestrians, vehicles or other external hazards
 - Equipment necessary for safe entrance and exit (**ladders, retrieval systems, etc.**)
 - **Rescue and emergency equipment** (unless provided by rescue service)
Note: Retrieval systems or methods must be used whenever an Authorized 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. A mechanical device must be available to retrieve personnel from vertical type permit spaces more than 5 feet (1.52 m) deep.
 - **Any other equipment necessary** for safe entry into and rescue from permit spaces.
- Inspect and calibrate equipment before and after use.
- Test to verify acceptable entry conditions exist.
- Provide at least one outside Attendant for standard entries.
- Assign roles for entry operations in advance and provide required training.
- Arrange rescue and emergency services.
- Sign and post the permit when all required conditions specified on the permit are met.

**MINNEAPOLIS COLLEGE OF ART AND DESIGN
 CONFINED SPACE ENTRY PERMIT**

Based on 29 CFR 1910.146 and Appendix D-1

Date & Time Issued:	Date & Time Expires:	Job Site/Space Identification:
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Name(s) of Entrants:
Name of Entry Supervisor:

Purpose of Entry:

Stand-by Person(s):

Equipment to be worked on:
Work to be performed:

1. Initial Atmospheric Checks (for spaces which do not require isolation and mechanical ventilation):
Time: _____
Oxygen: _____ % (normal is 20-21%)
Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)
Toxic: _____ ppm Hydrogen Sulfide*OR: List other toxics: _____
 *NOTE : Normal is -2 to +2 ppm hydrogen sulfide on most instruments.
 List expected normal range for other toxics, such as less than 20% (or 1/5) of the PEL:

2. Tester's Signature:

3. Source Isolation Required Before Entry?

Pumps or lines blinded, disconnected, or blocked _____ N/A _____ Yes _____ No

Potential Hazards of Permit Required Confined Space:
 Hazardous Atmosphere - Describe: Oxygen _____ Explosive _____ Toxic _____
 Describe toxics:
 Engulfment
 Internal Configuration
 Other (Describe energy hazards, etc.) _____

Additional Steps Required for Acceptable Entry Conditions: _____ N/A
 _____ Drained _____ Flushed
 _____ Purged _____ Ventilated
 _____ Lock-out/De-energize/Try-out of following equipment:
 _____ Burning and welding permit (must attach)

4. Ventilation Modifications:
Mechanical _____ N/A _____ Yes _____ No
Natural Ventilation only _____ N/A _____ Yes _____ No

5. Atmospheric Check After Isolation and Ventilation
 (After isolation and ventilation, before entry, showing acceptable entry conditions exist initially.)

Time: _____
Oxygen: _____ % (normal is 20-21%)
Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)
Toxic: _____ ppm Hydrogen Sulfide*OR: List other toxics: _____
 *NOTE : Normal is -2 to +2 ppm hydrogen sulfide on most instruments.
 List expected normal range for other toxics, such as less than 20% (or 1/5) of the PEL:
Tester's Signature:

6. Communication procedures for maintaining contact between entrants and standby person(s):

7. Rescue and emergency services and how they will be contacted:

8. Entrants, Standby/Attendants and Rescue Persons have current training so that they have the understanding, knowledge and skills necessary for safe performance of their duties. _____ Yes _____ No

ENTRY CANNOT BE APPROVED IF ANY ITEMS ARE MARKED "NO"
 - CONTINUED ON BACK -

9. List of required equipment: (Personal protective equipment, testing equipment, communications equipment, alarm systems, rescue equipment, etc.)

Direct reading gas monitor – tested N/A Yes No

Safety harnesses and lifelines for entrants and standby person(s) N/A Yes No

Hoisting equipment: N/A Yes No

Powered communications: N/A Yes No

SCBA's for entry & standby persons N/A Yes No

Protective Clothing: N/A Yes No

List of required personal protection: _____

All electric equip. listed Class I, Division I, Group D & non-sparking tools N/A Yes No

Other required equipment: _____

10. Periodic atmospheric tests (showing acceptable entry conditions exist throughout the entry operations)

Time: _____

Oxygen: _____ % (normal is 20-21%)

Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)

Toxic: _____ ppm Hydrogen Sulfide*OR: List other Toxics: _____

*NOTE : Normal is -2 to +2 ppm hydrogen sulfide on most instruments.

List expected normal range for other toxics, such as less than 20% (or 1/5) of the PEL: _____

Time: _____

Oxygen: _____ % (normal is 20-21%)

Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)

Toxic: _____ ppm Hydrogen Sulfide*OR: List other Toxics: _____

Time: _____

Oxygen: _____ % (normal is 20-21%)

Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)

Toxic: _____ ppm Hydrogen Sulfide*OR: List other Toxics: _____

Time: _____

Oxygen: _____ % (normal is 20-21%)

Explosive: _____ % LEL (normal is -2 to +2 % LEL methane)

Toxic: _____ ppm Hydrogen Sulfide*OR: List other Toxics: _____

Tester's Signature: _____

List of Instruments Used for Atmospheric Tests:	Calibrated? (Yes - Frequency - Last cal. date)
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

Tester's Signature: _____

We have reviewed the work authorized by this permit and the information listed. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "No" column. This permit is not valid unless all appropriate items are completed.

Required Signatures:

Permit prepared by: (Entry Supervisor) _____

Permit reviewed by: (Entrants and Attendants) _____

This permit is to be kept at the job site and returned to Tom Grue's office after the job is completed.

ENTRY CANNOT BE APPROVED IF ANY ITEMS ARE MARKED "NO"