

This guide outlines how to write a Safe Operating Procedure. A written Safe Operating Procedure may be used for any hazardous activity that requires coordination between multiple entities (i.e., contractors, Northwestern employees), involves unique hazards or unfamiliar work locations, or requires special tools or equipment that are not normally utilized. Safe Operating Procedures are required for certain activities, including working in confined spaces (e.g., certain utility vaults, utility tunnels, crawl spaces), working in restricted utility tunnels and crawl spaces, and any other jobs when conditions and hazards warrant.

I. General Information			
<b>Scope of Work Performed:</b>	A brief description of the work to be performed.		
<b>Departments/ Contractors Involved:</b>	All departments and, if applicable, contractors who are involved in the work to be performed.		
<b>Estimated Start Date:</b>		<b>Estimated Start Time:</b>	
<b>Estimated End Date:</b>		<b>Estimated End Time:</b>	
<b>Work Areas and/or Buildings:</b>	All areas and buildings on campus where work will occur.		
<b>Equipment and Utilities Present:</b>	All equipment and utilities in the space(s) where work is performed. If the work involves the utilities or equipment or requires lockout/tagout, those control measures must be listed in the <i>Required Safety Measures</i> section.		
<b>Buildings/Systems Affected:</b>	All buildings and systems affected as a result of the work being performed (e.g., no steam, no electricity).		
<b>Required Safety Measures:</b>	<p>All safety measures that must be in place for the work to be performed, which could include measures such as:</p> <ul style="list-style-type: none"> <li>i. Proper training to work on the equipment.</li> <li>ii. Any required certifications.</li> <li>iii. Carefully inspecting all equipment prior to performing the procedure.</li> <li>iv. Forced-air ventilation and air-monitoring equipment will be utilized.</li> <li>v. Barricade hatch openings to protect workers and others from fall hazards.</li> <li>vi. Voice communication will be maintained between the entrants and attendant.</li> <li>vii. Hot work safety measures must be in place.</li> </ul>		
<b>Required Personal Protective Equipment:</b>	If different PPE is required for the tasks being performed, that should be specified.		
<b>Required Notifications:</b>	All departments/persons who must be notified before, during, and/or after the work, as necessary (e.g., Risk Management, University Police, Evanston Fire Department, Central Utility Plant).		
<b>Required Permits/Forms/Authorizations:</b>	Any additional permits, forms, or authorizations necessary for this work to occur (e.g., Confined Space Permit, Confined Space Reclassification Form, Hot Work Permit, Live Electrical Authorization).		
All required permits, forms, authorizations, and procedures must be submitted to the Supervisor in charge of the work and Risk Management once the work is complete.			

II. Preliminary Procedure	Person(s) Involved
<ol style="list-style-type: none"> <li>1. Outline any steps that must occur before the work is allowed to proceed here, as well as all persons involved with that step. This should include steps such as:                             <ol style="list-style-type: none"> <li>i. Field verification of existing conditions to ensure conditions have not deteriorated and work can proceed as planned.</li> <li>ii. Review the space assessment, if applicable (e.g., confined spaces, tunnels).</li> <li>iii. Review applicable procedures (e.g., lockout/tagout) for the work to be performed.</li> </ol> </li> </ol>	
<ol style="list-style-type: none"> <li>2.</li> </ol>	
<ol style="list-style-type: none"> <li>3.</li> </ol>	

III. Procedure	Estimated Duration	Person(s) Involved
<ol style="list-style-type: none"> <li>1. Outline the steps to complete the work correctly and safely here, including the anticipated duration and all persons involved with each step. All steps must be in the proper sequence of how they must be performed. This should include steps such as:                             <ol style="list-style-type: none"> <li>i. Hold a pre-job meeting to review this procedure with all those involved.</li> <li>ii. Setup barricades, open the access hatch, and install forced-air ventilation.</li> <li>iii. Ensure emergency egress routes are accessible.</li> <li>iv. Monitor the atmosphere with an air monitor, and record the readings on the permit.</li> <li>v. Notify Risk Management and University Police the employee is about to enter the confined space or tunnel.</li> <li>vi. Complete and sign-off on the Hot Work Permit, ensuring all safety measures are in place and in compliance with 29 CFR 1910 Subpart Q.</li> <li>vii. Lockout/tagout the utilities, as outlined in the Lockout/Tagout Procedure.</li> </ol> </li> </ol>		
<ol style="list-style-type: none"> <li>2.</li> </ol>		
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<ol style="list-style-type: none"> <li>10.</li> </ol>		

III. Procedure	Estimated Duration	Person(s) Involved
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12.		
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### IV. Emergency Procedures

*The following are situation-specific emergency procedures that may apply; additional steps may be required, based on the scope of the job and location of the work:*

**Confined Space Reclassifications:**

If the entrant is unable to exit (self-rescue) the vault during reclassification:

1. Call 911 to report a "Confined Space Rescue;" provide as much detail as possible.
2. Aid emergency responders as necessary.

In the event a condition arises that violates the confined space reclassification form:

1. The space will be evacuated immediately.
2. The space will be designated as a permit-required confined space.
3. Contact Risk Management to evaluate to determine reentry requirements.

**Permit-Required Confined Space Entries:**

If workers are unable to exit the confined space:

1. Call 911 to report a "Confined Space Rescue;" provide as much detail as possible.
2. Use non-entry retrieval equipment to hoist the worker out of the space.
3. Aid emergency responders as necessary.
4. Contact Risk Management.

In the event a condition arises that violates the confined space entry permit:

1. The space will be evacuated immediately.
2. Contact Risk Management to evaluate to determine reentry requirements.

**Work Performed in Tunnels:**

If workers are unable to exit the tunnel:

1. Call 911 or utilize an emergency “blue light” phone in the tunnel to report a “Tunnel Rescue;” provide as much detail as possible.
2. Aid emergency responders as necessary.
3. Contact Risk Management.

**Work Performed in Crawl Spaces:**

If workers are unable to exit the crawl space:

1. Call 911 to report a “Crawl Space Rescue;” provide as much detail as possible.
2. Aid emergency responders as necessary.
3. Contact Risk Management.

*For all Safe Operating Procedures, the following will apply:*

In the event of a serious injury that requires medical attention:

1. Call University Police: 847-491-3456, 911, or 456 from any campus phone.
2. Stop all work.
3. Investigate and document the incident, including any required OSHA Injury and Illness information.
4. After the investigation is complete and it is determined to be safe to resume the work, finish the procedure at the last step completed.

In the event an unforeseen condition or situation arises that was not outlined in the Safe Operating Procedure:

1. Stop all work.
2. Inform all parties involved of the unforeseen condition or situation.
3. Assess the situation, considering what must be adjusted to complete the work.
4. Communicate the adjustments to those who authorized the Safe Operating Procedure; significant changes or deviations from this Safe Operating Procedure require a new Safe Operating Procedure.
5. Note the changes in the *Notes* section.

**V. Authorization of the Work to be Performed**

Northwestern Departmental Supervisors and their Directors, the Contractor Supervisor (if applicable), and the Environmental Health and Safety Director, or their designees, must review and sign this Safe Operating Procedure prior to the commencement of work, approving/authorizing the work to be performed as specified in the Safe Operating Procedure. Without all signatures, work cannot proceed.

Name	Title/Company (if Contractor)	Signature/Date

**VI. Acknowledgement of the Safe Operating Procedure**

All persons involved in the work, including Northwestern and contractor employees, must review, acknowledge, and agree to comply with all the procedures and safety requirements outlined in this Safe Operating Procedure by signing below prior to the commencement of work. If the work spans multiple days, this must be signed each day.

Name	Title/Company (if Contractor)	Signature/Date

**VII. Notes**

Write any noteworthy information here, including issues noted during the work or deviations from the outlined Safe Operating Procedure, which must be relayed to and approved by all who authorized the Safe Operating Procedure.