South Central College
North Mankato/Mankato Campus
1920 Lee Boulevard
N. Mankato, MN 56002-1920
Faribault Campus
1225 Third Street SW
Faribault, MN 55021-5782

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Hot Work Permit Plan
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HOT WORK PERMIT PLAN

Purpose:

South Central College is committed to providing a safe and healthful work environment for all employees. In pursuit of this endeavor, the college strives to take steps to prevent and mitigate fire hazards relating to hot work operations (e.g., any welding, oxyacetylene cutting, hot riveting, grinding, chipping, soldering, and other similar operations producing heat, sparks, or flame on campus).

The easy portability of hot work equipment and its careless use (outside designated areas) can increase the potential for fires and explosions. Therefore, to make sure portable cutting, welding, and other hot work is completed safely for the purposes of production, maintenance, construction, or modification, a Hot Work Permit Plan has been designed to establish safe work procedures.

All South Central students will receive safety training (in conjunction with their specific course’s curriculum) as designated by their instructor. The instructor is responsible for following, implementing, and training all students (within their program) in any aspect of this plan as it relates to their program of study.

Employee Classifications:

South Central College has established three separate classifications of employees involved in hot work operations. These employee classifications are: Hot Work Supervisors, Hot Work Operators, and Fire Watch Personnel. Under the Hot Work Permit Plan each category is involved in different aspects of the plan as it is applicable to their positions within the college.

Hot Work Supervisors:

These persons will oversee and authorize hot work operations within their areas. These persons are responsible for the following actions:

- Ensuring employees are trained on proper hot work operations (e.g., including procedures and equipment);
- Assigning hot work personnel as needed (e.g., sufficient hot work operators and fire watch personnel);
- Inspecting work sites prior to allowing hot work operations;
- Ensuring all fire protection equipment and safe guards are working and readily available;
- Issuing and maintaining hot work permits; and
- Verifying contractors understand and follow the established hot work procedure.
Hot Work Supervisors’ Contact Information:

Hot Work Supervisors’ names and contact information are provided as follows:

<table>
<thead>
<tr>
<th>Hot Work Supervisor</th>
<th>Hot Work Supervisor</th>
<th>Hot Work Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary- North Mankato</td>
<td>Primary- Faribault</td>
<td>Alternate- Both Sites</td>
</tr>
<tr>
<td>Russ Berndt</td>
<td>Rick Sanders</td>
<td>Al Kluever</td>
</tr>
<tr>
<td>Maintenance Supervisor</td>
<td>Maintenance Supervisor</td>
<td>Security &amp; Safety Director</td>
</tr>
<tr>
<td>1920 Lee Blvd.</td>
<td>1225 3rd Street SW</td>
<td>1920 Lee Blvd.</td>
</tr>
<tr>
<td>North Mankato, MN 56003</td>
<td>Faribault, MN 56021</td>
<td>North Mankato, MN 56003</td>
</tr>
<tr>
<td><a href="mailto:russ.berndt@southcentral.edu">russ.berndt@southcentral.edu</a></td>
<td><a href="mailto:rick.sanders@southcentral.edu">rick.sanders@southcentral.edu</a></td>
<td><a href="mailto:al.kluever@southcentral.edu">al.kluever@southcentral.edu</a></td>
</tr>
</tbody>
</table>

Hot Work Operators:

These persons will follow all directions and instructions from hot work supervisors, and will use all equipment provided in accordance with established safety rules and procedures. These persons are also responsible for the following actions:

- Obtaining supervisory approval and authorization before starting hot work operations;
- and
- Immediately stopping hot work operations and notifying hot work supervisors if any unsafe conditions develop.

Fire Watch Personnel:

These persons are responsible for fire watch procedures, and they must be familiar with worksite safety and fire hazards. These persons have authority to immediately stop hot work operations at any time they determine a hazard or problem exists.

Outside Personnel (i.e., Contractors):

Contractors will be informed of the college’s Hot Work Permit Plan, any applicable procedures, or precautions (by the Hot Work Supervisor requesting their services) prior to starting hot work operations. The informal meeting with the contractor will be used to exchange information or copies of their respective hot work plans and/or procedures and to discuss any other relevant provisions.

The contractor will be responsible for assuring their own employees are properly trained on the hazards they are working with or may encounter.

Hot Work Requirements:

The principal hazard associated with (portable) hot work operations is that it may accidentally introduce ignition sources to unintended areas of the facility. Ignition sources sufficient to start fires or ignite explosive materials may come from several sources, including:

- The open flame of a torch;
- Metal being welded or cut;
• Molten slag or metal that flows from the work;
• Sparks that fly from the work;
• An improperly handled soldering iron;
• Dropped hot rivets;
• Improperly applied grounding clamps during arc welding;
• Roofing or road work using tar pots or asphalt kettles; and
• Any alteration, maintenance, or modification of any system containing or that may contain explosives or flammable liquids/gases, when using flame, heat, spark producing, or impact related tools (e.g., electric power tools and powder actuated tools)

Hot Work Permit Authorization and Guidelines:

Authorization shall not be given for hot work operations until all safety precautions and requirements listed on the Hot Work Permit are met. Under no circumstances is a permit to be issued with the worksite unseen by the Hot Work Supervisor.

Hot Work Permits shall only be issued by the local Hot Work Supervisor.

• Hot Work Permits shall not be approved for any length of time exceeding normal shift hours of the Hot Work Operator except:
  o When hot work operations are planned to be continued into the next shift when the same Hot Work Operator is working.
  o When emergency repair work warrants the continued operation of hot work operations into the next shift.
• No Hot Work Permit shall be authorized for any length over 24 continuous hours.
• Hot Work Permits shall be issued on a job-to-job basis. No Hot Work Permits shall be issued for general work tasks in any location. Each specific job task shall be issued a separate permit.
• Once issued, the Hot Work Permit shall be posted in a visible location near the worksite, so that it may be observed during hot work operations.
• The Hot Work Permit should be maintained by the local Hot Work Supervisor and a copy should be provided to the Security & Safety Director.

Hot work operations without Hot Work Supervisor authorization shall only be permitted in designated hot work locations, see “Approved Hot Work Locations” section for details.

Hot Work Authorization shall not be granted if:

• The Hot Work Operator is not properly trained in hot work operations;
• Fire Watch is not identified and present at the worksite;
• If Hot Work equipment is not in proper operating condition and free from defects or damage; and
• The Hot Work Supervisor feels the operation may jeopardize the safety of the South Central College Community.

Hot Work Operation Guidelines:

The following guidelines shall be followed by all persons (e.g., employees and contractors) during all hot work operations performed unless those hot work operations are completed in areas specifically designated for such work.
A Hot Work Permit shall be completed and posted at the worksite for each hot work job performed. The Hot Work Permit may only be issued once an inspection of the worksite is completed by the Hot Work Supervisor to verify no fire or hazardous conditions exist (see below for requirements).

If the object or task requiring hot work can be moved, it should be taken to a location approved for hot work. If the object or task requiring hot work cannot be moved, all movable fire hazards (e.g., flammable and combustible liquids or materials) in the vicinity should be taken to a safe place away from the worksite (i.e., at least 35 feet). In addition, the following conditions should be met:

- The area is swept and clean of hazardous dust accumulation (i.e., less than 1/16”).
- All areas adjoining the worksite (e.g., openings/cracks in walls, floors, ceilings, and ducts, etc…) are shielded.
- Verify that hot work conducted on walls, partitions, ceilings, or roofs is only commenced once flammable and combustible materials on the other side are removed or shielded.
- If the object needing hot work cannot be moved, and fire hazards cannot be removed, then guards must be used to confine heat, sparks, and slag to protect the immovable fire hazards (e.g., approved welding blankets and fire retardant coverings).
- Conveyer systems should be shut down to prevent sparks from being carried away.

Atmospheric testing is required when possible hazardous atmospheres (e.g., from confined spaces and any other flammable, explosive, oxygen deficient, toxic atmosphere) exists, or could develop during the course of hot work. Testing must be performed prior to commencement of hot work operations and repeated periodically during the operation as worksite conditions dictate (e.g., previous flammable or combustible readings; environmental temperature changes; changes in hazardous conditions; etc…).

Hot work operations performed within confined spaces should be followed in accordance to the guidelines established in both the Hot Work Permit Plan and the Permit-Required Confined Space Plan. Note: When atmospheric testing is required, the results and collection times should be recorded on the Hot Work Permit and/or Confined Space Permit.

A minimum of a “2-A, 20 BC rated” fire extinguisher shall be located within the hot work location. Note: Fire extinguishers must remain accessible without climbing stairs or ladders.

Smoke detectors within the hot work area must be covered or guarded to prevent false alarming. In addition, the nearest manual pull station should be located.

It should be verified that automatic sprinkler systems are “in-service” prior to conducting hot work.

Fire watch shall be continuously present during the entire hot work activity and 30 minutes after completion. In addition, the work area should be monitored every 30 minutes for 4 hours after the hot work operations are completed.

Construction & Remodeling Requirements:

It is the responsibility of the contractor and their employees engaged in any construction or remodel project to maintain appropriate fire safety conditions.
- Fire Department access shall be maintained to the work area at all times.
- Accumulations of combustible waste materials, dust/debris shall be removed from structures and their immediate vicinity at the end of each work shift (and more frequently if necessary for safe operations).
- Contractors, subcontractors and South Central College employees are responsible for notifying appropriate facilities personnel anytime fire protection equipment is taken out of service.
- When the contractor is working in occupied buildings, they must exercise extreme caution when using any equipment requiring flammable liquids or any type of cutting and welding. Appropriate fire guarding is required.
- Dumpsters must be kept a minimum of 10’ from any building opening. Dumpsters must be emptied regularly.

If the requirements listed above cannot be followed then hot work operations shall not be performed.

**Employee Training:**

South Central College understands that training is a critical part of the Hot Work Permit Plan. Hot work training compliments the efforts to address workplace safety and prevent fire hazards. Training efforts and methods will vary based on specific needs of employees and the types of task present within their job.

Training must be provided to employees before their initial assignment in the workplace where hot work operations are performed. Additional training must be provided or repeated at intervals of not greater than 3 years.

Training must be provided in a language that the employee understands, and the format of the training used may relate to any combination of different delivery methods.

At a minimum hot works training must address the following topics, as appropriate:

- The contents of the Hot Work Permit Plan and the employee’s responsibilities within it;
- Approved and hot work permit required locations;
- Warning signs and detection methods for fires or explosions;
- The facility’s fire detection/suppression equipment; as well as, how to use or interact with them; and
- Emergency Procedures.

**Recordkeeping:**

Recordkeeping is an essential element of the Hot Work Permit Plan. Hot work records provide a means for verifying that safety and compliance are maintained within the program.

**Training Records:**

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years with the Security & Safety Director by means of an electronic training record database. The training records include:
1. The date training was conducted;
2. The name, title, and qualifications of the person who conducted the training;
3. The names and job titles of employees who completed the training; and
4. A brief summary or outline of the information that was included in the training session.

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to the Security & Safety Director.

Expired Hot Work Permits:

After completion of the hot work operation, the Hot Work Supervisor shall send a copy of the expired permits to the Security & Safety Director for record retention purposes. These records will be maintained in the Security & Safety Office, and they are retained for a minimum period of one year. These expired permits will be used to facilitate the review of the Hot Work Permit Plan.

Approved Hot Work Locations:

South Central College has established designated hot work locations. These locations are areas within the college designed specifically for hot work operations, or areas that have been modified to accommodate this work safely.

These locations are as follows:

<table>
<thead>
<tr>
<th>Campus</th>
<th>Program or Department:</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Mankato</td>
<td>Welding Lab, Room A-139</td>
</tr>
<tr>
<td>North Mankato</td>
<td>Welding Lab, Room A-168</td>
</tr>
<tr>
<td>North Mankato</td>
<td>Ag Mechanics, Room A-117</td>
</tr>
<tr>
<td>North Mankato</td>
<td>Auto Collision, Room A-100</td>
</tr>
<tr>
<td></td>
<td>(Excluding Painting Areas)</td>
</tr>
<tr>
<td>North Mankato</td>
<td>Auto Mechanics A-101</td>
</tr>
<tr>
<td>Faribault</td>
<td>Welding Lab, Room B-151</td>
</tr>
</tbody>
</table>

If there are questions as to whether or not an area is approved, contact the Security & Safety Director or local Hot Work Supervisor.

Plan Evaluation & Review:

The Security & Safety Director will conduct periodic evaluations of the workplace to ensure the provisions of this plan are implemented, followed, and adequately meet the organization’s safety and regulatory needs. Evaluations may include; site inspections, industrial hygiene testing, chemical sampling and analyses, review of records, analyses of accident/injury trends, and consultation with personnel. Any problems or violations noted will be addressed with the appropriate personnel to safeguard the hazard, correct the violation, and/or eliminate the deficiency.
The Security & Safety Director will review and update this plan per regulatory requirements, changes to college operations or equipment, upon the results of evaluations, and/or annually at a minimum.

**Hot Work Regulations & Standards**

**Appendix (A)- Hot Work Regulations & Standards**

**Title**: General Requirements  
**Regulation or Standard Number**: 1910.252  
**Responsible Agency**: Federal OSHA- (General Industry)  

**Sections 1910.252(a) through 1910.252(a)(4)(ii)**
HOT WORK PERMIT
(Work is not permitted unless this notice is completed and posted in work area)

Date _______/________/ _______ Time _____________ AM/PM

Building _______________________________________________________

Department ____________________________________________________ Floor _____________

Work to be done __________________________________________________

Special Precautions ________________________________________________

Fire Watch Required? _______ Yes _______ No

The location where work is to be done has been examined by me, the necessary precautions have been taken and permission is granted for this work.

Permit Expires _______/_______/_______ Time ___ _____________ AM/PM

Signed __________________________________________________________
(Maintenance Supervisor/Security & Safety Director)

Time Started ___________________ Time Completed ____________________

FINAL CHECK
(Where fire watch is required)

Work area, and all adjacent areas where sparks might have spread, were continuously inspected during the entire time cutting, welding, or other hot work was conducted, and for 30 minutes after completion. In addition, the work area was monitored every 30 minutes for four (4) hours after the cutting, welding, or other hot work was completed, and no fire conditions were noted.

Signed ________________________________

Return this permit, after work is completed, to Security & Safety Director/Maintenance Supervisor for filing.

CHECK LIST

□ Fire protection system(s) in service (sprinklers, CO₂, foam).

□ Cutting and welding equipment in good condition.

□ Floor/ground clean (and wet down when necessary).

□ Combustibles at least 35 feet from welding area.

□ Flammable liquids and other hazards removed from area.

□ All floor and wall openings within 35 feet covered.

□ Non-combustible covers used to protect nearby combustibles and equipment.

□ Containers, tanks, ducts, and other enclosures cleaned and purged of flammable vapors, liquids, dusts, and other hazardous materials.

□ Fire extinguishers or small standpipe fire hose provided.

□ All hazardous operations discontinued in area.

□ Fire watch should be present during, and at least one-half hour after, welding or burning has ceased.

□ Location of nearest fire alarm box identified.

When possible, do work in a non-combustible area. An individual should generally be assigned to watch for dangerous sparks in the area and the floor below.