ROSE STATE COLLEGE

Hot Work Program

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Purpose

This program has been developed to prevent fires resulting from temporary operations that produce heat, sparks, hot slag, or have open flames. This includes, but is not limited to brazing, cutting, grinding, soldering, thawing pipes, and torch applied roofing and welding.

Scope

This program applies to Rose State College employees and contractors who perform or supervise hot work activities in existing buildings, new construction in existing buildings, and new construction attached to existing buildings.

This program does not apply to areas that are specifically designed and equipped for such operations, i.e., designated welding areas.

Definitions

Hot work is any work that produces a possible source of ignition, including but not limited to welding, torch cutting, brazing, soldering, flame heating, thawing pipes, torch applied roofing, and grinding.

The Safety and Risk Management Coordinator is responsible for authorizing the hot work job by reviewing and signing the permit to verify that all precautions were followed.

A Designated Area shall be a specific area designed or approved for such work, such as, a maintenance shop or a detached outside location that is of noncombustible or fire-resistive construction, essentially free of combustible and flammable contents, and suitably separated from adjacent areas.

Procedures/Requirements

1. Hot work should not be performed if the work can be avoided or can be performed in a safer manner. When practical, objects to be welded, cut, or heated must be moved to a designated area.
2. If hot work must be performed, a Hot Work Permit must be obtained before the hot work begins.
3. All instructions must be followed and all checklists filled out on the Hot Work Permit prior to performing any hot work.

4. The Maintenance Supervisor shall designate or perform the duties of the Fire Safety Supervisor. The fire safety supervisor will fill out and post a completed Hot Work Permit at the hot work site. The permit is not valid beyond one work shift and is valid only for the date and time specified on the permit. A copy of the permit must remain at the hot work location until the hot work is completed. Upon completion of the hot work the permit must be forwarded to the Safety and Risk Management office.
5. A Fire Watch is **REQUIRED** whenever hot work is done in an area where one or more of the following conditions exists:
    A. Appreciable combustible material is within 35 feet of the point of operation;
    B. Appreciable combustibles more than 35 feet away that may be easily ignited by sparks;
    C. Wall or floor openings within 35 feet expose combustibles in adjacent areas including confined spaces.
    D. Combustibles that could be ignited by conduction or radiation through metal partitions, walls, ceilings, or roofs.
6. Maintain a Fire Watch at the scene for at least 30 minutes after the hot work has stopped.
7. All personnel (employees, contractors, building occupants) must be suitably protected against hazards generated by the work, e.g., heat, sparks, fumes, welding rays, etc. This may include but is not limited to, the use of personal protective equipment, shields, screens, or local exhaust ventilation.
8. Conveyor systems that might carry sparks to distant combustibles shall be shut down.
9. Exhaust systems that might carry sparks to distant combustibles shall be shielded.

PROHIBITED CONDITIONS: A HOT WORK PERMIT WILL NOT BE ISSUED IF ANY OF THE FOLLOWING CONDITIONS EXIST:

1. In a sprinkled building while such protection is impaired unless a fire watch is provided.
2. Appropriate firefighting equipment such as a hose or fire extinguisher is not readily available.
3. Combustible or flammable materials are within 35 feet and cannot be moved or protected;
4. The presence of an explosive atmosphere such as mixtures of flammable gases, vapors, liquids, or dusts with air.
5. Floor and wall openings cannot be covered including ductwork;

6. Cutting or welding on pipes or other metals can conduct enough heat to ignite nearby combustible materials; or
7. Any condition that could result in undue hazards by performing the work.

Responsibilities

1. **Physical Plant Responsibilities**:
    a. Recognize its responsibility for the safe use of cutting and welding equipment in their area;
    b. Establish designated areas for cutting and welding;
    c. Ensure hot work procedures are being implemented and followed in other than designated areas;
    d. Ensure that supervisors, cutters and welders, are suitably trained in the operation of the equipment and the safe use of the process; and
    e. Ensure that contractors, under their supervision, follow Rose State College procedures and requirements.
2. **Supervisor Responsibilities**:
    a. Ensure that all employees and contractors are following hot work procedures;
    b. Ensure that a hot work permit is issued prior to the start of work;
    c. Ensure that all cutting and welding equipment is in good repair;
    d. Ensure that employees are properly trained in the operation of the equipment used in the hot work process.
    e. Ensure that employees are properly trained in the Hot Work Program.
3. **Hot Work Operator Responsibilities**:
    a. Follow and use hot work procedures;
    b. Obtain a hot work permit prior to starting work;
    c. Ensure that all cutting and welding equipment is in good repair.
    d. Attend and actively participate in training sessions; and
    e. Protect nearby personnel and passers-by against heat; sparks, etc. when working in occupied buildings.

4. **Fire Watch Responsibilities**:
    a. Ensure proper firefighting equipment is readily available;
    b. Locate the nearest fire alarm pull station;
    c. Inspect hot work area before any hot work is conducted;
    d. Extinguish fire ONLY when within trained capabilities to safely do so
    e. Stay on watch at least thirty minutes after hot work has been completed.
    f. Ensure that safe conditions are maintained during hot work operations.
5. **Safety and Risk Management Coordinator Responsibilities**:
    a. Update Hot Work Program as needed;
    b. Provide assistance with Program implementation and administration; and
    c. Provide assistance in training supervisors, employees, and project managers.

ROSE STATE COLLEGE
HOT WORK PERMIT
CUTTING - WELDING - BRAZING

This form is to be filled out in its entirety by the responsible person actually performing the "HOT WORK" and then brought to the Safety and Risk Management Coordinator for approval PRIOR to beginning the project.

Company:	Date**:**
Responsible Person:	Start Time**:**
Work to be performed:	Room Number/Area:
θ A. General Welding/Cutting/Brazing	Building:
θ B. Instruction/Production	Estimated Finish Time:
Is it possible to perform this work in the shop? Yes No	Equipment:

PLEASE PLACE A CHECK MARK if the following items have been completed for each item listed below!

θFlame or spark-producing equipment to be used has been inspected and found in good repair.
θSprinklers, where provided, are in commission and **will not be taken out of service while** this work is being done.
θThere are no combustible fibers, dusts, vapors, gases or liquids in the area. Tanks and equipment previously containing such materials have been purged. The absence of gases or vapors has been verified by a combustible gas detection instrument. If there is a possibility of a leak developing in nearby piping, equipment, or tanks, this area is being continuously monitored. **Contact the Maintenance Department if assistance is needed to test area**.
θFire alarms will **not be taken out of service** while work is being performed. If alarm system must be inactivated during work then the Safety and Risk Management Coordinator will be contacted prior to taking alarm out of service so that a suitable "fire watch" can be coordinated with campus police. **Under no circumstances will fire alarms be taken out of service without contacting the Safety and Risk Management Coordinator.**
θThe work will be confined to the area or equipment specified on this permit.
θSurrounding floors have been swept clean and, if combustible, wet down.
θContractor has ample charged portable fire extinguishers available and trained personnel to use them.
θAll combustibles have been relocated 35 feet from the operation and the remainder protected with metal guards or flame-proofed curtains or covers.
θAll floor and wall openings within 35 feet of the operations have been tightly covered.
θResponsible personnel have been assigned to provide a "Fire Watch" for dangerous sparks in the work area, as well as on floors above and below while work is being performed.
θArrangements have been made to provide a "Fire Watch" to patrol the area, including floors above and below, during any lunch or rest period and for at least one-half hour after the work has been completed.

NOTE: Where the welding process may produce gas or vapors that could be harmful to employees wearing contact lenses, such lenses are not permitted.

θ I attest that the above precautions have been taken_____
Person Responsible for Performing Hot Work

Approved_____ _____

Safety and Risk Management Coordinator Date

NOTE: This permit expires 24 hours after the designated "start time". If work is to continue another permit must be secured.

WARNING!

HOT WORK
IN PROGRESS
WATCH FOR FIRE

In case of emergency call **911**

WARNING!

Rose State College
Safety and Risk Management Office