

Roger Williams University

Hot Work Plan

- I. Introduction
- II. Definitions
- III. Policy Scope and Training Requirements
- IV. Procedures
- V. Duties and Responsibilities
- VI. References
- VII. Appendix A: Hot Work Permit

I. Introduction

Both the Occupational Safety and Health Administration (OSHA) and the National Fire Protection Agency (NFPA) have standards for any operation producing flames, sparks, or heat including cutting, welding, brazing, grinding, sawing, torch soldering, thawing frozen pipes, etc., also known as Hot Work. The basis for the standard is to prevent loss of life and property from fire or explosion resulting from Hot Work.

II. Definitions

Hot Work:

Any operation producing flames, sparks, or heat (including cutting of metals), welding, brazing, grinding, sawing, torch soldering, thawing frozen pipes, etc.

Hot Work Permit:

permit will be properly filled out, displayed on site and returned to the employee supervisor or designated manager when the Hot Work is complete. Permits contain a checklist to be completed prior to commencing Hot Work activities and also at the conclusion of the Hot Work.

Fire Watch:

Any individual performing Hot Work will watch for fire during the job and for a minimum of 30 minutes following completion of job. In the event that sparks or flames from Hot Work cannot be viewed by the person performing the job, an additional fire watch will be designated. When a fire watch is deemed necessary a trained individual will be stationed in the Hot Work area that monitors the work area for the beginning of unwanted fires both during and after the hot work. All individuals engaged in Hot Work and/or acting as a Fire Watch must be trained and familiar with the operation of portable fire extinguishers and methods to activate building fire alarm systems.

Personal Protective Equipment:

OSHA requires the use of personal protective equipment (PPE) to reduce employee exposure to hazards when engineering and administrative controls are not feasible or effective in reducing these exposures to acceptable levels. Employers are required to determine if PPE should be used to protect their workers. RWU requires all present at the Hot Work site to wear, at a minimum: long pants, closed toe shoes, and appropriate PPE as determined by the hazards of the specific job being performed.

Designated Hot Work Area:

Location designed for, and approved by RWU, for Hot Work operations to be performed regularly. The current Designated Hot Work Areas at RWU are:

Mechanical Maintenance Shop

Mechanics Shop

Fine Arts Building/Room 102

These
quarterly.

Office of Environmental Health and Safety (EHS)

III. Policy Scope and Training Requirements

The scope of this Policy includes all RWU employees, contractors, and their direct supervisors or managers that perform Hot Work in existing buildings. This Policy does not apply to new construction where there is no attachment to existing buildings or areas that are specifically designed and equipped for such operations (i.e. a Designated Hot Work Area). RWU departments are primarily responsible for compliance with, and safe implementation of, all RWU safety programs. EHS is available to assist with compliance and provide policy clarification as necessary.

Students are only allowed to perform class related Hot Work in Designated Hot Work Areas under the supervision of their instructors, after completing proper training.

Training

RWU requires all employees and students performing Hot Work to be knowledgeable in identifying potential hazards associated with Hot Work prior to performing any Hot Work. RWU EHS will provide required annual Hot Work procedure training, as well as fire extinguisher training to employees and students listed in the scope.

IV. Procedures:

- A. Do not perform Hot Work if the work can be avoided or performed in a safer manner. If practical, move the object to be cut, welded or heated to a Designated Hot Work Area.
- B. A Hot Work Permit must be completed if Hot Work is performed outside of a Designated Hot Work Area.
- C. All precautions on the Hot Work permit must be met prior to any work commencing. The job supervisor or the employee performing the Hot Work will complete the permit.
- D. The Hot Work permit is only good for the day specified on the permit.
- E. The Hot Work permit must be displayed at the work site during all Hot Work.
- F. All building occupants must be protected against any hazards generated by the Hot Work.
- G. *Hot Work operations in confined spaces and in the Marine and Natural Science Building require additional safeguards. Please contact EHS before pulling permit.*
- H. Before beginning Hot Work :
 1. Move all flammable and ignitable material and debris 35 feet from the Hot Work area or cover and protect any material that cannot be moved from the Hot Work by fire resistant material. Move all explosives, oxygen tanks, acetylene tanks, flammable liquids, compressed gas cylinders or stored fuel at least 50 feet from Hot Work area or cover and protect from Hot Work by fire resistant material.

2. (a)4(r3aa)-9(re)7(sis)-3(tant/F1 12 Tf1 008.02 21(jo[be)4(n ta)-7(nks, a)3(c)4(e)(x)4dc)4(e)9.38 33

6. Make sure all the building occupants have been protected from the Hot Work area. If work impacts building occupants, the work must be coordinated with the job supervisor or project manager.
 7. Make sure drums, barrels, and tanks have been cleaned and purged of flammables and toxics, and that all tank feeds are closed and the tank is vented.
 8. An additional fire watch must be implemented if deemed necessary.
 9. Workers and Fire Watch personnel are trained in the use of fire extinguisher equipment and how to activate the fire alarm system.
 10. Adequate Personal Protective Equipment must be worn at all times.
 11. Hot Work equipment must be operable and in good repair.
- I. When the Hot Work is complete:
1. The work area and any potentially affected surrounding areas must be inspected for fire, fire damage or the potential for a fire, for a minimum of 30 minutes following the completion of Hot Work.
 2. Smoke / Fire Alarms that were disabled because of Hot Work are re-activated by contacting RWU Office of Environmental Health and Safety (EHS) at Ext. 3494 or 3781 *or* a Facilities Maintenance Supervisor at Ext. 3136 for assistance. The RWU Fire Panel Building Bypass Procedures will be followed as instructed.
 3. Hot Work permit is closed out.
 4. Completed permit is returned to workers supervisor who then submits the completed permit to RWU EHS for record keeping purposes. Permits will be kept for 1 year.

Duties and Responsibilities:

Managers:

It is the responsibility of management to insure that this Policy is implemented in those areas under their supervision where applicable. As mentioned before, RWU departments are primarily responsible for compliance with, and safe implementation of, all RWU safety programs. RWU EHS is available to assist with compliance and provide policy clarification as necessary.

Environmental Health and Safety:

- A. Review and revise Hot Work Program as necessary.
- B. Assist with Hot Work procedure training for Supervisors.
- C. Perform quarterly inspections of Designated Hot Work Areas and maintain records of employee training.
- D. Be able to demonstrate knowledge of Hot Work procedures by compliant execution of all related procedures.
- E. Investigate and document all accidents or near misses as a result of Hot Work.

Facility Managers / Lab Managers / Capital Projects

- A. Be able to demonstrate knowledge of Hot Work procedures by compliant execution of all related procedures.
- B. Notify contractors of the RWU Hot Work Policy.
- C. Identify employees who may perform Hot Work as defined in this Policy.
- D. Provide Hot Work training to employees who perform Hot Work operations.

- E. Provide Hot Work Permits.
- F. Collect and complete Hot Work Permits and return to EHS for record keeping purposes.

Contractors / RWU Employees and Students

- A. Be able to demonstrate knowledge of Hot Work procedures by compliant execution of all related procedures.
- B. For RWU Employees and Students complete required RWU training; Contractors should undergo training through their employer.
- C. Must remain with task until complete per permit.
- D. Complete Hot Work permit

References:

- A. NFPA 51 B
- B. OSHA CFR 1910.252

Roger Williams University Hot Work Permit

WARNING

In case of Fire Activate Fire Alarm



Hot Work is any operation that generates heat, spark or open flame. This includes, but is not necessarily limited to, welding, cutting, grinding, soldering, heat gun use and similar activities.

STOP! Can the Hot Work be completed in a safer manner or can the Hot Work be avoided

STOP! Review RWU Hot Work Policy, NFPA 51 B and OSHA CFR 1910.252 for Hot Work Procedures

Date: _____

Location: _____

RWU Job Order # _____

Type of Hot Work: Soldering

Welding

Company Name _____