



HOT WORK POLICY

**Prepared By:
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Developed: November 2016

Program Approval

Superintendent of Physical Plant

Date

Environmental Health and Safety Coordinator

Date

Flagler College Hot Work Policy

1. Purpose:

To ensure the safety and health of all Flagler College faculty and staff, and also to protect Flagler College property by establishing control over non-routine jobs that require open flame or are spark producing in nature.

2. Definitions:

Designated Hot Work Area- Is an area that due to its design, construction or modification has been deemed safe to conduct hot work without the use of special permits or conditions of work. Designated "Hot Work" areas at Flagler College include:

1. Welding Area in Flagler College Auditorium
2. Maintenance Shop
3. Parking Garages
4. Administrative areas as deemed needed
5. Areas that are assessed properly by EH&S and the facilities director whereas the findings of this assessment prove no hazard beyond the hot work itself.

Hot work - work entailing the use of open flame or spark producing apparatus such as, but not limited to, welding, cutting, burning, grinding, drilling jack-hammering and related heat producing jobs which could ignite combustible and flammable materials.

Incipient Fire - A small contained fire which is in the initial or beginning stage, and not of structural nature, and can be generally extinguished by using no more than two portable fire extinguishers

Responsible Parties - A member of Flagler College management who by experience and training is qualified to complete and approve Hot Work Permits

Structural or Major Fire - A fire which is NOT controllable with the use of just two fire extinguishers and needs the immediate response of a Fire Dept or Fire Brigade.

Qualified Person - A person who has been trained in the use of a particular piece of equipment, to the degree that they are competent in the use of such equipment.

3. Requirements:

The Hot Work Permit program is designed for both facilities maintenance personnel as well as for contractors providing construction or service work.

4. Exemptions:

1. Work areas equipped with appropriate fire prevention and suppression are exempt from the requirement for Hot Work Permits.
2. "Low risk" hot work does not require the use of a "Hot Work Permit", provided that the person conducting the work has received training on the hazards. "Low risk" hot work includes soldering, brazing, and general-purpose use of hand-held propane, butane torches and cut-off saws. The above normally does not require the use of a hot work permit; however, the responsible party must review the Risk Identification section of this program to ensure compliance. This exemption does not apply to oxyacetylene or electric welding. For these operations, a Hot Work Permit is required.

5 Risk Identification

- 5.1 The responsible person authorizing the work must ensure all materials that will be heated during the hot work will withstand the heat generated by the hot work (e.g. materials, adjacent to, connected to, behind and inside the materials being worked on).
- 5.2 Where practical, all combustibles (i.e., wood, paper, flammable and combustible liquids) will be relocated at least 35 feet from the work area.
- 5.3 Where relocation is impractical, combustibles will be protected with flame proof covers or otherwise shielded with flameproof material.
- 5.3 Before hot work is performed in areas or processes that could contain flammable vapors, a combustible gas test will be performed to determine the flammability range of the container or area in which the hot work is to be performed. Such a test shall only be conducted by a qualified person who is trained in the use of the measuring device and who understands the concepts of Lower and Upper Explosive Limits. Such test shall be conducted immediately before the hot work begins and the results will be recorded on the Atmospheric Test section of the Hot Work Permit. Flagler College has two photo ionization detectors/4 gas meters; a BW Gas Alert Micro, and a Sperian Biosystems PHD6. These detectors are located in Environmental, Health, and Safety office.
- 5.5 Hot work will not be performed if the concentration exceeds ten (10) percent of the Lower Explosive Limit (LEL)

5.6 If the Level of Flammable/Combustible vapors or gases is detected and does not exceed ten (10) percent of the LEL, the hot work must not start until the manager responsible for the work:

- Understands the source of the flammable vapor which is present
- Knows the concentration will not increase while the work is being done.

5.7 The responsible person cannot sign the Hot Work Permit until this test has been conducted by a qualified person and the results are within acceptable limits.

6. Obtaining a Hot Work Permit:

Hot work may only begin upon the issue of a Hot Work Permit, available from the Superintendent of Physical Plant, Victor Cheney or the Environmental, Health and Safety Coordinator or designee.

7. Displaying the Hot Work Permit:

The Hot Work Permit must be displayed in a visible location any time hot work is in progress. Failure to display this permit will result in an immediate stoppage of work. The permit is valid only for the time period displayed on the Hot Work Permit.

8. Hot Work Permit shall contain the following information:

- a) The effective time and date.
- b) The place of use.
- c) The hours during which the source of ignition may be used, not to exceed 8 hours. If the work is to extend between shifts, a new permit needs to be issued
- d) The specific location or piece of equipment where the source of ignition will be used.
- e) The nature of the use of the source of ignition.
- f) Any special precautions or limitations to be observed before, during or after the use of the source of ignition, including the need for fire watch.
- g) Fire Alarm System shut downs.

9. The Hot Work Permit shall be terminated under the following conditions:

- a) When circumstances would make the continued use of the source of ignition hazardous.
- b) Any time the conditions of its issuance change.
- c) At the end of each shift

10. Completion of Work:

Upon completion of hot work and final fire check, return the used permit to the issuing manager. The permit will be kept on file for a minimum of 6 months.

11. Audit of Program:

This policy shall be audited on a periodic basis. Results of such audits shall be reported to the Flagler College Environmental, Health and Safety Coordinator

12. Permit Retention:

All cancelled Hot Work permits will be retained for one year and filed in the facilities office.

APPENDIX A

EXAMPLE HOT WORK PERMIT

Flagler College

HOT WORK PERMIT

This Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: cutting, grinding, and welding.

INSTRUCTIONS

- A. Verify precautions listed at right (or do not proceed with the work).
- B. Complete form and get necessary signatures.
- C. Post at work site.

HOT WORK BEING DONE BY:

- Trades Personnel Contractor

PERMIT ISSUED	DATE:	TIME:	AM PM
LOCATION/BUILDING & FLOOR:			
NATURE OF JOB:			
NAME OF PERSON DOING HOT WORK:			
COMPANY NAME/DEPARTMENT:			
PHONE NUMBER:			
I verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and permission is authorized for this work.			
SIGNED (Project Manager or Facilities Manager):			
PERMIT EXPIRES	DATE:	TIME:	AM PM

- A fire watch shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work.
- The fire watch shall include the entire hot work area and if necessary, adjoining floors/areas.
- Hot work conducted in areas with vertical or horizontal fire exposures that are not observable by a single individual shall have additional personnel assigned to fire watches to ensure exposed areas are monitored.

REQUIRED PRECAUTIONS CHECKLIST

- Available sprinklers, hose streams and extinguishers are in service/operable.
- Hot Work equipment in good repair.
- Special precautions taken to avoid accidental operation of automatic fire detection systems.

Requirements within 35 ft. of work:

- Flammable liquids, dust, lint and oily deposits removed.
- Explosive atmosphere in area eliminated.
- Floors swept clean.
- Combustible floors wet down, covered with damp sand or fire-resistive sheets.
- Remove other combustibles where possible. Otherwise protect with fire-resistant material.
- All wall and floor openings covered.

Work on walls or ceilings:

- Construction is noncombustible and without combustible covering or insulation.
- Combustibles on other side of walls moved away.

Work on enclosed equipment:

- Enclosed equipment cleaned of all combustibles.
- Containers purged of flammable liquids and/or vapors.
- Pressurized vessels, piping and equipment removed from service, isolated and vented.

Fire watch/hot work area monitoring:

- Fire watch will be provided during and for 30 minutes after work, including any coffee or lunch breaks.
- Fire watch is supplied with suitable extinguishers.
- Fire watch is trained in use of this equipment and in sounding alarm.
- Fire watch may be required for adjoining areas above and below.

Flagler College HOT WORK PERMIT