



Policies and Procedures

Hot Works Operations Policy

Introduction:

Purpose

To establish procedures defining a system of control that will allow work involving possible sources of ignition to be carried out safely, eliminating the danger of fire to surrounding areas in accordance with NYS Fire Code Chapter 26, OSHA laws and good practices.

Policy

A Hot Work permit will be required for any activity that requires the use of a flame or generates sufficient heat or sparks that might serve as a source of ignition. See definition of “Hot Work” below. This policy applies to indoor and outdoor work on any SUNY ESF property.

Persons performing Hot Work and signing permits must have completed training provided by the Environmental Health and Safety Office. The person conducting the Hot Work will complete a permit and meet all of its requirements. A trained supervisor or the Environmental Health and Safety Officer will review completed permits and the affected area before signing the permit and allowing Hot Work to begin.

Cold cutting and attachment methods are preferred to Hot Work whenever possible.

This Hot Work policy and permit process applies to contractors as well as employees. Permits provided to contractors are to be issued by the ESF representative managing the project or the Environmental Health and Safety Officer.

Where the Hot Work area is accessible by the public, conspicuous signs shall be posted stating: “CAUTION – HOT WORK IN PROGRESS – STAY CLEAR”.

No Hot Work can be performed in a “Confined Space” without approval of the Environmental Health and Safety Officer.



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Definitions

Hot Work: Any work that produces open flames, hot slag or sparks. The Fire Code defines Hot Work as cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch applied roof systems, or any other similar situation.

Combustible: A material capable of sustained burning when ignited and in the presence of air.

Flammable: A liquid having a flashpoint below 100 degrees Fahrenheit.

Fire Watch: A trained individual stationed in the Hot Work area who monitors the work area for the beginnings of potential, unwanted fires both during and after Hot Work for 30 minutes. Individuals must be trained and familiar with the operation of portable fire extinguishers and methods to activate building fire alarm systems. Fire Watch can have other assigned duties if these do not prevent him/her from being an effective Fire Watch.

Confined Space: A space that has the following characteristics:

- Is large enough and so configured that an individual can bodily enter and perform assigned work; and
Has limited or restricted means for entry or exit; and
- Is not designated for continuous employee occupancy

Procedure

A permit is required when any form of Hot Work is to be done. The permit is to be completed prior to the start of the work and may be valid for up to thirty days. Extended time permits are for single locations only.

A permit will be issued by the Environmental Health and Safety Office, a Hot Work trained supervisor, or ESF representatives who have been approved by the Environmental Health and Safety Officer to manage projects.

All permits are issued or renewed to the requestor in person after a review of the location of the Hot Work and the completed permit.

Requestor is responsible for preparing the work area daily according to the permit requirements prior to allowing any Hot Work. All areas for which a Hot Work permit is to be issued must be checked for combustible materials, flammable load, floor/wall penetrations, and fire alarm accessibility prior to the start of every Hot Work project, as well as for compliance with all requirements of the permit.



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The requestor shall monitor the area for fire safe working conditions and see that a minimum of one portable fire extinguisher with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet. The discharge of any fire extinguisher shall be reported to the Environmental Health & Safety Office.

An additional person to act as a Fire Watch shall be available if conditions warrant. Factors to consider are the spread of ignition sources such as sparks and slag.

Hot Work is restricted as follows:

Hot Work is not allowed in:

- Areas where flammable vapors may be present within a minimum 50' radius.
- The immediate vicinity of any pipe line, valve, fitting, vessel, or equipment that contains or has contained a flammable or combustible liquid or gas without approval from the Environmental Health and Safety Officer.
- Areas where, when a gas meter test is done, the Lower Explosive Limit (LEL) reading is above 10% LEL.
- A confined space without approval of the Environmental Health and Safety Officer.

Floor openings or drains must be adequately covered to prevent slag or sparks from falling to the area below or entering drains. In the case of the work being performed in an elevated area, the area below shall be barricaded.

In areas where heavy dust may be present, the dust accumulation must be cleaned prior to the start of work.

When both the requestor and approved signatory are satisfied with the precautionary measures, the permit will be issued.

The signed permit shall be posted on the job site at all times by personnel doing the work.

When the work is completed, the area shall be returned to normal condition.

The requestor shall check the area for fire, up to 30 minutes after work has been completed for the day, and return all firefighting equipment to its proper place.

Any unusual incidents that occur shall be noted on the back of the permit and reported to the supervisor or Environmental Health and Safety Officer (x6896) for a follow-up investigation.

Permits shall be maintained for 48 hours following expiration.



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Frequently Asked Questions about SUNY ESF Hot Work Permits

Is a Hot Work Permit required by code?

Yes. The State Fire Prevention Code and OSHA require a permit system for Hot Work.

Is complying with Code the only reason for having a Hot Work permit system?

No. While it is important to comply with the Code, a Hot Work permit system helps the College maintain control of Hot Work operations to avoid injuries and losses from fires. Due to the hazardous nature of all types of Hot Work operations, millions of dollars in damage occur each year around the country. A Hot Work permit system provides the following advantages: 1) workers are reminded of required safety precautions and responsibilities; 2) smoke detectors can be temporarily bypassed to avoid false alarms; 3) the fire department MAY BE notified in order to help them assess an incident in locations where Hot Work is being performed.

What is Hot Work?

The Fire Code defines Hot Work as cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch applied roof systems, or any other similar situation.

Has Environmental Health and Safety done anything to make it quicker and easier to obtain and use Hot Work permits?

Yes. Environmental Health and Safety has placed the Hot Work Permit form on-line. It is available through the Environmental Health and Safety web page at <http://www.esf.edu/ehs/>. Additionally, permits may be valid for extended periods of time with proper approval.

Who is responsible for assuring that Hot Work is done in a safe manner and that all precautions have been taken?

Trained workers are responsible for the safety of the Hot Work operation. They must have a properly issued Hot Work Permit for any Hot Work. However, everyone involved in the operation is important when it comes to doing the work safely. Environmental Health and Safety (5 Bray, x6896) will provide assistance on safety issues and should be contacted when needed.

Does my personal liability increase when I sign a Hot Work Permit?

No. Following established College policies reduces personal liability, unless it is proven that an employee acted with intent to cause damage or harm. Not following the Hot Work Policy and Permit process is a violation of SUNY ESF policy and is subject to disciplinary action.



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Is a Hot Work Permit required for outdoor Hot Work?

Yes. The Fire Code makes no distinction between indoor and outdoor Hot Work.

Can a Fire Watch have other duties?

Yes, unless they prevent him/her from being an effective Fire Watch. Fire watch must be the primary responsibility.

Why does a Fire Watch have to remain on the job site for 30 minutes after the completion of Hot Work?

Most fires associated with Hot Work occur after the work has been completed. A spark that landed in an unnoticed location may smolder. It takes time for the fire to grow to a point where flame and smoke are visible. By that point the workers may have left the site.

Is a Hot Work permit needed in a maintenance shop?

Yes. A permit is required in any area where Hot Work is performed, regardless of frequency. Permits MAY be issued for up to 30 days, and new permits may be issued upon expiration. Requiring a site to obtain a permit at least every 30 days helps ensure frequent review of fire safety conditions.

Do contractors need Hot Work permits?

Yes. All contractors are required to follow the SUNY ESF Hot Work Policy and Permit process. Physical Plant staff will ensure that contractors are informed of and follow ESF's Hot Work Policy.

Do I need to check for smoke detectors in the area where Hot Work is to be performed? Whom do I contact to schedule a smoke detector outage? What if there is a fire alarm activation?

Persons performing Hot Work must check for smoke detectors in the area where they will be working. This is necessary to avoid unwanted alarm activations. Physical Plant must be contacted in advance of the work to schedule an outage for the smoke detectors. If a smoke detector activates during Hot Work, the building must be evacuated and University Police must be notified by calling 470-6666 and explaining what happened. Wait for instructions. Do not re-enter the building until the alarm is reset.



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Are there specific requirements for tar kettles?

Yes. Tar kettles are not permitted to be located inside of or on the roof of any building. The kettle must be operated in a controlled area, which must be identified by the use of traffic cones, barriers, and other suitable means. An operating kettle must be attended by a minimum of one employee who is knowledgeable of the operations and hazards. The employee must be within 25 ft. of the kettle and have the kettle within sight. Two 20-B:C type fire extinguishers must also be located and visible within 25 ft. of the operating kettle. Kettles must not block, or be closer than 10 ft. from, exits or means of egress. Kettles must not block roadways, gates or entrances.

Whom can I contact for more information or if I need assistance?

Contact the Environmental Health & Safety Office in 5 Bray Hall, or call 470-6896.