



Hot Work Policy

1. Purpose

The purpose of the University of Denver Hot Work policy is to protect personnel and property from a fire caused by hot work. The DU Hot Work policy defines the responsibilities and requirements for performing hot work and establishes controls through the use of a hot work permit.

This policy establishes the means to assess the work area and the planned hot work activity to ensure sufficient and necessary controls are in place to prevent a fire. Hot work will only be performed in areas that are or have been made fire safe. Where fire prevention precautions, such as a fire suppression system or a fire or smoke detection system, are not sufficient a fire watch person shall be assigned to monitor the area for fire, as needed.

2. Authority

OSHA 29CFR 1910.252-254
NFPA 51B

3. Scope

This policy applies to all hot work performed on DU property, including work performed by DU employees and external contractors. Hot work includes any temporary operation, scheduled or emergency, indoor or outdoor, involving open flames or producing heat and/or sparks. Examples of hot work include torch cutting, welding, soldering, brazing, grinding. Permanent areas which are designated areas for long term or permanent performance of hot work, such as a maintenance shop or a detached outside location are not considered hot work as defined above.

A hot work permit is **not** required for:

- Operations performed that do not generate sufficient heat or sparks to be considered a significant source of ignition to surrounding combustibles;
- Operations performed in permanent areas, which are designated areas for long term or permanent performance of hot work, such as a maintenance shop or a detached outside location;

Permanent areas where welding, torching, or cutting will be performed must have the following conditions to be exempt from this policy:

- area constructed of non-combustible or fire resistive material
- essentially free of combustible and flammable content
- suitably segregated from adjacent areas
- equipped with a suitable exhaust system capable of removing the fumes and spent gases associated with Hot Work;



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4. Responsibilities

a. Environmental Health & Safety Manager

The Environmental Health & Safety (EH&S) Manager is institutionally responsible for:

- overseeing the Hot Work Policy to provide for regulatory compliance
- assisting in evaluating specific work to determine if potential hot work exists
- inspecting and approving the job site for hot work, as needed
- prescribing any additional personal protective equipment (PPE) beyond the minimum required PPE
- maintaining copies of hot work permits for one year.

b. Authorized Person

An Authorized Person, employed by DU, shall be responsible for ensuring compliance with this policy. The applicable Project Manager will be the Authorized Person for contracted work. The authorized person shall have sufficient technical knowledge, training and practical experience in the hot work processes and their associated hazards. The authorized person is responsible for:

- ensuring hot work is identified and performed in accordance with this policy
- performing a hazard assessment of the scheduled hot work and the work area, as needed, to establish controls and fire watch requirements (see precautions & requirements section below)
- notifying the EH&S Manager of scheduled Hot Work
- obtaining any alarm system bypass that may be necessary and ensuring such alarm system is reactivated upon completion of hot work
- making sure that persons who will perform hot work have read and understand the Hot Work Policy
- assuring that persons who will perform hot work have demonstrated competency in the use of hot work equipment and are trained in performing hot work
- ensuring that high energy sources are isolated as needed in accordance with the Lockout/tagout policy



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- approving hot work permits
- submitting a copy of the permit to the EH&S Manager.

c. Hot Work Employee

The worker who is performing the hot work is responsible for:

- completing classroom hot work training to the requirements of this policy
- performing hot work in accordance with the requirements of this policy
- being familiar with the facility and how to sound an alarm in the event of a fire
- filling out the work area preparation section of the hot work permit
- making the work area fire safe and verifying on the permit that work can start
- insuring the required safety precautions per the hot work permit are followed.

d. Fire Watch

The Fire Watch, which simultaneously can be the worker, is responsible for:

- being alert to all conditions that may directly involve the safety of the cutter or welder and observing the cutter or welder for sparks, flame, or slag that lands on clothing or protective equipment
- being trained to the requirements of this policy
- having the appropriate fire extinguishing readily available
- being familiar with the facility and how to sound an alarm in the event of a fire
- extinguishing a fire and/or sounding the fire alarm
- calling emergency services at 911 and Campus Safety at -13000, as needed
- completing the Closeout section of the permit.

5. Precautions and Requirements

- A hot work permit must be completed prior to initiating hot work and posted at the work area. The work process shall include (1) an assessment of the facility condition, (2) preparation of the work area, (3) hot work activity, (4) closeout.



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- Hot work must be approved by the **Authorized Person**. For externally contracted work the applicable **Project Manager** is the Authorized Person.
- Hot Work is permitted only in areas that are or have been made fire safe.
- Hot Work equipment shall be in good working condition and fully inspected.
- The Authorized Person shall perform a hazard assessment of the scheduled hot work and the work area where the following conditions exist:
 - fire suppression system is not operable or does not exist
 - fire/smoke detection system is localized only or does not exist
 - special potential hazards such as work in a confined area, attic, or crawlspace in which an increased fire risk may exist

This hazard assessment includes the identification on the permit any special precautions and controls and the fire watch requirements, which will be at least 60 minutes after completion and may include periodic checks for 2 or 3 hours.

- The floor around the area where the hot work is to be performed shall be swept clean and clear of debris for a radius of 35 feet.
- Combustibles shall be adequately protected or shielded, using flameproof materials. For torch cutting or welding, combustibles shall be relocated at least 35 ft horizontally from the work area. The edges of covers at the floor shall be tight to prevent sparks from going under the covers.
- Openings or cracks in walls, floors, or ducts within 35 feet of the Site shall be tightly covered to prevent the passage of sparks to adjacent areas.
- When torch cutting or welding is performed near combustible partitions or ceilings, fire-resistant guards shall be provided to prevent ignition.
- Welding shall not be attempted on a metal partition, wall, ceiling, or roof having a combustible covering. Oil-based paints and epoxies shall be no closer than three feet in any direction.
- Fully charged and operable fire extinguishers shall be available in the hot work area. The use of wall-mounted fire extinguishers, provided in the facility, is prohibited. Available portable fire extinguishers shall include as a minimum, one 4A:40B:C rated extinguisher within 40 feet of the activity.
- Special precautions shall be taken to avoid accidental operation of automatic fire detection or suppression systems. If the possibility exists that automatic fire detection or suppression systems will be activated as a result of the work activities, then the automatic fire detection or suppression systems shall be isolated from the detectors located in the immediate area.
- Nearby personnel shall be relocated or suitably protected from heat, sparks, slag, arc



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flashing, and infrared or ultraviolet radiation.

- The Hot Work permit is valid for only one day unless otherwise approved by the EH&S Manager.



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DU Department / Contractor _____ Building / location _____

Authorized person _____ Phone _____ Date of Issue _____

Description of work _____

Facility / Area Conditions (completed by the Authorized Person)
Is a fire suppression system (sprinklers) in place? (Yes / No)
Is an alarm detection system in place? (Yes / No)
Can the area be made fire safe with no special considerations? (Yes / No)
Describe special precautions to be implemented and fire watch requirements if any answer is negative.
Mark NA if not applicable.
EH&S Manager notified _____ Signature of Authorized Person _____

Work Area Preparation (completed by worker)
Fire suppression sprinklers, fire hoses, or fire extinguishers available and operable
Smoke/fire detectors/alarms in immediate area temporarily disabled
No combustible and flammable materials within 35 ft or protected with covers or guards
Adequate mechanical or natural ventilation provided.
Floors swept, debris cleared, cracks or holes in floors, walls covered
Area barricaded from building occupants
Hazards from energized electrical equipment properly controlled, i.e. properly grounded
Personnel trained on the use of equipment and how to sound alarm
Appropriate fire extinguisher certified for use and available
Required PPE: safety glasses, flame resistant coveralls, flame resistant gloves, safety shoes
Comments for unchecked items _____

Permit approval
Authorized Person Signature _____ Date: _____

Closeout
Completion of work (initial and time, mark NA if not applicable)
Work area cleaned and inspected _____ Time _____ Alarms/detectors reactivated _____ time _____
Fire Watch _____ Time _____ Fire Watch _____ Time _____ Fire Watch _____ Time _____
Name and signature _____ Date & time closed _____

Emergencies – call 911 and -13000 (Campus Safety)