

Hot Work Permit Program



Course Objectives

🔥 Describe how CCSD Hot Work Permit Program is used to managed hot work activities.

🔥 Identify responsibilities and components of the CCSD Hot Work Permit Program.



Introduction

🔥 Every year fires occur, which could have been prevented had employees used appropriate fire prevention measures. CCSD requires the use of the Hot Work

Permit to:

- 🔥 Protect employees and District property.
- 🔥 Prevent ignition of combustible and flammable materials from occurring.

Definitions

- Hot Work Operations - Any operation that could cause a source of ignition in a hazardous area.
- Hazardous Location - Is one where flammable gases, vapors or combustible dust are (or may be) present in the air in sufficient quantities to create a fire or explosion.
- Source of Ignition - Is a flame, tool spark, static electric charge or electric spark that would cause a fire or explosion.

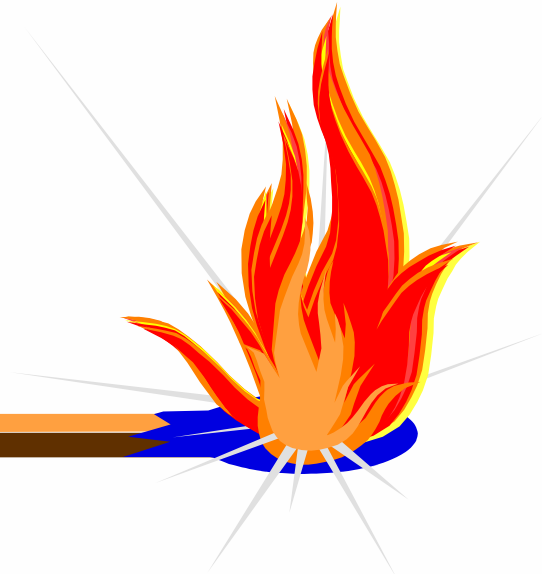
Definitions

- Cutter / Welder – The individual performing the hot work operations.
- Fire Watch - Individual that is specifically trained in the use of a fire extinguisher, small hose and/or bucket of sand. He/she should be familiar with the facilities and also know how to sound the fire alarm.
- Hazard - A potential for an accident with undesirable consequences, usually involving a loss of containment of flammable, combustible, highly toxic (i.e. ammonia) or reactive materials.






Hot Work

EXAMPLES OF HOT WORK ARE:

- Welding
- Burning
- Brazing
- Propane Soldering
- Oxyacetylene Cutting
- Grinding Ferrous Metals
- Thawing Pipe
- Hot Riveting
- Heat Treating
- Powder Driven Fasteners



Hot Work Program Objective

-  To ensure the work area is inspected and all sources of ignition are isolated from the hot work area.
-  To establish fire watches when applicable.
-  To provide communication with all departments concerned.
-  To control how open flame or spark-producing equipment is used.
-  To formally document all hazardous conditions and special requirements of the work area.

Precautions

- 🔥 Reviewing general safety precautions prior to performing hot work.
- 🔥 Inspection of non-approved welding areas.
- 🔥 Using the required PPE.
- 🔥 Posting a fire watch.



Hot Work Permits

- **INITIATING A HOT WORK PERMIT**



Is There A Need?



Submit Hot Work Permit

- **ISSUING A HOT WORK PERMIT**



Supervisor Fills Out Permit



Date, Time and Location (no longer than 4 days)



Supervisor Review List Of Precautions



Supervisor Signs Permit



Post Fire Watch

Hot Work Permits

CCSD Hot Work Permit

BEFORE INITIATING HOT WORK, ENSURE PRECAUTIONS ARE IN PLACE!
MAKE SURE AN APPROPRIATE FIRE EXTINGUISHER IS READILY AVAILABLE!

This Hot Work Permit is required for any operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: Brazing, Cutting, Grinding, Soldering, Thawing Pipe, Torch-Applied Roofing, and welding.

INSTRUCTIONS

- A. Verify precautions listed at right (or do not proceed with the work).
- B. Completed permit maintained on site while operation is being performed.
- C. Return permit to supervisor when complete.

HOT WORK BEING DONE BY

- EMPLOYEE
- CONTRACTOR _____

DATE _____ JOB NO. _____

LOCATION/BUILDING & FLOOR _____

NATURE OF JOB/OBJECT _____

NAME OF PERSON DOING HOT WORK _____

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 work.

SIGNED: (Permit Authorized Individual)

PERMIT EXPIRES: DATE _____ TIME _____

IN THE EVENT OF A FIRE, IMMEDIATELY DIAL 911 AND REPORT THE SITUATION.

Required Precautions Checklist

- Available sprinklers, hose streams, and extinguishers are in service/operable.
- Hot work equipment in good repair.
- Requirements within 35 ft of work**
- Flammable liquids, dust, lint, and oil deposits removed.
- Explosive atmosphere in area eliminated.
- Floors swept clean.
- Combustible floors wet down, covered with damp sand or fire-resistant sheets.
- Remove other combustibles where possible. Otherwise protect with fire-resistant tarpaulins or metal shields.
- All wall and floor openings covered.
- Fire-resistant tarpaulins suspended beneath work.
- Work on walls or ceilings/enclosed equipment**
- Construction is noncombustible and without combustible covering or insulation.
- Combustibles on other side of walls moved away.
- Enclosed equipment cleaned of all combustibles.
- Containers purged of flammable liquids/vapors.
- Fire watch/hot work area monitoring**
- Fire watch will be provided during and for 60 minutes after work, to include 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 area of operation.
- Monitor hot work area for 4 hours after job is completed. Check area every 30-60 minutes.
- Other precautions taken where identified**
- Confined space entry permit required.
- Area protected with smoke or heat detection.
- Ample ventilation to remove smoke/vapor from work area.
- Lockout/tagout required.

Permits are issued for the specific job being done and for a specific time period. The time period is usually for the working shift, but may never exceed ninety six hours.

Hot Work Permits

CCSD Hot Work Permit

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HOT WORK BEING DONE BY		
<input type="checkbox"/> EMPLOYEE		
<input type="checkbox"/> CONTRACTOR _____		
DATE	JOB NO.	
LOCATION/BUILDING & FLOOR		
NATURE OF JOB/OBJECT		
NAME OF PERSON DOING HOT WORK		
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 work.		
SIGNED BY: (Permit Authorized Individual)		
PERMIT EXPIRES:	DATE	TIME
IN THE EVENT OF A FIRE, IMMEDIATELY DIAL 911 AND REPORT THE SITUATION.		



The appropriate supervisor has the responsibility to verify that all necessary precautions have been taken at the worksite.

Hot Work Permits



SPRINKLER IN SERVICE

Welding and other hot work have been found to be high ranking causes of industrial fires. Sprinkler systems must remain in service in the hot work area.

Hot Work Permits



Cutting and welding equipment in good repair.

Gas hoses, backflow preventers, fire resistive tarpaulins, curtains and other cutting and welding equipment must be in good condition before the permit is issued.

Hot Work Permits

Available sprinklers, hose streams and extinguishers are in service/operable.

Hot work equipment in good repair.

Requirements within 35 ft of work

Flammable liquids, dust, lint and oil deposits removed.

Explosive atmosphere in area eliminated.

Floors swept clean.

Combustible floors wet down, covered with damp sand or fire-resistant sheets.

Remove other combustibles where possible. Otherwise protect with fire-resistant tarpaulins or metal shields.

All wall and floor openings covered.

Fire-resistant tarpaulins suspended beneath work.

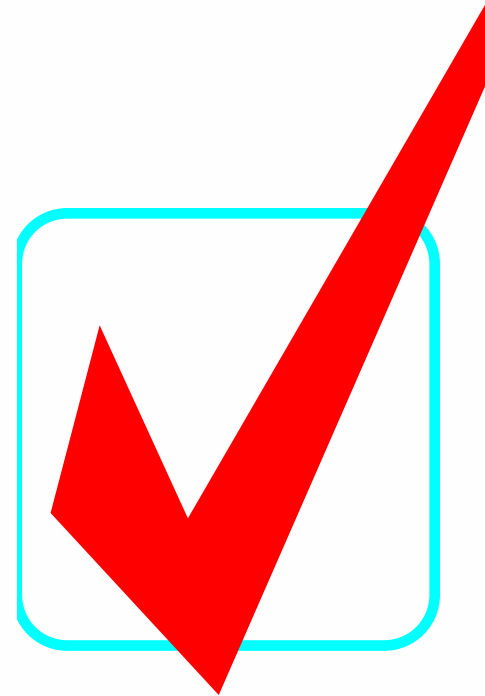
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Construction is noncombustible and without combustible covering or insulation.

Combustibles on other side of walls moved away.

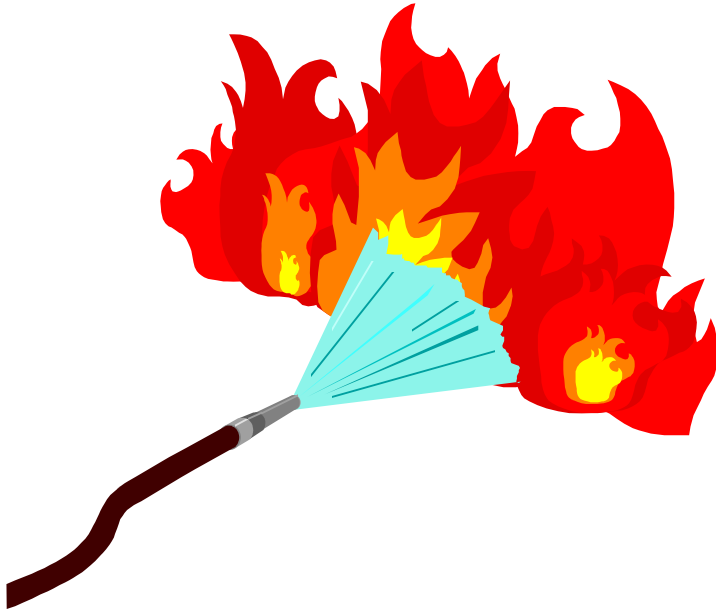
Enclosed equipment cleaned of all combustibles.

Containers purged of flammable liquids/vapors.



Anything that can burn must be removed from the immediate work area.

Hot Work Permits



Necessary Precautions

Fire watch will be provided during and for 60 minutes after work, to include 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 area of operation.

Monitor hot work area for 4 hours after job is completed. Check area every 30-60 minutes.

Should other precautions fail, trained personnel will be needed with fire fighting equipment to extinguish any fires which start. Personnel and equipment must be readily available before the permit is issued.

Hot Work Permits

Necessary Precautions

Fire watch will be provided during and for 60 minutes after work, to include 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 area of operation.

Monitor hot work area for 4 hours after job is completed. Check area every 30-60 minutes.

Fire Watch Personnel may not do other jobs which detract from their primary responsibility.

Fire Watch Personnel must be trained to use fire extinguishment media provided.

Fire Watch Personnel must be aware of how to report emergencies and implement emergency evacuation procedures.

Fire Watch Personnel must be identified and their qualifications verified, before permits are issued.

Hot Work Permits



Necessary Precautions

CAN THE JOB BE AVOIDED?

IS THERE A SAFER WAY?

Before beginning any hot work, ask yourself if the work can be done a safer way. Hot work is very hazardous and should be avoided if not absolutely necessary.

Hot Work Permits



SECTION 3 FINAL CHECK-UP

Work area and all adjacent areas to which sparks and heat might have spread (including floors above and below and on opposite sides of walls) were monitored for 4 hours after job is completed. Check area every 30-60 minutes.

THIS FORM SHOULD BE KEPT ON FILE FOR 30 DAYS AFTER ALL WORK IS COMPLETED.

Before leaving the area for the day, verify that no smoldering fires have developed within walls, cracks in floors or in ceiling areas where you have been working. Return the work permit to the person who issued it within 30 minutes of job completion, so that they may complete any necessary job follow-up.

Hot Work Permits - Summary

- 🔥 Jobs like electric arc welding, brazing, gas soldering and oxygen-acetylene cutting and welding require hot work permits be issued by the appropriate supervisor before work begins.
- 🔥 Permits are issued for a specific job, for a specific time frame, to a specific person.
- 🔥 All necessary equipment must be on site and in good working order before work begins.
- 🔥 A fire watch must be present for the duration of hot work and for at least 60 minutes after hot work is done.
- 🔥 A fire inspection must be conducted by the person doing the hot work before leaving the job site.
- 🔥 Permits are to be returned to the person who issued them.

Where to Get Help?

- 🔥 The person performing the job is responsible for all necessary equipment and for contacting the appropriate supervisor and other affected employees.
- 🔥 The appropriate supervisor will issue all permits and answer any specific questions about fire protection systems, fire prevention measures and precautions.
- 🔥 The Risk Management Department can answer any questions regarding other hazards, such as welding light or fumes.
- 🔥 For more information please contact Risk Management at 702-799-6496.