

Using this Template

The following template can be used to help your organization develop a written Hot Work Program. This template cannot be used as is – you must customize the template to meet the needs of your organization. We have made this template easier for you to customize by adding visual prompts that identify some areas where your input is needed. These are identified by yellow highlighted, red text in the template. You may also change any of the text in the template to meet your organization’s needs – for example, department names, job titles and listed responsibilities and procedures.

Example:

<Company Name>

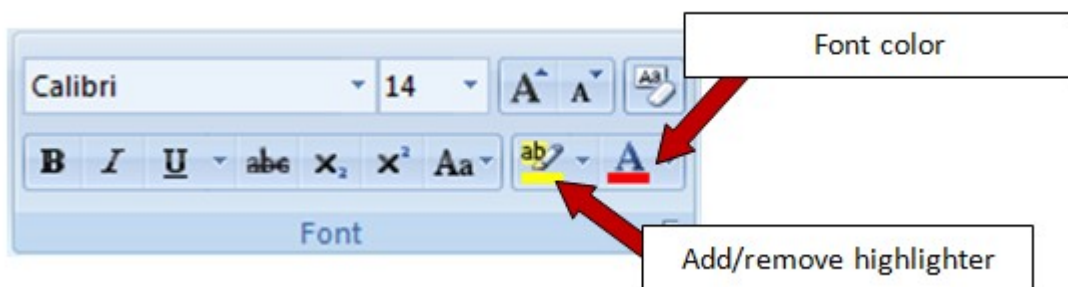
Hot Work Program

becomes

XYZ Company

Hot Work Program

To remove the colored highlighting from your text, left click and drag your mouse over the yellow text and click on the highlighter button from the font menu. To change the font color to black, select the text and click on the font color button.



To aid you in understanding the need to customize your program, several “Check Your Understanding” text boxes are also included throughout the template. After reading the information in the text box and adding the required information into the template, you may simply right click on the cross arrow box and select “cut.”

Disclaimer. This sample safety program template cannot be used as is. You must customize the template to meet the needs of your organization. EMC does not guarantee that this template is or can be relied on for compliance with any law or regulation, assurance against preventable losses, or freedom from legal liability. We make no representations or warranties of any kind whatsoever, either express or implied, in connection with the use of this template. EMC will not be liable for your use of the template as customized by you. All safety programs and policies, including this template and the information you supply to complete it, should be reviewed by your legal counsel and/or risk management staff.

<Company Name> Hot Work Program

Check Your Understanding. Do you need a Hot Work program? If your organization performs operations or maintenance involving open flame, sparks or high heat, the answer to this question is likely yes. This includes operations such as brazing, cutting, drilling, welding, grinding, soldering and torch work. The prevention and protection against fires and other hazards associated with hot work can be addressed by general requirements as specified by OSHA standard [29CFR 1910.252](#). This applies for employees working within a designated hot work area as well as those working outside of a designated hot work area.

Revision History

<Revision XX – March 7, 2014>

Purpose and Scope

<Company Name> is committed to providing a safe and healthy work environment and to protecting our employees from injury or death caused by uncontrolled hazards in the workplace. <Company Name> recognizes the potential for fire from hot work operations. The Hot Work Program has been established to help protect the safety of <Company Name's> employees and property by establishing appropriate hot work procedures and designated areas for hot work operations.

This program applies to all employees (permanent, temporary and contractors) who complete hot work or work in areas where hot work is taking place. All employees are required to follow the procedures outlined in this program. Any deviations from this program must be immediately brought to the attention of the Program Administrator.

Program Responsibilities

Management. The management of <Company Name> is committed to the overall safety of its workers and facilities. Management supports the efforts of the Program Administrator by pledging leadership support and financial resources for this program and ensuring the program is being followed.

Program Administrator. The Program Administrator reports directly to upper management and is responsible for developing and implementing the Hot Work Program. The Program Administrator is responsible for:

- Developing safe usage protocols for all heat, flame and spark-producing equipment
- Providing appropriate training to all employees of <Company Name> that perform or authorize hot work activities
- Establishing designated hot work areas
- Establishing procedures and a permit system for performing hot work in non-designated areas
- Designating individuals on all shifts who can approve hot work activities and issue permits in non-designated areas
- Identifying the proper personal protective equipment (PPE) needed during the hot work procedures
- Completing air monitoring in the event a potentially explosive atmosphere is identified

- Providing outside contractors working on <Company Name's> premises with training and information on the Hot Work Program and procedures
- Retaining records of training and all hot work permits
- Reviewing program at least annually, and when changes are needed or new equipment is added

Supervisors. Supervisors are responsible for:

- Ensuring that only qualified and trained authorized employees perform hot work activities
- Ensuring that employees who are found to have insufficient skills or understanding of hot work procedures do not perform hot work activities and receive retraining before conducting any hot work procedures
- Ensuring employees comply with all procedures described in this program
- Ensuring all hot work activities are approved prior to being performed in both designated and non-designated areas
- Completing hot work permit requests when necessary
- Identifying dangerous situations, not suitable for hot work
- Designating a fire watch employee for all hot work performed in a non-designated area during and for no less than 30 minutes after work is completed
- Conducting final inspections after a fire watch period has concluded
- Inspecting designated hot work areas after each shift to ensure no smoldering materials are present
- Providing information to the Program Administrator regarding needed improvements to this program

Hot Work Approver. A hot work approver is an employee who has been trained to approve hot work. Duties of the hot work approver include:

- Determining if the work can be completed or moved to a designated hot work area
- If the work cannot be moved, ensuring all combustible materials in the vicinity are removed
- If all combustible materials cannot be removed, ensuring that guards are in place to confine the heat, sparks and slag.
- Inspecting hot work areas and reviewing planned safety precautions before hot work operations begin
- Communicating to employees regarding hot work activities to ensure their safety
- If approval for hot work is granted, issuing and posting hot work permits which list all required precautions
- Establishing a fire watch during and for no less than 30 minutes after completion of the hot work

Authorized Personnel. Authorized personnel includes employees or contractors who are trained to perform hot work activities including soldering, welding, pipe-cutting, heat-treating, grinding, thawing pipes, hot riveting, torch-applied roofing and any other application involving heat, sparks or flames. Duties of authorized personnel include:

- Completing all required hot work training
- Seeking approval and/or a permit to perform hot work prior to beginning operations
- Performing hot work activities and procedures in accordance with this program
- Inspecting designated hot work areas for combustibles and other hazards prior to beginning hot work

- Inspecting hot work equipment to ensure it is in safe operating condition before beginning work
- Retaining control of the equipment while hot work is in progress

Fire Watch Personnel. A fire watch is a designated employee who monitors the hot work area for fires while work is being performed and for 30 minutes after its completion. Duties of the fire watch personnel include:

- Maintaining continuous watch over hot work activity during and for 30 minutes after work has been completed
- Monitoring adjacent areas for fires
- Extinguishing small, controllable fires with extinguishing equipment available in hot work area
- Activating fire alarm if an uncontrollable fire occurs
- Signing the hot work permit 30 minutes after the work is complete and re-posting signed permit in hot work area
- After the hot work and mandatory 30 minute monitoring period is complete, periodically returning to the area where the hot work was completed to check for fires for three hours
- Ensuring that the supervisor has conducted a final inspection after the fire watch period has concluded and signs off on the permit
- Having a supervisor find another trained person to relieve him/her if the designated individual must leave for any reason

Other Personnel. This includes employees or contractors who are neither authorized personnel nor fire watch personnel but are still exposed to areas where hot work is performed. Other personnel should not perform any hot work activities. Duties include wearing proper personal protective equipment when in a 35 foot radius of hot work.

Check Your Understanding. The section below provides basic steps that are required for successful hot work performance. Each of the hot work activities has their own risks and hazards that need to be accounted for. Adjust the hot work procedures as appropriate.

Personal protection varies depending on the particular hot work activity performed. Refer to [OSHA 1910.252\(c\)\(1\)](#) for information regarding specific protection details and ventilation standards for hot work.

Hot Work Designated Areas

The following areas have been designated as approved hot work areas. Hot work may be performed in these areas without the issuance of a hot work permit. Even though a permit is not required in these areas, authorized personnel must inspect the area for combustibles and other hazards before beginning hot work operations.

- Building B welding stations
- Maintenance welding booth

Authorized personnel must be certain that a functioning fire extinguisher appropriate for the type of potential fire is present at all times while hot work is being performed in designated areas. At the end of each shift, a supervisor or the hot work approver on duty must inspect each designated hot work area to ensure no smoldering materials are present and all hot work equipment is properly shut off and stored.

Hot Work Non-Designated Area Procedures

Basic Precautions. At a minimum all of the following precautions must be met to perform hot work in a non-designated area.

- Building fire sprinkler system is operational at the hot work location. (if applicable)
- All combustible materials within 35 feet of the hot work shall be moved to a safe distance or other location.
- If combustible materials cannot be moved, they are protected by fire retardant covers or they are shielded with fire retardant or metal guards.
- Appropriate PPE is provided to employees performing hot work based upon a hazard assessment.
- A fire watch is initiated during and for 30 minutes after all hot work has stopped.
- The hot work approver has inspected the hot work area prior to beginning work.
- The hot work approver has issued and posted a hot work permit **(Appendix A)**

Special Precautions. Where any of the following conditions exist additional precautions shall also be taken above the basic precautions. The final protection measures will be determined by the hot work approver prior to beginning work.

Floor Openings/Coverings – The floors shall be protected from exposure to flames, sparks, slag or other hot materials whenever there are combustible floors or materials on the floor, floor openings or cracks in the floors. Protections may include:

- Fire-resistant shields or material
- Wetting down floors
- Covering floors with damp sand
- Sweeping combustibles from floor
- Additional protections deemed necessary by the hot work approver

Wall Openings –The walls shall be protected from exposure to flames, sparks, slag or other hot materials whenever there are combustible walls, wall openings, pipe penetrations or ducts.

Protections may include:

- Fire-resistant shields or materials
- Shutting dampers
- Separate fire watch on the other side of the walls
- Additional protections deemed necessary by the hot work approver

Potentially Explosive Atmospheres – If there is a potential for mixtures of flammable gases, vapors, liquids or dust in the air, **no hot work will be conducted** until the Program Administer has completed a review and air monitoring has confirmed that there is no danger of an explosion.

Containers – No hot work will be performed on used drums, barrels, tanks or other container until they have been cleaned thoroughly. The hot work approver must determine that no flammable materials and no substance such as greases, tars, acids or other material which might produce flammable or toxic vapors if exposed to heat are present.

Outside Contractors

Whenever outside contractors perform any hot work activity they will be informed of the <Company Name> Hot Work Program and procedures by the Program Administrator or the hot work approver. All outside personnel are required to obtain a permit (**Appendix A**) from the hot work approver. All appropriate safety information will be communicated to the contractor(s) before work begins.

Protection of Personnel

General. All personnel conducting hot work or assisting with hot work on elevated platforms, scaffolds or runways will be protected from falling. The fall protection system will consist of either full railings or a fall arrest system with a full body harness, lanyard and approved connection point. Hot work personnel will position all cables, hoses and other equipment out of passageways and emergency egress paths whenever possible.

PPE. All personnel conducting hot work or assisting with hot work must wear the appropriate personal protective equipment. The appropriate protection is determined by the Personal Protective Equipment Program survey and outlined in the PPE Program document. Do not begin any hot work operations without obtaining and wearing the required protection.

Welding, cutting, heating and brazing. The following PPE must be worn when completing this type of hot work.

- **Eye and face protection**
 - Helmet with filter lens and cover plate that complies with ANSI Z87.1
 - Safety glasses with side shield under helmet
- **Head and ear protection**
 - Fire-resistant welder's cap under helmet
 - Approved ear-plugs or muffs
- **Foot Protection**
 - Leather, steel-toed, high-topped boots in good condition and that meet the requirements of ASTM F2412 and ASTM F2413
 - Do not wear pants with cuffs. The bottoms of pants should be worn over the tops of the boots
- **Hand Protection**
 - Dry, hole-free, insulated and flame-resistant welding gloves
- **Body Protection**

- Oil-free protective clothing made of wool or heavy cotton
- Clothing should allow for freedom of movement and should prevent skin exposure
- Leather aprons, leggings, capes and sleeves as needed

<List other forms of hot work and the required PPE here>

Equipment. All tools and equipment used to perform hot work operations will be inspected prior to use. No person should use any tool or equipment unless trained. All safety precautions as outlined in the Welding and Cutting Safety Program will be followed at all times.

Permit System

In order to ensure adequate controls and safety precautions are being used in non-designated hot work areas, a hot work permit system will be used.

Procedures.

1. Authorized person or supervisor will complete and submit hot work permit request (**Appendix A**) to hot work approver.
2. Hot work approver will review planned safety precautions and inspect the hot work site using the hot work permit checklist (**Appendix A**) within <30 minutes> of receiving the request.
3. Hot work approver will inform employees in the immediate area that hot work is going to be conducted and to avoid the area.
4. Hot work approver will communicate any additional special precautions that need to be taken prior to beginning operations.
5. If all necessary precautions have been taken and work can proceed, the hot work approver will complete the hot work permit and post the warning sign in a highly visible area.
6. Copies of all hot work permit information will be sent to the Program Administrator.
7. Upon completion of the hot work operations and the 30 minute fire watch, the hot work approver will inspect the completed job and ensure the area is clear and ready to return to normal operations.
8. Hot work approver will inform the employees in the immediate area that work is completed to return to normal operations.

Voiding Permits. Hot work permits will be void and all hot work must not begin or must be immediately stopped if any of the following occur:

- Fire alarm sounds
- Work has not begun within 60 minutes of approved time
- Work has been suspended for more than 60 minutes
- A work shift ends or there is a change in authorized or approval personnel
- At any time the authorized employee, supervisor or hot work approver detects a danger or uncontrolled hazard

Whenever a hot work permit is voided, a new permit must be issued to begin or continue hot work operations.

Check Your Understanding. Employee training is a critical component of a hot work program. EMC provides several [welding and hot work](#) tools you can use to create or enhance your training program. Remember to document all training and retraining courses including the following information: employee name, trainer name, content of training and date of training. Keep all training records on file for seven years.

Employee Training

Hot Work Approvers / Authorized Personnel / Supervisors.

Before any employees designated as hot work approvers, authorized personnel or supervisors are allowed to perform any hot work operations, they must first receive training. Periodic retraining will occur if an employee has a lack of knowledge, uses equipment improperly or if work tasks change. At a minimum, the training will include the following subjects:

- Fire prevention and protection
 - Basic precautions
 - Special precautions
- Employee classifications and responsibilities
 - Hot work approver
 - Authorized personnel
 - Supervisors
 - Fire watch personnel
- Designated hot work areas
- Non-designated hot work procedures
- Protection of personnel
- Hot work permit system
- Handling and storage of hot work materials
- PPE selection and use

Periodic Program Review

All hot work procedures will be reviewed at least annually by an authorized employee who does not regularly work with the hot work procedure or by the Program Administrator. If any inadequacies are identified, the Program Administrator will update the procedures and program. The annual review will include a discussion between the reviewer and each authorized employee to determine if he/she understands their responsibilities under the program. Annual inspections are documented in the form found in **Appendix B**.

Record Retention

Written training records, which include trainee names, the type of training provided and the dates when training occurred, will be kept by the Program Administrator for **<3 years>**. (**Appendix C**)

The Program Administrator will maintain the hot work permits for <7 years> and the annual program review documents indefinitely.

HOT WORK PERMIT REQUEST

Before beginning hot work, ask yourself, “Can this job be avoided? Is there a safer way?”

Hot work permits are required for any operation involving open flame, sparks or any heat-producing process. This includes, but is not limited to, brazing, cutting, drilling, welding, grinding, soldering and torch work.

The person performing the hot work must fill out this form in its entirety and submit it to the safety director for approval prior to beginning the project.

General Information

Company: _____

Responsible person: _____ Phone number: _____

Date work to be performed: _____ Start time: AM / PM _____

Building: _____

Room _____

Type of work to be performed: _____

<input type="checkbox"/> Welding	<input type="checkbox"/> Cutting	<input type="checkbox"/> Grinding	<input type="checkbox"/> Soldering	<input type="checkbox"/> Drilling	<input type="checkbox"/> Pipe thawing
<input type="checkbox"/> Brazing	<input type="checkbox"/> Torch-applied roofing	<input type="checkbox"/> Electric tools	<input type="checkbox"/> Other heat-producing process		

Planned Safety Precautions

☐ Perform fire watch. (List designated person.) _____

☐ Remove flammable and combustible materials within 35 ft. of work zone.

☐ Guard flammable and combustible materials that cannot be removed.

☐ Maintain appropriate and adequate fire extinguishers.

☐ Sweep floors within 35-ft radius of work zone.

☐ Protect floors within 35-ft radius of work zone by wetting, covering with damp sand or by using fire-resistant shields.

☐ Protect or shut down ducts and conveyors.

☐ Protect walls, partitions, ceilings and roofs with fire-resistant shields or guards.

☐ Other _____

HOT WORK PERMIT

A completed and signed hot work permit is required before any hot work process can begin. Both pages of this permit and the warning page are required to be posted at the work area during the hot work process or for the approved permit period.

Hot Work Safety Checklist

- ☐ Hot work process is located in the safest location possible or in an approved area.
- ☐ Precautions are in place to protect floors, walls, open doorways or open windows within a 35-ft radius of the work zone.
- ☐ Suitable fire extinguishing devices are available at the hot work site.
- ☐ If the worksite is inside a building equipped with a sprinkler system, the system is operational.
- ☐ If the worksite is inside a building equipped with a sprinkler system, the sprinkler heads within a 3-ft radius of hot work operations have been covered with a wet rag to prevent unwanted alarms.
- ☐ If the worksite is inside a building equipped with smoke detectors, the smoke detectors within a 3-ft radius of hot work operations have been covered to prevent unwanted alarms.
- ☐ Hot work equipment is in good repair.
- ☐ Fire watch personnel are trained on the proper use of extinguishing equipment and alarm operation.
- ☐ Fire watch is posted and will remain for at least 30 min after all hot work has been completed.
- ☐ No flammable or combustible fibers, dust, vapors, gasses or liquids are in the area.
- ☐ Floors are swept clean within a 35-ft radius of the work zone.
- ☐ Combustible floors are wet, covered with damp sand or protected by fire-resistant shields.
- ☐ Combustible materials are relocated at least 35 ft away from the work zone.
- ☐ Immovable combustibles are protected with flameproof covers or otherwise shielded with metal guards.
- ☐ Ducts and conveyors are protected or shut down.
- ☐ Combustible walls, partitions, ceilings and roofs are protected with fire-resistant shields or guards.
- ☐ No danger exists from conduction of heat through noncombustible walls, partitions, ceilings and roofs.
- ☐ There is adequate clearance between combustible material and pipes and other metals.
- ☐ There is adequate ventilation to remove smoke, vapor and dust from the work zone.
- ☐ All required lockout/tagout procedures are in place.
- ☐ Hot work operators are adequately trained.

☐ Contractors are advised about all hazardous materials and conditions they may encounter.

☐ Supervisors and employees are notified of nearby hot work operations.

HOT WORK PERMIT

(page 2)

Authorization

I have personally inspected the location where the above work is to be done, have checked for compliance with safety precautions listed on this permit and authorize the work to be performed.

Name:

Title:

Signature: Date:

Permit #:

Authorized duration of permit: To:

Date and Time

Date and Time

This permit is only valid as long as the working conditions existing at the time of issuance are maintained. The permit will automatically and immediately expire when any change in conditions adversely affects the safety of the work area while hot work is in progress. After a change occurs, another hot work permit must be issued before work can resume.

**This permit and associated warning sign
must be posted near the hot work site during all hot work.**

WARNING

HOT WORK IN PROGRESS

WATCH FOR FIRE

**Stop work immediately if an emergency alarm
signals an emergency situation in or near your work area.**

If you have questions about these hot work operations:

Contact:

(Safety Director)

Phone number:

WARNING

Appendix B – Annual Evaluation Report

Date of Evaluation:

Evaluated By (list all present):

Written Program Reviewed: Yes No
Comments on Written Program:
The following specific procedures have been reviewed:
The following specific procedures were modified:
The following specific procedures were added:
A review of the <Company Name's> incident reports were made: Yes No
The following injuries/fires resulted from failure to use correct hot work procedures:
Comments:

Appendix C – Personnel Training Record

This is to certify that the undersigned received training in **<Company Name's>** Hot Work Program.

Print Name	Hot Work Program Role	Sign Name

Print Instructor's Name	
Instructor's Signature	
Instructor's Title	
Date of Training	