



K.B.M. Fire Safety Services

HOT WORK SAFETY POLICY

- OBJECTIVE:** To establish minimum requirements for performing hot work during maintenance and construction activities.
- POLICY:** To all contractors working within the premises must comply with the contents of the Hot Work Safety Policy.
- RESPONSIBILITIES:** The responsible person and the contractor have the responsibility and authority to halt any unsafe practices not in accordance with this policy.
- PROCEDURES:** Any work involving burning, welding, torch cutting, grinding where sparks are produced, soldering, or brazing in construction, maintenance and fabrication activities shall follow the Hot Work Safety Procedure.

Hot Work Safety Procedure

Scope and Application:

This program is designed to prevent injury and loss of property from fire or explosion as a result of hot work in all premises.

It covers: welding, brazing, soldering, heat treating, grinding, powder-actuated tools, hot riveting and all other similar applications producing a spark, flame, or heat.

This program does not cover use of: candles, laboratory activities, pyrotechnics or special effects, cooking equipment, electric soldering irons.

All hot work performed by outside contractors shall be in conformance with this policy.

Hot work operations in confined spaces will require additional safeguards.

Hot work on and near building systems and piping may require additional safeguards.

Definitions:

Competent Hot Work Operator (CHWO) The contractor carrying out the work shall have successfully completed competent person training and examination to be considered competent. This individual is designated to perform hot work after authorisation by the premises representative.

Designated Area. The location in which the “Hot work” is to be performed.

Hot Work. Any work involving welding, brazing, soldering, heat treating, grinding, powder-actuated tools, hot riveting and all other similar applications producing a spark, flame, or heat, or similar operations that are capable of initiating fires or explosions.

Hot Work Permit. A document issued by a representative of the premises for the purpose of authorizing a specified activity.

Welding and Allied Processes. Those processes such as arc welding, oxy-fuel gas welding, open-flame soldering, brazing, thermal spraying, oxygen cutting, and arc cutting.

Specific Responsibilities:

Competent Hot Work Operator (CHWO)

The CHWO is responsible for the safe operations of hot work activity under their supervision. These duties include:

- Establish permissible areas for hot work.
- Ensure that only approved apparatus, such as torches, manifolds, regulators and pressure reducing valves, are used.
- Ensure that all individuals involved in the hot work operations are familiar with Hot Work requirements.
- Ensure that all individuals involved in the hot work operations are trained in the safe operation of their equipment and the safe use of the process. These individuals must have an awareness of the risks involved and understand the emergency procedures in the event of a fire.
- Determine site-specific flammable materials, hazardous processes, or other potential fire hazards present or likely to be present in the work location.
- Ensure combustibles are protected from ignition by the following means:
 - Move the work to a location free from combustibles.
 - If the work cannot be moved, ensure the combustibles are moved to a safe distance or have the combustibles properly shielded against ignition.
 - Ensure hot work is scheduled such that operations that could expose flammables or combustibles to ignition do not occur during hot work operations.
 - If any of these conditions cannot be met, then hot work must not be performed.
- Determine that fire protection and extinguishing equipment are properly located and readily available.
- Ensure sufficient local exhaust ventilation is provided to prevent accumulation of any smoke and fume.
- Ensure that a fire watch is posted at the site when:

- Hot work is performed in a location where other than a minor fire might develop, or where the following conditions exist.
- Combustible materials in building construction or contents are closer than 35 ft to the point of hot work.
- Combustible materials are more than 35 ft away but are easily ignited by sparks.
- Wall or floor openings are within 35 feet and expose combustible materials in adjacent areas. This includes combustible materials concealed in walls or floors.
- Combustible materials are adjacent to the opposite side of partitions, walls, ceilings, or roofs and are likely to be ignited.

The hot work operator shall handle the equipment safely and perform work so as not to endanger lives and property. Specific duties include

- No hot work shall be conducted without specific written authorisation from the premises representative via completion of the Hot Work Permit.
- The operator must cease hot work operations if unsafe conditions develop.
- The operator must notify the premises representative in the event of suspected unsafe conditions or concerns expressed by affected persons.

Where a fire watch is not required, the CHWO shall make a final inspection $\frac{1}{2}$ hour after the completion of hot work operations to detect and extinguish possible smoldering fires.

Fire Watch:

The fire watch is an individual posted in specific circumstances, as described above. The function of the fire watch is to observe the hot work and monitor conditions to ensure that a fire or explosion does not occur as a result of the work performed. The fire watch is authorized to stop any unsafe operation or activity. Specific duties and responsibilities include:

- Watch for fires, smoldering material or other signs of combustion.
- Be aware of the inherent hazards of the work site and of the hot work.
- Ensure that safe conditions are maintained during hot work operations and stop the hot work operations if unsafe conditions develop.
- Have fire-extinguishing equipment readily available and be trained in its use.
- Extinguish fires when the fires are obviously within the capacity of the equipment available. If the fire is beyond the capacity of the equipment, sound the alarm immediately.
- Be familiar with the facilities and procedures for sounding an alarm in the event of a fire.
- A fire watch shall be maintained for at least $\frac{1}{2}$ hour after completion of hot work operations in order to detect and extinguish smoldering fires.
- More than one fire watch shall be required if combustible materials that could be ignited by the hot work operation cannot be directly observed by a single fire watch (e.g. in adjacent rooms where hot work is done on a common wall).

Hot Work Operational Requirements

Hot work is allowed only in areas that are or have been made fire-safe. Hot work may only be performed in either designated areas or permit-required areas.

A designated area is a specific area designed or approved for such work, such as a maintenance shop or a detached outside location that is of noncombustible or fire-resistive construction, essentially free of combustible and flammable contents, and suitably segregated from adjacent areas.

A permit-required area is an area made fire-safe by removing or protecting combustibles from ignition sources.

Hot work is not allowed:

- In sprinklered buildings if the fire protection system is impaired
- In the presence of explosive atmospheres or potentially explosive atmospheres (e.g. on drums previously containing solvents)
- In explosive atmospheres that can develop in areas with an accumulation of combustible dusts (e.g. grain silos).

Hot Work Permit

Before hot work operations begin in a non-designated location, a completed hot work permit prepared by the premises representative is required. Based on local conditions, the CHWO must determine the length of the period, not to exceed 24 hours, for which the hot work permit is valid.

The following conditions must be confirmed by the CHWO before permitting the hot work to commence:

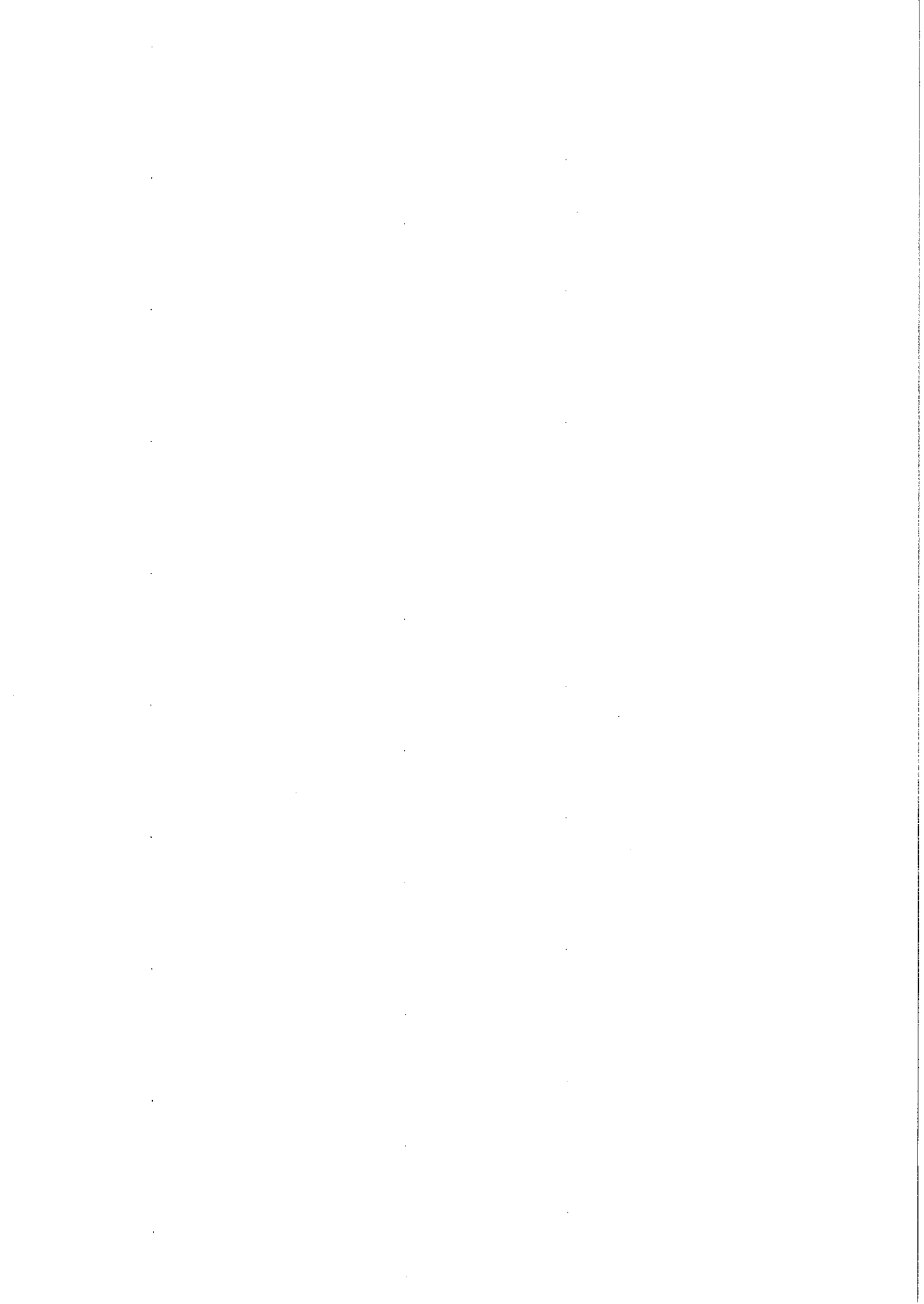
- Equipment to be used (e.g. welding equipment, shields, personal protective equipment, fire extinguishers) must be in satisfactory operating condition and in good repair.
- The floor must be swept clean for a radius of 35 ft if combustible materials, such as paper or wood shavings are on the floor,
- Combustible floors (except wood on concrete) must be
 - kept wet or be covered with damp sand (note: where floors have been wet down, personnel operating arc welding or cutting equipment shall be protected from possible shock)., or
 - be protected by noncombustible or fire-retardant shields.
- All combustible materials must be moved at least 35 ft away from the hot work operation. If relocation is impractical, combustibles must be protected with fire-retardant covers, shields or curtains. Edges of covers at the floor must be tight to prevent sparks from going under them, including where several covers overlap when protecting a large pile.
- Openings or cracks in walls, floors, or ducts within 35 ft of the site must be tightly covered with fire-retardant or noncombustible material to prevent the passage of sparks to adjacent areas.
- If hot work is done near walls, partitions, ceilings, or roofs of combustible construction, fire-retardant shields or guards must be provided to prevent ignition.
- If hot work is to be done on a wall, partition, ceiling, or roof, precautions shall be taken to prevent ignition of combustibles on the other side by relocating

combustibles. If it is impractical to relocate combustibles, a fire watch on the opposite side from the work must be posted.

- Hot work must not be attempted on a partition, wall, ceiling, or roof that has a combustible covering or insulation, or on walls or partitions of combustible sandwich-type panel construction.
- Hot work that is performed on pipes or other metal that is in contact with combustible walls, partitions, ceilings, roofs, or other combustibles must not be undertaken if the work is close enough to cause ignition by conduction.
- Fully charged and operable fire extinguishers that are appropriate for the type of possible fire shall be available immediately at the work area. These extinguishers should be supplied by the group performing the hot work. The fire extinguishers normally located in a building are not considered to fulfill this requirement.
- If hot work is done in proximity to a sprinkler head, a wet rag shall be laid over the head and then removed at the conclusion of the welding or cutting operation. During hot work, special precautions shall be taken to avoid accidental operation of automatic fire detection or suppression systems (for example, special extinguishing systems or sprinklers).
- Nearby personnel must be suitably protected against heat, sparks, and slag.

Work Closeout:

- A fire watch shall be maintained for at least 30 minutes after completion of hot work operations in order to detect and extinguish smoldering fires.
- The CHWC shall inspect the job site 30 minutes following completion of hot work and close out the permit with the time and date of the final check.
- The completed Hot Work Permit shall be retained for 6 months following completion of the project.





K.B.M. Fire Safety Services

Is any fire worth the risk?

HOT WORK POLICY PROCEDURE

This policy is designed to ensure contractors using heat generating equipment, such as blow lamps, hot air guns, welding equipment, do not ignite items like floor boards, curtains or other soft furnishings and take precautions to safeguard your property before commencing work. Contractors should read your policy before any work commences.

Along with the policy you will find 4 master copy forms these are as follows:-

1. **Proposal of works** – this is completed by the property management to tell the contractor what works you wish him/her to undertake.
2. **Issue of information** – this is completed by the contractor to inform the management who is undertaking the task, that they understand the Hot Work Policy and will comply with it. Finally a contact number by which the person undertaking the work can be reached.
3. **Hot permit to work** – issued by management to the contractor when they are satisfied all precautions have been taken to prevent an outbreak of fire. This permits the contractor to carry out the work requested.
4. **Completion notice** – to be completed by the contractor when the work requested has been finished. This tells management that the work has been completed and in compliance with the hot work policy.

All the forms should be retained for a period of at least 1 year, should any heat damage be found after the work is completed then the contractors insurance would be held liable as the contractor had failed to comply with the Hot Work Policy and compensation for the damage can be claimed. It also covers any damage that may occur whilst the work is being carried out. In short, the Hot Work Policy is your safeguard against malpractice by the contractor.

PROPOSAL OF WORKS

To be completed by the person or contractor representative carrying out the work

The described work area has been inspected and the fire precautions detailed have been complied with.

Site details:	
Building:	
Area or location of the proposed work:	
Nature of hot work proposed:	
Start time:	
Finish time:	
Operators names:	
Observers name:	

ISSUE INFORMATION

Issued by:
Signed:
Position:
Date:
Telephone number
Issued to:
Name:
Position:

HOT WORK PERMIT

Permit Number

Declaration

To be completed by the practice manager or the representative of management of the premises.

The described work area has been inspected and the fire precautions detailed have been complied with.

Signature:	
Print:	
Position:	
Date:	

COMPLETION NOTICE

To be completed by the person or contractor representative carrying out the work

The described work area has been inspected and the fire precautions detailed have been complied with.

Completion time:
Inspection time:
Signature:
Print:
Position:
Date:

FIRE ACTION NOTICE

ANY PERSON DISCOVERING A FIRE

- Raise the Fire Alarm
- Call the Fire Brigade by dialling **999**
- If it is safe to do so, attack the fire using the correct extinguisher provided.
- Leave the building by the nearest exit.
- Close all doors behind you.
- Report to your designated assembly point,

Do not take risks

Do not return to the building for any reason until authorised to do so

Do not use lifts



K.B.M. Fire Safety Services

CONTACT DETAILS

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