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FIRE SAFETY

STANDARD OPERATING PROCEDURE

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**Document Approval History**

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# Purpose

This procedure explains the requirements to ensure the highest of fire safety standards. It will help you to identify hazards and control risks and it explains how to plan, organize, control, monitor and review health and safety throughout the task.

The intention of the document is to outline the requirements associated with this activity and to specify the hazards and mitigations required to ensure that the risks arising from the work are reduced as low as reasonably practicable. Associated risk assessments and safe systems of work (SSoW) must be used in conjunction with this document.

# Definitions

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| Concept | Definition |
| Accident | An incident which results in death, injury loss, or damage |
| Competent person | person who has acquired through training, qualification or experience the knowledge and skills to carry out the task. |
| Exclusion zone | means an area from which all persons are excluded during excavation work. |
| Hazard | A potential source of harm. |
| PPE | Personal Protective Equipment |
| Risk | Combination of the probability of occurrence of harm and the severity of that harm |
| Safe System of Work | A method of working that eliminates or reduces the risk of injury |
| Work at height | Work at height means work in any place where, if precautions were not taken, a person could fall a distance liable to cause personal injury |

# Roles & Responsibilities

**Employer:** The employer is responsible for thehealth, safety and welfare at work of all his employees, and other people who might be affected by their activities, The employer shall do whatever is reasonably practicable to achieve this. It is also its responsibilities:

* The provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health
* The arrangements for ensuring the safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances
* To provide information, instruction, training and supervision to ensure the health and safety at work of his employees;
* To provide any place of work under the employer’s control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks;
* The provision and maintenance of a working environment for his employees that is, so far as is reasonably practicable, safe, without risks to health, and adequate as regards facilities and arrangements for their welfare at work.

It’s employer’s responsibilities to assess risks in the workplace. Risk assessments should be carried out that address all risks that might cause harm in your workplace. It must also:

* give you information about the risks in your workplace and how you are protected, also instruct and train you on how to deal with the risks.
* consult employees on health and safety issues. Consultation must be either direct or through a safety representative that is either elected by the workforce or appointed by a trade union.

**Employees**: Workers must take care of their own health and safety and that of others who may be affected by your actions at work. Workers must co-operate with employers and co-workers to help everyone meet their legal requirements. As a worker, if you have specific queries or concerns relating to health and safety in your workplace, talk to your employer, manager/supervisor or a health and safety representative.

**Contractors**: Contractors shall make sure they plan, manage and monitor the work under their control. They also must comply with directions given to them by either the principal contractor or the employer.

**Fire Management Team:** The company’s Fire Management Team (FMT) consists of a pre-determined core group of experienced personnel having the capability and authority to responding to an emergency crisis. The Fire Management Team comprises of:

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| FMT Leader | Project Manager |
| FMT Advisor | HSE Advisor |
| FMT Supporters | Fire Marshals, Fire Wardens, First Aiders |

**FMT Leader:** Take decisions to overcome the situation and provide resources as required. Be the main point of contact for external parties such as the authorities.

**FMT Advisor:** Assess the situation and advise action in case of an emergency to the FMT Leader.

**FMT Supporters**: Follow the instructions of the FMT Leader and report back with progress updates.

# Training & Competence

Training must be arranged for an adequate number of personnel to be trained from 3rd party in the use of portable firefighting equipment. This will ensure that there are trained persons in every location.

# Procedure

## Fire Fighting

Action to be taken during the fire emergency

* Raise the fire alarm.
* Switch off the power immediately.
* Evacuate all staff to the assembly point by using the emergency exit.
* Firefighting and emergency team stays on the spot and start the fire fighting with portable fire extinguishers if safe to so.
* If possible, disconnect the power supply/ gas supply to cooking stove, etc. in case of kitchen fire.
* Always be prepared to evacuate the building even though you are fighting the fire.
* Try to prevent the fire from spreading towards other areas.
* Emergency team must be stand by on the spot of fire to deal with the casualties.
* Call the Civil Defense Department if situation is beyond the control.

## Fire Fighting Arrangements

It essential that all persons are aware of the type of fire to fight and extinguish by using appropriate extinguishing media. Training shall be provided and all should be familiar with the types of fire and the right extinguishing media suitable for each types of fire. The following are the types of fire:

**Class A** fires involve solid materials of an organic nature such as wood, paper, cloth, rubber and plastics that do not melt.

**Class B** fires involves liquids. They include petrol, diesel, thinners, oils, paints, wax, cooking fat and plastics that melt.

**Class C** fires involve electricity.

**Class D** fires involve flammable metals such as magnesium, aluminium, titanium, sodium and potassium.

Appropriate fire extinguishing agents like water, sand, different types of extinguishers shall be available at selected locations relevant to the fire risk available. It is important to be aware of the correct selection of portable extinguishers according to the types of fire. The types of portable fire extinguishers normally used are as follows:

[**Water Fire Extinguishers**](http://www.mfs-fire-extinguishers.co.uk/water.htm)

Most widely used [fire extinguishers](http://www.mfs-fire-extinguishers.co.uk/). Used for Class A fires. Not suitable for Class B (Liquid) fires, or where electricity is involved.

**Foam Fire Extinguishers**

Used for Classes A & B fires. Foam spray extinguishers are not recommended for fires involving electricity, but are safer than water if inadvertently sprayed onto live electrical conductors.

**Dry Powder Fire Extinguishers**

Often termed the multipurpose extinguisher, as it can be used on classes A, B & C fires. Best for running liquid fires (Class B). Special powders are available for class D metal fires.

**CO2 Fire Extinguishers**

Carbon Dioxide is ideal for fires involving electrical apparatus, and will also extinguish class B liquid fires, but has no post security and the fire could re-ignite.

All types of extinguishers and other fire-fighting arrangements like fire blankets, fire hose reel, etc. shall be inspected and ensured in good condition. All extinguishers shall be inspected at least once a month with records maintained.

## Provision and Location of Extinguishers

* Adequate numbers of portable fire extinguishers must be made available throughout the site.
* The fire extinguishers must be located in conspicuous positions close to exits
* Appropriate fire extinguishers, e.g. Carbon Dioxide or Dry Powder; must be provided to all electrical distribution panels and other major items of electrical equipment.
* All mechanically propelled site plant should carry a suitable fire extinguisher.
* The adequacy of portable firefighting equipment must be regularly reviewed as the work progresses by the supervisor; safety office shall inform the entire user in the work area if the fire extinguisher is subjected to replacement.
* Specific fire extinguishers shall be made available for hot work/fire watch activities.

## Maintenance and Inspection

* Fire extinguishers and other fire protection equipment must be maintained and inspected on monthly basis.
* All fire extinguishers shall be provided with an inspection tag that shall be completed by the competent person during monthly inspection.
* All fire extinguishers shall be numbered.
* Competent person shall check fire fighting equipment
* In particular; Monthly checks should be carried out to ensure the following :
* All fire hydrants are clear of any obstruction and clearly marked.
* Suitable fire extinguishers are in place adjacent to the fire risks.
* Fire extinguishers are fully charged, undamaged, no signs of visible corrosion, clean from dirt and hoses in good condition.

# Emergency Arrangements

Actions to be taken during the fire emergency

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* If possible disconnect the power supply/ gas supply to cooking stove, etc. in case of kitchen fire.
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