

# FLA'S FIRE SAFETY INITIATIVE

## Preventing fires and saving lives by empowering workers and factory managers



### SCENARIO 1 OCCURS AT FACTORY ABC, WHICH HAS NOT IMPLEMENTED NECESSARY FOUNDATIONAL FIRE SAFETY COMPETENCIES.

**Imagine you're hard at work on the top floor of an old factory building. Due to a welding spark during machine maintenance on the ground floor, a small rag ignited and a smoky fire ensued...**

- Suddenly the room is clouded with smoke.
- It's difficult for you to see and breathe as a grey bitter smoke fills the room from the ceiling to the floor.
- You drop to the floor, eyes stinging and coughing.
- Your co-workers are shouting, and everyone is trying to get to the only exit door.
- The door is locked—but even if it wasn't, the fire is burning from below and the only way to escape is through a window.
- Remember: you're on the top floor, 12 meters from the ground.

### SCENARIO 2 OCCURS AT FACTORY XYZ, WHICH HAS IMPLEMENTED FOUNDATIONAL FIRE SAFETY COMPETENCIES.

**Due to a welding spark during machine maintenance on the ground floor of a tall building, a small rag ignited and a smoky fire ensued...**

- Smoke starts to work its way up stairway one.
- A smoke detector automatically sets off the emergency evacuation alarm.
- When the emergency alarm sounds, you calmly shut down your machine and are guided by trained evacuation wardens, to an unobstructed stairway to an area of safety outside of the building.
- You and your co-workers are able to see and breathe clearly because fire doors closed on the first floor, limiting the smoke moving to the upper stories. Additionally, an automatic smoke bulkhead opened on the roof allowing accumulated smoke to escape.
- The automatic sprinklers are activated on the ground floor directly over the fire, suppressing the flames.

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- Part of the in-plant fire brigade assures the evacuation is running smoothly and no one is injured, while the others see that the fire is contained.
- Local external emergency services are met by a member of the in-plant fire brigade and guided to the scene of the fire.
- Working together as outlined in the emergency action plan, the in-plant fire brigade and the local emergency services team make sure everyone is out of the building, any injuries are treated, and that the building is safe.
- You and your co-workers are able to return to your workstations. In one hour, production has restarted.

#### WHO?

The competencies are for factory workers and managers, their safety and health committees, local emergency services and trainers, auditors and inspectors, local experts, NGOs and trade unions and anyone else with an interest in improving fire safety and local emergency services.

#### WHAT?

A set of fundamental and strategic competencies upon which a workplace fire safety program can be built.

#### WHERE?

Any workplace or anywhere someone is working.

#### WHY?

Using the set of 39 competencies can save lives!

Factories are not meeting required fire safety standards and workers' lives are being lost every day. A comprehensive, structured program supported by buyers will help factories implement programs to save lives. Even the most basic fire safety measures are not always implemented in factories in developing countries. The multitude of standards and variation in local law and regulation make even the simplest precautions seem daunting. These foundational competencies were developed for FLA by Dr. David Gold—a fire safety expert formerly with the ILO—with input from FLA affiliates and the National Fire Protection Association.

#### HOW?

Practical implementation of the fire safety competencies require identification of gaps and priorities and collaboration with all workers, worker representative organizations including trade unions where applicable, managers and others in the facility to build an action plan with deadlines to meet each competency and measure impact.

#### WHEN?

Competencies should be implemented based on priority over the short, medium and long-term.

# FOUNDATIONAL FIRE SAFETY COMPETENCIES

Companies, corporations and organizations that are able to manage to successfully protect their employees, contractors, visitors and neighbours from the dangers of fire have put into place fire safety (fire protection and fire prevention) competencies including but not limited to the following:

## POLICIES, DIRECTIVES AND PROCEDURES

1. The company policy mandates that the company manager is fully responsible for safely operating and maintaining the facility including all aspects of occupational safety, health and fire safety.
2. The company policy includes provisions to protect the safety of all employees, contractors and visitors at the facility as well as to protect the premises and its surroundings from the dangers of fire.
3. The prevention, identification and control of hazards and risks leading to occupational accidents, occupational diseases, and fires and explosions are listed as a primary responsibility in the job descriptions of all managers, supervisors and employees. These same measures are also included in the agreements for contractors and in the conditions for visitors coming onto the site.
4. The facilities occupational safety and health committee (including balanced management and worker participation) has a standing item on its agenda to address all aspects of fire safety including fire hazards, fire risks, emergency evacuation and accounting for everyone after an evacuation.
5. A fire safety officer is appointed and is responsible for the development of the fire safety program including: compliance with local fire safety legislation and codes; evacuation drills; the storage, handling, use and disposal of combustible and flammable materials; awareness and status of the automated fire alarm and fire suppression systems; and providing fire extinguisher training to designated employees. The fire safety officer reports directly to the occupational safety and health manager. Fire safety programs must also be in compliance with any policies of the brand that a facility is under contract with, when applicable.
6. The plant manager, occupational safety and health manager and the fire safety officer are fully up-to-date with any local or national requirements related to fire safety as well as the policies of the brand that they are under contract to, when applicable.
7. Directives are established and enforced ensuring the ongoing need for fire safety awareness among employees, contractors and visitors.
8. Directives are established and enforced ensuring continuous control and availability of access to at least two marked, clear, lighted, unobstructed, unlocked emergency evacuation routes from every workstation to an external posted area of safety outside of the building (external assembly point).

## RISK ASSESSMENT

9. Dynamic (ongoing and continually updated) fire risk assessments are carried out by a person who has the necessary competency (knowledge and skills).
10. A method is in place to identify gaps in fire safety, fire prevention, evacuation and extinguishment leading to an action plan to correct and eliminate any identified gaps.

## EMERGENCY ACTION PLANNING

11. An emergency action and contingency plan is developed and continually updated that takes into account all actions by all employees related to fire or other emergencies with a clear definition of roles and responsibilities to prevent, mitigate and recover from an event such as a workplace fire or other emergency.
12. Direct relations with the local (municipal) emergency services are developed and maintained, addressing elements including but not limited to: planning for emergencies; 24-hours per day, 7 days per week access is available to the facility; identification of fire hazards and risks including potential dangers during fire and rescue operations; the designation of actions and responsibilities addressing how the workplace fire brigade and the municipal fire brigade will work together; regular (at least annual) participation in evacuation and employee accountability drills; and the identification of individuals who will guide and advise the municipal fire ground commander on issues related to the emergency.

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## STRUCTURES

13. All buildings and structures are of substantial construction to prevent the spread of smoke or fire, and all floors, roofs, stairways, fire escapes, fire walls, as well as internal and external doors are of a substantial design to support the full evacuation of all employees, contractors and visitors.
14. All work stations are equipped with access to at least two marked, well-lighted emergency evacuation routes with unlocked exit or fire doors that will open outward in the event of an emergency evacuation and lead to an external assembly point.

## AUTOMATED SYSTEMS

15. Procedures are in place to regularly inspect, test, maintain and ensure fully operational automatic fire detection, alarm, extinguishment and smoke removal systems with manual backup for each system (as appropriate) should the automatic systems fail.
16. An evaluation is done to ensure that any automated systems or features have been designed and installed to meet local or international standards and that they are appropriate for the hazard(s) that they are designed to protect.

## EMERGENCY EVACUATION (LIFE SAFETY)

17. A monitoring program is in place to ensure that every workstation, break area, canteen and other areas of the facility have evacuation maps indicating a primary and secondary emergency evacuation route from the location to an external assembly point.
18. Emergency evacuation routes are provided that are: clearly marked; continually unobstructed; well lighted (equipped with emergency lighting that will continue to function in the event of a power failure); designed and arranged so as not to pass through or near any hazardous area; provided with doors that are equipped with panic hardware and are not locked.
19. A fully operational evacuation alarm that everyone can hear (taking into consideration ambient noise levels) and see, is in place which is regularly inspected, tested and maintained including a backup system should the alarm system fail.
20. One or more designated and marked external assembly points are provided in an area of safety away from where fire-ground operations might occur.
21. A system to account for all employees, contractors and visitors once they reach the external assembly point, is developed, maintained and tested through evacuation drills including a means to report to the emergency operations command point the names and last-seen location of anyone that cannot be accounted for.
22. All passenger and goods lifts are posted with a sign, in local languages to not use the lift in case of fire.
23. A system is developed and tested to ensure that for each disabled employee, an individual will be assigned to assist that disabled employee from their workstation to the external assembly point.
24. A group of fire evacuation wardens – in each area and on each working shift – is selected, trained and regularly drilled in guiding employees from their workstations to the external assembly point, ensuring that everyone has evacuated the work area and that these wardens are provided with specifically marked clothing such as an orange vest.

## FIRE HAZARDS AND RISKS

25. A system for the identification and elimination of fire hazards and risks is in place using a hierarchy of controls that ranges from a top priority of elimination of the risk to the lowest priority of the provision of personal protective equipment.
26. Fire prevention, reduction of fire load:  

A day-to-day operational approach is taken to ensure that combustible or flammable materials are removed by adequate housekeeping measures (e.g. removal of dust, clearing away unused equipment or material, not allowing waste products to accumulate and the use of covered waste bins).

Hazardous material such as flammable and combustible liquids, solids or gases are handled and stored in a safe way using specifically designed containers and storage facilities in accordance with national legislation or safety data sheets, whichever is stricter.
27. Fire prevention, sources of ignition:  

A day-to-day operational approach is taken to ensure that precautions are taken to prevent the ignition of fires from sources of heat, including but not limited to: open flames, electrical resistance, electrical sparking or arcing, radiant heat (such as from the sun), hot surfaces, cutting and welding activities, smoking, heat or sparks generated by friction, and spontaneous combustion.

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### FIRE EXTINGUISHERS AND HOSES

28. Fully operational firefighting equipment, selected as appropriate to the fire hazard in the area, is in place and maintained which is continually unobstructed, clearly marked, easily accessible and easy to use with clearly posted instructions in local languages. Employees that are specifically designated to use this equipment as part of a fire brigade will receive periodic training on use of the equipment.
29. Employees are initially trained and continually refreshed on the safe use of fire extinguishers based on the hazards in their respective areas.

### TRAINING

30. A system is put into place whereby all employees are trained in emergency evacuation on induction, with mandatory semi-annual refresher trainings, including at least one full evacuation drill where all employees are evacuated and accounted for at the external assembly point.
31. Fire prevention training is developed and implemented for all employees upon induction, with annual refresher training emphasizing the elimination of sources of ignition and heat.
32. Initial and annual refresher training on the selection and use of fire extinguishers is developed and implemented for all employees with an emphasis on when to use an extinguisher and when to evacuate.

### EMERGENCY OPERATIONS: EMERGENCY OPERATIONS CENTER

33. An on-site emergency operations command point is designated in a safe area outside of the facility. This emergency operations command point is staffed by the company manager and other designated staff to assist in managing and mitigating the impact of the emergency in concert with the local emergency services. The managers and designated staff should, as part of their evacuation plan, bring with them any communications equipment and necessary files including emergency plans and copies of safety data sheets.

### EMERGENCY OPERATIONS: WORKPLACE FIRE RESPONSE TEAM

34. Employee action to address fire or other emergencies may range from evacuation only, to providing a fully equipped in-plant fire brigade response. If the company decides to have an internal workplace fire response team, the level of involvement is selected in concert with the local fire brigade and may include any or all of the following:
  1. A group of trained employees (fire wardens) that intervenes when safe to do so to support the evacuation of co-workers.
  2. A trained emergency responder group that provides first aid, fights fire in its incipient (beginning) stage, supports evacuation and guides, where appropriate, the external emergency services using the necessary personal protective equipment.
  3. A trained and fully equipped in-house full-time or on-call industrial-structural rescue/firefighting capacity.
35. Protocols and procedures are developed and maintained for the operations and limits of the individuals designated for the workplace fire response team.
36. Adequate continuous training on evacuation and firefighting techniques (with emphasis on supporting full evacuation) is carried out, including but not limited to: special hazards; adequate personal protective equipment; and leadership training for selected individuals.
37. A program is developed and maintained to ensure the health and fitness of the workplace fire response team.

### INSPECTION

38. A system is developed and maintained in concert with the safety and health committee by which there are designated competent individuals to ensure that emergency exits and emergency escape routes are completely unobstructed on each shift; all firefighting equipment is clearly marked, unobstructed and in serviceable condition; potential sources of heat and fuel are controlled; and automatic fire detection, alarms, extinguishing systems and smoke evacuation systems are operational.

### PREPAREDNESS

39. A system is developed to address and integrate emergency management and business continuity programs for the facility to address recovery from fire, natural disasters or other events that may interrupt the production chain.