6 Fire Protection & Emergency Planning

6.1 Policy Statement

«Company Name» has implemented this policy for the protection of our employees against the fire and other emergency situations in the workplace. *[Safety Advisor Name]* will supervise the Emergency Action Plan and Fire Protection Program.

[Company Name] will have a written Emergency Action Plan (EAP) and Fire Protection Program (FPP). The EAP and FPP will be posted in the workplace, and remain available to employees for review along with the names and job titles of every person in the chain of command during emergency situations.

6.2 Responsibilities

Fire prevention and emergency planning is a responsibility shared between [Company Name] and its employees.

6.2.1 Employer Responsibilities

It is the responsibility of [Company Name] to:

- Ensure adequate workplace safeguards against hazards, including appropriate exit routes, fire alarms and fire protection systems.
- Ensure development and implementation of FPP and EAP.
- Ensure training of employees in accordance with this policy.

6.2.2 Safety Committee Responsibilities

It is the responsibility of the [Company Name] safety committee to:

- Develop and implement fire prevention plan and emergency action plan.
- Train new employees in fire prevention and emergency action plans and provide continued employee safety training according to [Company Name] policy.
- Inform employees about fire hazards in the workplace specific to their task.

6.2.3 Employee Responsibilities

Every [Company Name] employee is expected to:

- Report a fire or other emergency.
- Follow fire prevention plan and emergency action plan.
- Report any suspected problem with fire control systems to [Safety Advisor Name], a supervisor or a member of the safety committee.
- Assist in fire hazard assessment.

6.3 Training

[Company Name] will ensure every employee is provided training on fire protection and emergency planning. This training will be provided at no cost to the employee during working hours.

Training will be provided:

- At the time of assignment.
- At least annually thereafter; annual training for all employees will be provided within one year of their previous training.

[Company Name] will provide additional training when tasks or procedures are added or changed that may affect the employee's work. It is acceptable for additional training to be limited to addressing only the changes or additions to the employees' exposure.

[Company Name] will use only training material that is appropriate in content and vocabulary to the educational level, literacy, and language of employees.

6.3.1 Training Components

[Safety Advisor Name] will ensure all employees at *[Company Name]* are informed and trained in the following minimum elements for the Emergency Action Plan and Fire Protection Program:

- Fire hazards at the worksite
- Means of controlling or removing fire hazards at the worksite
- Procedures for reporting a fire or other emergency.
- Procedures for emergency evacuation for all areas of work, including type of evacuation and exit route assignments.
- Safe assembly areas designated for all work areas in the event of evacuation.
- Procedures to be followed by employees who are requested to remain to operate critical plant operations before they evacuate, if applicable.

- Procedures to account for all employees after evacuation.
- Procedures to be followed by employees performing rescue or medical duties.
- The members in the chain of command who may be contacted by employees for information about the plans or for an explanation of their duties under the plans.
- Proper operation of fire extinguishers provided by the company if the EAP allows employees to fight incipient stage fires rather than evacuate.
- The hazards involved in incipient stage firefighting. Employees are instructed to ensure the local emergency response service (Fire Department) is notified before attempting to extinguish any fire, and that if a fire is not immediately extinguished, or the fire recurs to evacuate immediately.

6.3.2 Training Records

Training records will include the following information:

- The dates of the training sessions;
- The contents or a summary of the training sessions;
- The names and qualifications of persons conducting the training; and
- The names and job titles of all persons attending the training sessions.

Employee training records will be maintained for 3 years from the training.

6.4 Policy

6.4.1 Fire Prevention Plan

[Company Name] is committed to providing a safe workplace and will ensure procedures are in place to protect employees from the advent of any emergency, including fire emergencies. Accordingly, [Company Name] will ensure there is a Fire Protection Program written and available to employees as required by OSHA regulations. This plan will include the following:

- A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard;
- Procedures to control accumulations of flammable and combustible waste materials;
- Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials;
- The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires; and
- The name or job title of employees responsible for the control of fuel source hazards.



6.4.1.1 Determining Fire Hazards

A fire is essentially the rapid oxidation of a chemical. It requires heat, oxygen and fuel in the right proportion. Different types of fuel react in different ways and require different levels of heat and oxygen to ignite; however, once the chemical reaction begins, fire provides a source of heat for continued ignition until one of the essential aspects of combustion — fuel, heat or oxygen — is removed and the reactions end. See figure 1.

The *[Company Name]* safety committee will perform an areaby-area assessment of fire hazards and record them by location on the "Major Fire Hazards" list. The assessment will



Figure 1

ascertain and document whether the hazard is a fuel or ignition source, control systems in place to protect against fire, and the name or job title of the individual who is responsible for removing or minimizing the listed hazard.

The goal is to systematically eliminate fire hazards wherever possible; ensure a means to prevent a fire if the hazard cannot be removed; inform employees about fire hazards in their workspace; and identify the party responsible for controlling any given fire hazard. Fire hazard identification plays a central role in the FPP, and all employees are expected to contribute their efforts to identify and mitigate fire hazards in the workplace.

Employees will familiarize themselves with the safety data sheet of any hazardous chemicals with which they work and know proper handling and storage procedures to reduce hazards. Flammable and combustible material will be stored and staged in amounts as small as possible for operations and away from sources of ignition. It is important for employees to monitor the workplace for changes that might pose additional fire hazards.

6.4.1.2 Fire Protection Equipment and Safeguards

Alarm Systems

An alarm system to alert employees and the local fire department will provide a distinctive signal in case of fire or other emergency. The alarm needs to be heard above ambient noise levels and/or seen over ambient light levels. *[Company Name]* will establish how the alarm should be sounded and maintain the alarm system. Employee training will include an explanation of the system and the preferred means of reporting an emergency. (A verbal alert is sufficient for employers with fewer than 10 employees, provided all employees can hear it.) After the alarm is sounded during an emergency or a test, the alarm system will be reset as quickly as possible. If the system has components that wear out quickly — or are consumed or destroyed for the alarm — spare components will be readily available to reset the system with as little delay as possible.

The alarm code and reporting instructions must be posted conspicuously at phones and at employee entrances.

If the employee alarm system is used to alert fire brigade members, or for any other purpose, it must use a distinctive signal for each purpose.

Inspection, Maintenance and Testing

[Company Name] will provide for the testing of all alarm systems and making sure they remain in operating condition. All maintanance and repair of alarm systems will be performed only by qualified, trained personnel. At least every two months, a qualified individual will test systems that do not require employee supervision, replacing power supplies as necessary. Tests for systems that are capable of being supervised will occur annually.

Portable Fire Extinguishers

Any portable fire extinguisher provided will:

- Be fully charged and operable;
- Be kept in a conspicuous place when not in use;
- Not use carbon tetrachloride, chlorobromomethane, or other toxic vaporizing extinguishing agents;
- not be operated by inverting the extinguisher to rupture a cartridge or initiate an uncontrollable pressure-generating chemical reaction to expel the extinguishing agent.
- be protected from freezing (if subject to freezing)

All portable fire extinguishers will be selected based on the fire hazards present and distributed to minimize travel distances for employees to use. See Table 1.

Each 3,000 square feet of protected buildings during construction requires a fire extinguisher rated at least 2A, spaced within 100 feet of any point of the protected area. In multi-story construction, each floor needs its own extinguisher rated at least 2A, adjacent to the stairwell.

[Company Name] will provide a fire extinguisher rated not less than 10B within 50 feet of anywhere there is more than 5 gallons of flammable or combustible liquids being used on the jobsite (aside from vehicle fuel tanks).

Inspection, Maintenance and Testing

[Company Name] is responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace. Maintenance checks of portable fire extinguishing equipment will occur at least annually. The dates of fire extinguisher checks will be recorded; the record of these checks will be retained for at least a year after the last check or the life of the shell (whichever is less). An individual trained to perform hydrostatic testing will test each portable fire extinguisher with suitable equipment. Such testing is also called for when portable fire extinguishers show new evidence of corrosion or mechanical wear.

| | Water Type | | | | Foam | Carbon Dioxide | Dry ch Sodium or potassium bicarbonate | | emical Multi-purpose ABC | |
|--|---|--|--|--|--|------------------------------|---|--|--|--|
| | Stored Pressure | Cartridge operated | Water pump tank | Soda acid | Foam | CO2 | Cartridge Operated | Stored pressure | Stored pressure | Cartridge operated |
| Class A Fires Wood, Paper, Trash, Having Glowing Embers | Yes | Yes | Yes | Yes | Yes | No | No | No | Yes | Yes |
| Class B Fires Flammable Liquids, Gasoline, Oils, Paints, Grease Etc. | No | No | No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Class C Fires Electric Equipment Class D | No | No | No | No | No | Yes | Yes | Yes | Yes | Yes |
| Fires Combustible | | | Special extinguishing agents approved by recognized testing laboratories | | | | | | | |
| Method of Operation | Pull pin squeeze handle | Turn upside down and bump | Pump handle | Turn upside down | Turn upside down | Pull pin squeeze lever | Rupture Cartridge squeeze | Pull pin squeeze handle | Pull pin squeeze handle | Rupture Cartridge squeeze |
| Range Maintenance | 30'-40' | 30'-40' | 30'-40' | 30'-40' | 30'-40' | 3'-8' | 5'-20' | 5'-20' | 5'-20' | 5'-20' |
| | Check air pressure gauge monthly | Weigh gas cartridge — add water if required annually | Discharge and fill with water annually | Discharge annually — recharge | Discharge annually — recharge | Weigh semi- annually | Weigh gas cartridge check condition of dry chemical annually | Check pressure gauge and condition of dry chemical annually | Check pressure gauge and condition of dry chemical annually | Weigh gas cartridge check condition of dry chemical annually Table 1 |

Each extinguisher in the workplace will be accompanied by a record securely fixed to the extinguisher that indicates:

- The name of the person or agency who performed the last test, and the test date;
- The signature of the person who performed the test; and
- The serial number or other identifier of the fire extinguisher that was tested.

Training

Where employees have been provided portable fire extinguishers, *[Company Name]* will provide training over general principles of fire extinguisher use and the hazards involved with incipient-stage firefighting. This training will occur upon hire and be repeated annually.

Alternatives to Portable Fire Extinguishers

During construction activities, a 55-gallon drum with two fire pails may substitute for a fire extinguisher with a 2A rating.