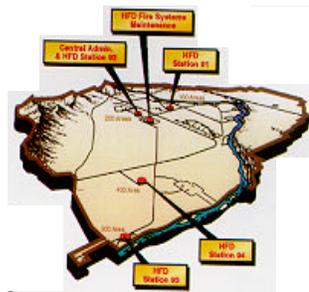


Chapter 13

Industrial Fire Protection

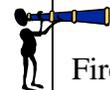


Click the map to view the Hanford Fire Manual.



Purpose:

This chapter provides facility management with guidance directed at the establishment and maintenance of fire protection and prevention programs at their facilities.



Scope:

Fire protection and prevention requires familiarity with the material covered in this chapter under the following topics.

- ❖ Responsibilities
- ❖ Fire Education
- ❖ Fire Protection System Inspection, Testing, and Maintenance
- ❖ Fire Investigations
- ❖ Fire Department and Emergency Response
- ❖ Notifications
- ❖ Special Hazards
- ❖ References
- ❖ Related Chapters
- ❖ Attachments



Responsibilities:

For each facility, the responsible management shall:

1. Be responsible for implementing a policy of providing a level of fire protection adequate to meet the objectives of the DOE Fire Protection Orders for protection of the public, personnel, environment, and property, within their area of responsibility.
2. Assure that all programs and activities are in compliance with the applicable provisions of the fire protection orders in effect, and the requirements of this manual.
3. Review all contractor requests for fire safety equivalencies and exemptions and obtain concurrence from the Director of the Quality, Safety, and Health Programs, prior to granting approval.
4. Review implementation plans for compliance with recommendations resulting from fire protection assessments and fire hazard analyses. Assure that the contractors provide appropriate responses and /or action plans for findings or observations resulting from the assessments and analyses and that funding is obtained to implement fire hazard analyses recommendations where



recommendations are required to meet the objectives of the DOE Fire Protection Program.

5. Forward facility fire hazard analysis to the Director of the Quality, Safety, and Health Programs for review and approval.
6. Ensure federal employees attend annual fire prevention training that includes good house keeping practices, proper response and notifications in the event of a fire and recognition of potential fire hazards. Annual fire prevention training is obtained in the Hanford General Employee Training.
7. Ensure that a minimum, of two required exits are maintained unobstructed and unlocked so personnel can safely exit the facility in the event of fire. While security measures may permit the locking of doors to prevent personnel from gaining entrance into an area or building, leaving the area or building should be possible without the use of special knowledge, keys, or other tools.
8. Fire protection systems that are impaired are identified by the contractor, are assigned a priority, and promptly corrected in a reasonable amount of time.
9. Ensure that the contractor maintains water supplies to their facilities at the required capacities and pressures and the contractor maintains fire alarm system transmission capabilities necessary for fire protection purposes.
10. Ensure that the contractors are performing fire protection facility assessments to the frequency and scope required by the DOE Orders.
11. Assure that the contractor maintains a system in place so that the requirements of the DOE Fire Protection Program are documented and incorporated in the plans and specifications for all new facilities, and for major modifications of existing facilities. This includes review and comment by a qualified fire protection engineer of design documentation.
12. Ensure that the contractor maintains all other fire protection facility features, fire hazards, fire protection personnel, inspection, testing, and maintenance and emergency response force capabilities in accordance with DOE Orders, RL implementing Directives, site and facility specific S/RIDS, and contractor specific procedures.



Fire Education:

All Federal employees must attend the annual fire prevention training that includes good housekeeping practices, proper response and notifications in the event of a fire and recognition of potential fire hazards. Annual fire prevention training is provided as part of the Hanford General Employee Training. Employees, who perform fire watches, must also receive hands-on portable fire extinguisher training.

Normally the contractor is responsible for the performance of fire watches but a Federal Employee who must receive hands-on portable fire extinguisher training due to fire watch requirements can contact the Hanford Fire Department for fire extinguisher training.



Fire Protection System Inspection, Testing, and Maintenance:

1. Each facility must include a fire protection system impairment strategy to minimize the duration and impact of fire protection system impairments. Elements of the contractor's fire protection impairment strategy must provide that;
 - a) Fire protection system impairments are identified, assigned priority, and promptly corrected in a reasonable amount of time.
 - b) A documented impairment program is administrated by trained personnel.
 - c) Fire protection staff and fire department personnel are advised and updated on impairments.
 - d) A policy is established for immediate and expedient repair of impairments.
 - e) Compensatory measures are implemented until the impaired system is restored.
 - f) Fire protection systems in facilities are inspected, tested, and maintained in accordance with the National Fire Protection Association Standards (ie: NFPA 10, 25, and 72) and the contractors fire protection program manuals. The inspection, testing, and maintenance of fire protection systems on the Hanford site a shared responsibility on the Hanford Fire Department, contractor maintenance forces, and facility operations.



Fire Investigations:

Every fire shall be investigated and a report prepared on the results of the investigation. The Hanford Fire Marshall shall participate in investigation of all fires and explosions. When arson is suspected all efforts shall be made to protect and preserve all physical evidence of the scene. Fire



investigation reports must include root causes, causal actions, and corrective actions necessary to prevent reoccurrence of the fire or explosion.



Fire Department and Emergency Response:

1. The Hanford Fire Department is the designated emergency response agency on the site for manual fire suppression, emergency rescue, emergency medical and ambulance services, and hazardous material emergency responses.
2. The fire department also is required to:
 - a) Provide emergency response support, as required by agreements or contracts, to other entities or agencies on the Hanford Site.
 - b) Maintain mutual aid agreements with surrounding area fire districts.
 - c) Develop, administer, and enforce the Fire Prevention Program for the Hanford Site as contained in the Authority, Responsibilities and Duties of the Hanford Fire Marshal.
 - d) Provide appropriate site wide fire protection system inspection, testing, and maintenance of fire alarm and fire suppression systems.
 - e) Perform self-contained breathing apparatus maintenance.
 - f) Maintain confined space entry and other emergency rescue readiness, as required by 29 CFR 1910.146.
 - g) Develop and maintain pre-fire plans for all major Hanford facilities and operations.
 - h) Act as the lead emergency response organization and provide incident command or fire suppression, emergency medical and ambulance service, special emergency rescue, and hazardous material events for Hanford Site operations.



Notification:

Employee Rights and Responsibilities to Fire Safety:

1. Once you are out of your office space you should have a minimum of two paths or “means of egress” to get out of the building. Take the time to familiarize yourself with the two ways out of the building in the event one of those ways become blocked by a fire.
2. When fire alarms are actuated understand your right to exit the building promptly and orderly without further instructions. Do not use elevators in exiting the building and proceed to your staging area so that personal accountability may be taken. The building manager



and fire department incident commander may provide further instructions once you are in the staging area.

Notifications and Response to Fire:

1. If you detect a fire or see smoke, activate the closest fire alarm pull station and get out of the building. If the building is filled with smoke crawl close to the ground where cleaner and cooler air exists and get out as quickly as you can. From another location outside your building, make sure you or someone else calls the fire department by either dialing 911 for site telephones, 811 from Hanford Site issued cellular telephones or 373-3800 when calling from a private cellular telephone on the Hanford Site.
2. Use a fire extinguisher only if you have been formally trained in the use of the extinguisher. If you have not received formal fire extinguisher training, get out of the building. Never spend time to look for the seat of a fire that has already started in another part of the building. Get out and contact the fire department! Normally, you only have 30 seconds to put a fire out when you are at the place where the fire starts and have an extinguisher in hand. Don't delay the call to the fire department by messing with an extinguisher.



Special Hazards:

The use, handling, and storage of unusually hazardous materials, for example, pyrophoric metals, highly reactive chemicals, etc., shall require detailed evaluation and special precautions. Professional safety and health advice shall be obtained.



References:

- ❖ National Fire Protection Association (NFPA) Codes
- ❖ Applicable OSHA Standards, 29 CFR 1910, Subpart S.



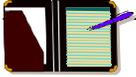
Related Chapters:

- ❖ Chapter 2, "Organization and Program for Operational Safety; Codes and Standards."
- ❖ Chapter 5, "Construction and Demolition."
- ❖ Chapter 14 "Industrial Fire Protection: Flammable and Combustible Liquids."



Attachments:

- ❖ Attachment 1: *Employee Training Records*
- ❖ Attachment 2: *Facilities and Equipment Inspection Records*



Attachment 1:
Employee Training Records

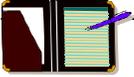


Please insert a copy of applicable records following this page or indicate the location of these records on the form below.

Facility Name:		
Records Location:	Initial:	Date:

Attachment 2:

Facilities and Equipment Inspection Records



Please insert a copy of applicable records following this page or indicate the location of these records on the form below.

Facility Name:		
Records Location:	Initial:	Date: