

[Ownership matrix](#)**1.0 PURPOSE AND SCOPE**(5.1.1, ~~2~~, 5.1.3, ~~5.1.4~~)

The Tank Farm Contractor (TFC) fire protection program is administered through the TFC Safety & Health organization and applies to all TFC employees, subcontractors, and managed facilities, programs, projects, and activities. The purpose of the program is to ensure that the TFC's commitment to uncompromising integrity and adherence to the highest safety standards is met in the area of fire protection by providing employees ~~who are not fire protection professionals~~ with the information necessary to ensure related safety requirements are met.

The Hanford Fire Department is responsible for the permitting process, fire suppression, fire system inspection/testing/maintenance and repair activities, hazardous material (HAZMAT) response, emergency rescue, and medical response. The Hanford Fire Department requirements are outside the scope of the TFC fire protection program and are maintained in [TFC-ESHQ-FP-STD-12](#). The TFC Safety & Health fire protection organization's fire protection engineer(s) are considered deputies of the Hanford Fire Marshal's Office and administer the permitting process for the TFC.

**2.0 POLICY STATEMENT**

The Tank Farm Contractor shall:

1. Minimize the potential for the occurrence of a fire or related perils.
2. Ensure the fire does not cause an unacceptable onsite or offsite release of hazardous material that will threaten the public health and safety or the environment.
3. Establish requirements consistent with the National Fire Protection Association (NFPA) [NFPA 101](#)® "Life Safety Code®" that will provide an acceptable degree of life safety to the TFC.
4. Ensure that vital U. S. Department of Energy (DOE) programs will not suffer unacceptable delays (defined by the program senior official) as a result of fire and related perils.
5. Ensure that property damage from fire and related perils does not exceed DOE established levels.
6. Ensure that process control and safety systems are not damaged by fire or related perils.

The TFC fire protection program shall be sufficient to fulfill the requirements for the best protected class of industrial risks and includes the preventive/protective features necessary to ensure the objectives are met.

To this end, the basic minimum objectives shall include:

- A reliable water supply of adequate capacity for fire suppression
- Noncombustible construction

- Automatic fire extinguishing systems
- Special hazards protection
- ~~Access to a~~ fully staffed and trained Fire Protection Engineer and maintenance staff
- ~~Access to a~~ fully staffed, trained, and equipped fire department
- A means to summon the fire department in the event of a fire
- A means to notify and evacuate building occupants in the event of a fire
- Application of mandatory fire protection criteria in accordance with ~~ORP-M-420.1-1~~ 10 CFR 851 implementation criteria.

### 3.0 RESPONSIBILITIES

#### 3.1 All Employees

1. Perform their activities safely to prevent the occurrence of a fire.
2. Notify their immediate manager or team coordinator of hazardous conditions that could result in a fire.
3. Notify the Hanford Fire Department if there is an indication of a fire, hazardous material spill, emergency rescue, or medical need by calling 911 or 373-3800 (cell phone) or other effective means.

NOTE: Off-site locations (e.g., Stevens Center) notify the City of Richland Fire Department by calling 911 or other effective means. Inform the TFC Fire Protection Engineer (372-~~32129418~~) in a timely manner for trending.

4. Park all vehicles (private and government) so that they do not block fire equipment or delay emergency response vehicles.
5. Shall receive basic fire prevention training that includes the following items (as a minimum): ~~(5.1.1)~~
  - Good housekeeping practices
  - Proper response/notification in the event of a fire
  - Instruction on the use of portable fire extinguishers
  - Recognition of potential fire hazards.

Employees who are designated to use a portable fire extinguisher as part of an emergency action plan or as a fire watch (such as for a welding/cutting operation) shall receive hands-on training in accordance with TFC-ESHQ-FP-C-01.

All fire protection training shall be documented in accordance with training administration procedures.

#### 3.2 Facility Management

(5.1.2)

1. Provide and maintain the necessary staff and resources to develop, implement, and maintain the TFC fire protection program.
2. Implement and adhere to the requirements of the TFC fire protection program for the facilities, programs, and/or operations under their jurisdiction.

3. Implement compensatory measures until compliance is achieved or an equivalent level of protection is provided whenever the requirements of the TFC fire protection program cannot be met.
4. Assist fire protection personnel with facility assessments, appraisals, investigations, and analyses.
5. Develop corrective action plans, provide timely resolution, and provide the necessary support for resolving fire protection deficiencies identified during appraisals, audits, and assessments, and fire protection system restrictions and emergency impairments.
6. Ensure serious fire protection deficiencies are funded and corrected with minimum delays.
7. Report fire and property losses in accordance with the requirements of TFC-OPS-OPER-C-24.
8. Ensure designs, specifications, modifications, fire system acceptance test procedures, fire system testing/inspection/maintenance procedures, and fire equipment procurement are reviewed and approved by a qualified Fire Protection Engineer.
9. Ensure a fire hazards analysis is prepared for all new facilities and existing nuclear facilities in accordance with TFC-ESHQ-FP-STD-06. Where assumptions are made in the fire hazards analysis regarding the combustible loading of a facility, facility-specific controls shall be developed which will prevent exceeding the limits analyzed.
10. Coordinate with the Hanford Fire Department and Fire Systems Support to ensure that there is a clear understanding of which fire protection systems are to be maintained by each organization. Attachment A specifies which components are the responsibilities of facility management. (Contact the TFC fire protection engineer if assistance is needed.)
11. In accordance with NFPA 801, "Standard for Fire Protection for Facilities Handling Radioactive Materials," documented facility inspections shall be conducted at least monthly, including provisions for remedial actions to correct conditions that increase the hazards. Facility inspections are intended to locate unnecessary transient combustibles, identify uncontrolled ignition sources, and detect obstructions to the means of egress. See TFC-ESHQ-S-STD-08 for details.
12. [Ensure compliance with 10 CFR 851 implementation for the requirements of 29 CFR 1910.39, "Fire Prevention Plans."](#)  
  
[Attachment C, 10 CFR 851 Implementation Fire Prevention Plan Requirements, list the applicable requirements of 29 CFR 1910.39, "Fire Prevention Plans" and the plans or procedures in place to meet prevention planning requirements.](#)

### 3.3 TFC Safety & Health Fire Protection Organization

1. Provide fire protection engineer technical support to the project organizations and facilities to assist with implementation of the TFC fire protection program, assist line management with fire investigations, assist in the resolution of fire system discrepancies, and support the preparation of exemptions/equivalency/deviation requests.

2. Disseminate fire protection information to management to keep them advised of changes, special problem issues, and/or new requirements related to the TFC fire protection program.
3. Establish and interpret fire protection policies, standards (including Life Safety Code<sup>7</sup> and National Electrical Code<sup>7</sup>) and requirements, and maintain program procedures applicable to TFC operations, activities, projects, and facilities.
4. Ensure a fire hazard analysis is conducted at all nuclear and new facilities by performing or coordinating preparation, reviewing, and approving all TFC-related fire hazard analyses and assist in acquiring DOE approval.
5. Review fire protection designs, specifications, modifications, fire system acceptance test procedures, fire system testing/inspection/maintenance procedures, and fire equipment procurement to ensure compliance with DOE and statutory fire protection requirements, standards, and recommended practices.
6. Review and approve, as appropriate, requests for exemptions, variances, deviations, or equivalency evaluations from fire protection standards and requirements.
7. Establish and maintain a list of those facilities that require fire protection facility assessments, and ensure new facilities are added to the list for review.
8. Perform fire protection facility assessments to determine compliance with applicable DOE Orders, and prescribed standards per the frequencies and category areas identified in ORD M 420.1-1 and ensure any deficiencies are maintained in the deficiency tracking system until corrected.
9. Assist with fire protection operational readiness reviews to verify that the facility, staff, procedures, and technical safety bases for operation are in place and ready for the defined operation.
10. Ensure that the working copies of files and records of fire protection activities (e.g., internal procedures, corrective action files, interpretations, etc.) are maintained and are accessible. (See Attachment B for RIDS requirements.)
11. Attend training courses to maintain proficiency in the mandatory fire protection standards of the program.
12. Prepare the Annual Property Loss Summary report.
13. Provide fire protection overview of subcontractor activities and facilities.
14. Provide technical assistance to DOE.
15. Provide testing/inspection/preventive maintenance requirements for the~~to~~ fire protection systems in accordance with [TFC-ESHQ-FP-STD-04](#).

### 3.4 Engineering

1. Ensure that nuclear facilities have interior finish materials (decorations, furnishings, and exposed wall or insulating materials) that have an Underwriters Laboratories (ASTM E-84/NFPA 255) flame spread rating of 25 or less, and smoke-developed rating of 50 or less (except for acoustical materials which shall have a smoke-developed rating of 100 or less). The minimum average critical radiant flux for floor covering material shall be 0.45 watts per square centimeter when tested in accordance with ASTM E-648 (NFPA 253). Contact the TFC fire protection engineer if assistance is needed.
2. Interface with the TFC fire protection engineer and the Hanford Fire Marshal to ensure fire protection concerns are adequately addressed, that designs and modifications comply with the applicable requirements, and applicable permits are obtained.
3. Specify (when available) only fire protection equipment and components that have been approved or listed for application by a nationally recognized testing laboratory.

### 4.0 DEFINITIONS

No terms or phrases unique to this procedure are used.

### 5.0 SOURCES

#### 5.1 Requirements

1. [10 CFR 851, "Worker Safety and Health."](#)
2. [29 CFR 1910.39, "Fire Prevention Plans."](#)
3. DOE O 420.1A, "Facility Safety." (S/RID)
4. [ORP M 420.1-1, "ORP Fire Protection Program."](#) (S/RID)

#### 5.2 References

1. HNF-SD-WM-FHA-020, "Tank Farm Fire Hazards Analysis."
2. [NFPA 101® "Life Safety Code®," 2000.](#)
3. TFC-ESHQ-FP-C-01, "Controls for Safe Hotwork."
4. TFC-ESHQ-FP-STD-04, "Fire Protection System Testing, Inspection, and Maintenance."
5. TFC-ESHQ-FP-STD-06, "Fire Hazards Analysis and Fire Protection Assessment Requirements."
6. TFC-ESHQ-FP-STD-12, "Hanford Fire Department Services."
7. [TFC-ESHQ-S-STD-08, "Safety Inspections."](#)
8. TFC-OPS-OPER-C-24, "Occurrence Reporting and Processing of Operations Information."

**ATTACHMENT A - APPLICABLE TFC ADMINISTRATION FIRE PROTECTION PROCEDURES**

The Hanford Fire Department personnel or other organizations using site-wide procedures perform many of the required activities, but the routines listed below are the responsibility of the facility management of the applicable building(s). (For information, the NFPA source for the requirement is also provided.)

**1.0 Project Management Team and Team Coordinator Responsibilities:**

1. Riser Pressure Gages Inspections (monthly/5 years)  
[NFPA 25; 2-2.4, 2-3.2]
2. Control Valve Inspections (weekly/monthly)  
Includes PIVs, control, backflow, and alarm isolation valves  
[NFPA 25; 9-3]
3. Fire Extinguisher Inspections (monthly)  
[NFPA 10 (1998), ¶ 4-3.1]
4. Fire Barrier Inspections (2 years)  
[ORP M 420.1-1]
5. Fire Damper Operation (2 years)  
[NFPA 90A, Annex B]
6. Fire Door Inspection (yearly)  
[NFPA 80, Chapter 15]
7. Emergency Light Inspection/Test (monthly/yearly)  
[NFPA 101, Section 7.9.3]
8. Exit Sign Inspections (monthly/yearly)  
[NFPA 101, Section 7.10.9.1]

**ATTACHMENT B - FIRE PROTECTION RECORDS**

This section provides information for use in preparing records inventory and disposition schedules (RIDS) as required by [TFC-BSM-IRM\\_DC-C-02](#).

**NOTE: The Hanford Site remains under a full moratorium on the destruction of all record material. No record material can be destroyed until further notice**

<b>Name (Filing Unit Title or Description)</b>	<b>Record Type*</b>	<b>Retention Period</b>	<b>Disposal Authority</b>	<b>Cut-Off Instructions and Retirement Instructions</b>
Records of reports of routine safety inspections, including evidence of action taken. (Example: fire watch records, fire barrier inspections)	R	Destroy when 1 year old.	II NNA-310(6)	Inspecting organization maintain most recent record; destroy in office after retention period, provided next record filed (for recurring records).
Alarm, investigation, and incident reports relating to various types of fires, including source data concerning fires in which fatalities may result or when arson is suspected.	R	Destroy when 10 years old.	NC-430-76-2(3)	Responsible organization send to permanent records storage facility within 30 days of completion.
Fire extinguisher history records and fire hose records.	R	Destroy 1 year after removal of equipment from service.	II NNA-1858(18)	Responsible organization destroy in office after retention period.
Fire extinguisher inspection records showing description of extinguishers, recharging data, and names of inspectors.	R	Destroy when 1 year old.	II NNA-2939	Responsible organization maintain most recent record; destroy in office after retention period, provided next record filed.
Fire station operating logs.	R	Destroy when 6 years old.	II NNA-1858(1C)	
Fire alarm system tests, radio communications logs, reports on outside and inside fire drills, daily force reports, and building inspections.	R	Destroy when 1 year old.	II NNA-1858(1F)	Responsible organization maintain most recent record; destroy in office after retention period, provided next record filed.
Maintenance/calibration records	---	---	---	Retain according to Job Control System requirements.
Training records	---	---	---	Retain according to training administration procedures.

\* QA - Quality Assurance; R - Record Material; NR - Nonrecord Material

**ATTACHMENT C - 10 CFR 851 IMPLEMENTATION – FIRE PREVENTION PLAN REQUIREMENTS**

**10 CFR 851 Implementation – Fire Prevention Plan Requirements**

<b><u>29 CFR 1910.39</u></b>	<b><u>Plan/Procedure Implementation</u></b>	<b><u>Description</u></b>
<u>1910.39(a)</u>	<p><u>Fluor Hanford, Inc., DE-AC06-6RL13200 - Modification A255, Specifically Part I, Section C, Statement of Work:</u></p> <ul style="list-style-type: none"> <li>• <u>C.4.2.14, Fire Department</u></li> <li>• <u>C.4.2.15, Fire Systems Maint.</u></li> </ul> <p><u>DOE/RL-94-02</u></p> <ul style="list-style-type: none"> <li>• <u>Section 1.1</u></li> <li>• <u>Section 1.2</u></li> <li>• <u>Figure 1-1</u></li> </ul> <p><u>TFC-PLN-13, Fire Protection Program</u></p>	<u>Application – Fire Prevention Plan</u>
<u>1910.39(b)</u>	<p><u>DOE/RL-94-02</u></p> <ul style="list-style-type: none"> <li>• <u>Section 1.1</u></li> <li>• <u>Section 1.2</u></li> <li>• <u>Figure 1-1</u></li> </ul> <p><u>TFC-PLN-13, Fire Protection Program</u></p>	<u>Written/oral – Fire Prevention Plan</u>
<u>1910.39(c)</u>	<p><u>See</u></p> <ul style="list-style-type: none"> <li>• <u>1910.39(c)(1)</u></li> </ul>	<u>Minimum elements - Fire Prevention Plan</u>
<u>1910.39(c)(1)</u>	<p><u>HNF-SD-WM-FHA-020, Tank Farm Fire Hazards Analysis</u>  <u>HNF-SD-WM-FHA-024, Fire Hazard Analysis for the Evaporator Facility (242-A)</u>  <u>HNF-SD-CP-FHA-003, 222-S, Laboratory Fire Hazards Analysis Report</u>  <u>TFC-ESHQ-FP-STD-02 – Combustible Material STD.</u>  <u>TFC-ESHQ-FP-STD-06 – Fire Hazard Analysis &amp; Fire Protection Assessment Requirements</u></p>	<u>List of major hazards</u>
<u>1910.39(c)(2)</u>	<p><u>TFC-ESHQ-FP-STD-02 – Combustible Material STD.</u>  <u>TFC-ESHQ-FP-STD-13, Fire Protection Requirements for Hazardous Material &amp; Used Waste Absorbing Material Storage</u></p>	<u>Procedures to control flammables/combustible wastes</u>
<u>1910.39(c)(3)</u>	<p><u>HNF-SD-WM-FHA-020, Tank Farm Fire Hazards Analysis</u>  <u>HNF-SD-WM-FHA-024, Fire Hazard Analysis for the Evaporator Facility (242-A)</u>  <u>HNF-SD-CP-FHA-003, 222-S Laboratory Fire Hazards Analysis Report</u>  <u>TFC-ESHQ-FP-C-01, Controls for Safe Hotwork</u>  <u>TFC-ESHQ-FP-STD-06 – Fire Hazard Analysis &amp; Fire Protection Assessment Requirements</u>  <u>TFC-ESHQ-FP-STD-13, Fire Protection Requirements for Hazardous Material &amp; Used Waste Absorbing Material Storage</u></p>	<u>Procedures for safeguards on heat producing equipment</u>

**ATTACHMENT C - 10 CFR 851 IMPLEMENTATION – FIRE PREVENTION PLAN  
REQUIREMENTS (cont.)**

<b>10 CFR 851 Implementation – Fire Prevention Plan Requirements</b>		
<b>29 CFR 1910.39</b>	<b>Plan/Procedure Implementation</b>	<b>Description</b>
<a href="#"><u>1910.39(c)(4)</u></a>	<p><a href="#"><u>Fluor Hanford, Inc., DE-AC06-6RL13200 - Modification A255, Specifically Part I, Section C, Statement of Work:</u></a></p> <ul style="list-style-type: none"> <li>• <a href="#"><u>C.4.2.15, Fire Department Services</u></a></li> </ul> <p><a href="#"><u>TFC-ESHQ-FP-STD-04, Fire Protection System Testing, Inspection, and Maintenance.</u></a></p> <p><a href="#"><u>TFC-ESHQ-FP-STD-12, Hanford Fire Dept Services</u></a></p> <p><a href="#"><u>TFC-PLN-13, Fire Protection Program</u></a></p> <p><a href="#"><u>The responsible building employees' contact information is located on the "Emergency Response Information" board located in every facility having 11 or more employees.</u></a></p>	<a href="#"><u>Employee responsibility for maintaining equipment to prevent or control sources of ignition or fires</u></a>
<a href="#"><u>1910.39(c)(5)</u></a>	<a href="#"><u>The responsible building employees' contact information is located on the "Emergency Response Information" Board located in every facility having 11 or more employees in the facility.</u></a>	<a href="#"><u>Employee responsibility</u></a> <a href="#"><u>Fuel source hazards</u></a>
<a href="#"><u>1910.39(d)</u></a>	<a href="#"><u>FEHIC Training – Course #350561</u></a>	<a href="#"><u>Employee information -</u></a> <a href="#"><u>Initial assignment</u></a>