





# Flame Resistant Clothing (FRC) Requirements

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Revision	Date	Originator	Revision Description
0	11/02/10	David Carmony	Initial version
1	08/19/11	Jon Graham	Added references to NFPA 2112 as well as Categories related to Arc Flash FR.
2	02/08/18	Lyndsey Linnen	Removed Supply Chain reference and added OSHA references.
3	04/10/19	Lyndsey Linnen	Added ASTM and NFPA; clarified flash fire and arc flash requirements for FRC.

**Flame Resistant Clothing (FRC) Requirement**

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## Flame Resistant Clothing (FRC) Requirement

### I. Purpose

The purpose of this Flame Resistant Clothing (FRC) Requirement is to protect employees, contractors and visitors from potential exposure to hydrocarbon flash fires. The FRC Requirement applies to Onshore and Offshore Apache Field Locations in the United States.

### II. Summary

Apache conducts our business in a responsible manner that protects the environment and the health, safety, security of our employees, contractors and the communities where we operate. One of Apache's core values is safety. It is not negotiable and will not be compromised. With this core value in mind, Apache and its Contractors shall comply with all federal, state, local and industry safety and health regulations, laws, and standards.

In consideration of OSHA's policy for citing the general industry standard for personal protective equipment (PPE), 29 CFR 1910.132(a)(d)(1)(i) for the failure to provide and use flame-resistant clothing (FRC) in oil and gas well drilling, servicing, and production-related operations, all personnel are required to wear flame resistant clothing (FRC) when conducting Drilling, Well-servicing, and Production-related operations when the potential exists for flash fires. Flame resistant garments shall meet the most current applicable regulatory requirements, which at this time are the National Fire Protection Association (NFPA) Standard on Flame-Resistant Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire (NFPA 2112), the Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire (NFPA 2113), and the Standard Specifications for Flame-Resistant Rainwear for Protection Against Flame Hazards (ASTM 2733).

Personnel performing activities associated with electrical energy and the hazards of Arc Flash must wear PPE that meets NFPA 70E (Standard for Electrical Safety in the Workplace) standards, including the appropriate Hazard Risk Classification Level 1 thru 4.

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### III. Requirements

To ensure the safety of our employees, contractors, and visitors, all personnel will be required to wear FRC in the following environments:

- On Apache onshore locations, whenever hydrocarbons have the potential to be present, regardless of the type of work being performed.
- On Apache Offshore platforms outside of personnel quarters if the platform processes contain or has the potential to contain any quantity of hydrocarbons.
- Outside the office area of a Gas Plant.
- On drilling locations after spud date and at all times thereafter until the well is completed and shut-in or plugged and abandoned.
- When FRC use has been prescribed on a site or by a job specific Hazard Assessment requiring FRC use.

For other work activities when a site or job specific hazard assessment is used to determine potential for burn hazards where employees have occupational exposure(s) to flash fires, the assessment must be performed in accordance to NFPA 2113 by a qualified individual. In all cases, FRC use will conform to applicable regulatory requirements (currently includes the OSHA March 19, 2010 Enforcement Policy, that is excerpted below for more context).

Employees performing the activities noted above shall wear FRC that meets NFPA 2112, and ASTM F2733 standards.

It is recommended that FRC also have high visibility reflective striping, unless the Region has instituted affirmative controls to ensure that personnel wear an FRC outer vest with high visibility reflective striping (front & back) when working during the hours between sunset and sunrise and during periods of impaired visibility.

Please contact your supervisor, an Apache Region HSSE Manager, or Corporate HSSE if you have questions or require further information regarding this FRC requirement.

**IV. Contextual Information**

As excerpted from the “OSHA Enforcement Policy for Flame-Resistant Clothing in Oil and Gas Drilling, Well Servicing, and Production-Related Operations”; March 19, 2010:

*“While the oil and gas industry has worked to reduce the risk of flash fire incidents, these efforts have not eliminated the occurrence of flash fires, nor the resulting burn injuries and fatalities. The use of FRC greatly improves the chance of a worker surviving and regaining quality of life after a flash fire. FRC can significantly reduce both the extent and severity of burn injuries to the body.*

*Inherent flash fire hazards are associated with oil and gas well drilling, servicing, and production-related operations. Additionally, the industry has a history of burn-related injuries and fatalities due to flash fire hazards when engineering and administrative controls have failed. Therefore, OSHA has concluded that employers are required to provide and ensure the use of FRC during certain operations.”*