



## INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS

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Richard E. Fairfax, Director  
Department of Labor  
Occupational Safety and Health Administration  
Directorate of Enforcement programs  
200 Constitution Ave. NW  
Room N-3119  
Washington, D.C. 20210

Dear Mr. Fairfax:

IADC is a trade association representing the interests of onshore and offshore drilling contractors operating worldwide. Founded in 1940, IADC's mission is to improve industry health, safety and environmental practices; advance drilling and completion technology; and champion responsible standards, practices, legislation and regulations that provide for safe, efficient and environmentally sound drilling operations worldwide. IADC drilling contractor membership represents approximately eighty percent of the land drilling rigs operating in the United States.

IADC has reviewed the Enforcement Policy for Flame-Resistant Clothing in Oil and Gas Drilling, Well Servicing, and Production Related Operations. IADC is concerned with the instructions regarding "Drilling Operations". IADC and the industry in general have been told numerous times by OSHA officials that before an official position policy on FR clothing was issued, the industry would be consulted for input. IADC is disappointed that it appears OSHA has abandoned this collaborative approach. IADC is also disappointed that OSHA appears to have abandoned working through the Alliance Networks that have worked well with industry over the past few years in improving safety in the Oil and Gas Upstream Industry.

In your letter to Regional Administrators and State Plan Designees it is stated that "NFPA 2112 and NFPA 2113 apply to general industry workplaces, including drilling, well servicing, and production-related operations". IADC has reviewed 1910.132 and cannot find NFPA 2112 or NFPA 2113 referenced. In addition a review of NFPA 2112 indicates that it is directed toward design and

testing of fire resistant garments by the manufacturer. The purpose of NFPA 2113 is to assist in the selection of flame-resistant garments and those risks associated with incorrectly maintained, contaminated or damaged flame-resistant garments. It is not clear if OSHA has incorporated by reference NFPA 2112 and 2113.

When citing the need for FRC during the 2 October 2009 hearing in Denver, OSHA representatives cited a draft IADC document. This draft document was changed extensively prior to final approval and issue. The final document was issued by API as Recommended Practice 92-U. API RP 92-U recommends FR clothing while drilling Category 4 and Category 5 Underbalanced wells. The vast majority of wells drilled in the United States do not fit into those two categories. After much discussion at the 2 October meeting the OSHA representatives present at the meeting recommended that industry develop FRC guidelines. However, OSHA area directors present at the meeting indicated they would only accept an industry document that required the use of FR clothing 100 percent of the time; we do not feel this position is justified.

IADC is also disappointed that OSHA chose to use an outdated fatality study as the basis for this enforcement policy. Reference "Upstream Onshore Oil and Gas Fatalities" issued in 2005. Industry has asked OSHA a number of times to put together a task group to update that study. IADC understands that there have also been requests submitted through the Alliance Networks. One of the problems with referencing the results of a study is that there are often details in the study that are not truly reflected in the final report. Our review of the study has determined that none of the fatalities was the result of drilling operations and two were not flash-fire explosions; rather one case involved the explosion of a casing cutter and the other involved a dynamite explosion. Another problem which was discovered during the previous study is that the industry classification (SIC Code) for the employer was entered incorrectly. Before developing such a blanket regulatory change, we feel it would have been prudent for OSHA to have established a new task group to update, analyze and validate the data from the fatality study.

The IADC Incident Statistics Program collects drilling related injury (illness) data worldwide. The data submitted to the program was reviewed for Flame/heat/steam (contact/exposed) injuries from 2002 through 2009. There were 29,631 recordable injuries during this time and only 0.39% of the injuries were "Flame/heat/steam (contact/exposed)" to the legs, body or arms. The majority of these incidents occurred during rig maintenance or rigging up/down - not well drilling operations. It is our determination that the drilling industry data indicates that the number and types of incidents in which FRC may have been beneficial is less than one half of one percent.

The bullets as written can cause confusion for both the inspector and the regulated community.

- *FRC is usually not needed during initial rig up and normal drilling operations prior to reaching active hydrocarbon zones, unless other activities warrant their use; e.g., fracing a previously drilled well while rigging a well in close proximity.*

The use of the term “active hydrocarbon zones” is unclear and confusing. Each year thousands of wells are drilled through the hydrocarbon bearing zones that require artificial lifting methods to bring the oil to the surface. During the drilling of normal balanced wells there is little risk of hydrocarbon reaching the surface. Many wells require formation fracturing before hydrocarbons can be released from the formation. Factors such as pressure present in the hydrocarbon formation(s), the drilling mud program and well control equipment present on the well should be considered by OSHA to clarify what constitutes an “active” zone. API RP 92-U Category 4 and 5 well descriptions account for active hydrocarbon formations and well bore pressures.

- *A potential or flash fire exists once active gas or hydrocarbon zones are reached. Appropriate FRC shall be worn by exposed employees working on the well site prior to drilling into identified gas or hydrocarbon zones. CSHOs should verify that employees are wearing FRC in advance of reaching such zones.*

Please see IADC comments regarding “active hydrocarbon zones” above.

- *Appropriate FRC should also be worn when there is a history of fluid or gas kicks from underground producing zones.*

It is unclear whether this statement applies only to kicks during normal overbalanced drilling operations or kicks after a formation has been perforated, after the producing zone has undergone fracturing procedures, or during well service / workover operations. IADC believes this statement needs further clarification.

- *Once FRC is identified for use as provided above, employees should wear appropriate FRC until the final casing is cemented and the well is effectively closed.*

Please see IADC comments regarding the first bullet above.

Most drilling companies that have conducted personnel protective equipment risk assessments have concluded that based on engineering controls, well planning and administrative controls, flash fire hazards are minimal and FRCs are not required. It does not appear that these individual employer assessments or the diverse types of wells and oilfield activities have been fully considered by OSHA in the construction of this enforcement policy.

Estimated start up cost for providing FRC to employees in the drilling industry would be over \$50,000,000 per year for initial issue. Combining drilling with Well servicing and other Oil and Gas upstream segments will most likely increase the total Oil and Gas industry costs to over \$100,000,000 per year. In

light of this conservative cost estimate IADC has determined that potential costs to industry of complying with this new OSHA policy are likely to have the impact of a major regulation change. It is IADC's position that OSHA should address this issue through the established rulemaking process to properly obtain industry comment.

Finally IADC is also concerned that there is no implementation date for this change in enforcement policy. Without an established effective date industry may be challenged to ensure compliance given the major additional costs that will be incurred to procure, issue, and maintain FR clothing.

IADC respectfully requests that OSHA withdraw this enforcement policy and seek further information and input from the industry through the customary and established rulemaking process.

Sincerely

Dr. Lee Hunt  
President

CC: Patrick Kapust, Deputy Director