Table 9.11: Foam Sprinkler/ Deluge/ Pourer System Requirements

ITEMS	REQUIREMENTS
15. DESIGN CRITERIA FOR LOW – EXPANSION FOAM SYSTEM	xxii. The design Criteria of Foam Monitor System for Loading Racks (Truck or Rail cars at loading and unloading) shall comply with **Table 9.11.G.** xxiii. The design Criteria of Foam Monitor System for Loading Diked and non-diked areas shall comply with **Table 9.11.H.** xxiv. Fixed foam outlets shall not be used to protect horizontal or pressure tanks.

Table 9.11.G.: Design Criteria for Foam Monitors System for Loading Racks

HAZARD	FOAM TYPE	REQUIRED DESIGN DENSITY (MINIMUM APPLICATION RATE)	FOAM ADDITION FOR HYDRAULIC IMBALANCE	DURATION
1. HYDROCARBONS	Protein and Flouroprotein	6.5 lpm (0.16 gpm)	10%	15 minutes
2. HYDROCARBONS	AFFF, FFFP, Alcohol Resistant AFFF and FFFP	4.1 lpm (0.10 gpm)	10%	15 minutes
3. FLAMMABLE AND COM-BUSTIBLE LIQUIDS REQUIRING ALCOHOL RESISTANT FOAMS	Alcohol Resistant Foams	4.1 lpm (0.10 gpm) or Manufacturer's specifications, whichever is higher	10%	15 minutes

Table 9.11.H.: Design Criteria for Foam Monitors System for Diked Areas

HAZARD	REQUIRED DESIGN DENSITY (MINIMUM APPLICATION RATE)	DURATION CLASS I HYDROCARBON	DURATION CLASS II HYDROCARBONS
1. LOW LEVEL FOAM DISCHARGE OUTLET	4.1 lpm (0.10 gpm)	10%	15 minutes
2. FOAM MONITORS	6.5 lpm (0.16 gpm)	10%	15 minutes

Points to Ponder

The application of solid foam streams, turbulently into the flammable liquid could cause ignition of the ensuing fire, due to the static discharges resulting from splashes and turbulence.

Any application of foam to an unignited flammable liquid should be as gentle as possible through an appropriately selected, designed and executed method of foam systems.