



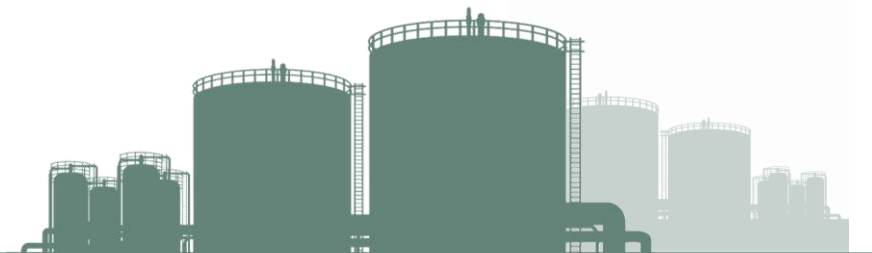
THE INTERNATIONAL LIQUID TERMINALS ASSOCIATION

OMB 12866 Meeting | February 23, 2022

A CRITICAL PERSPECTIVE

ILTA represents nearly eighty terminal companies providing critical infrastructure, storage, and transportation logistics for bulk liquid products at over 1,500 facilities in locations across all 50 states.

- Form a key link in supply chains for a wide range of commodities, including crude oil, gasoline, diesel, jet fuel, ethanol, industrial chemicals, fertilizers, and agricultural oils
- Dedicated to safe, reliable, and environmentally responsible operations at terminal facilities and recognize the potentially serious health effects of PFAS exposure
- Firmly supports a safe, strategic, well-managed transition to fluorine-free, or PFAS-free, firefighting foams, while ensuring that the safety of firefighters, our workers, and our communities is not compromised.



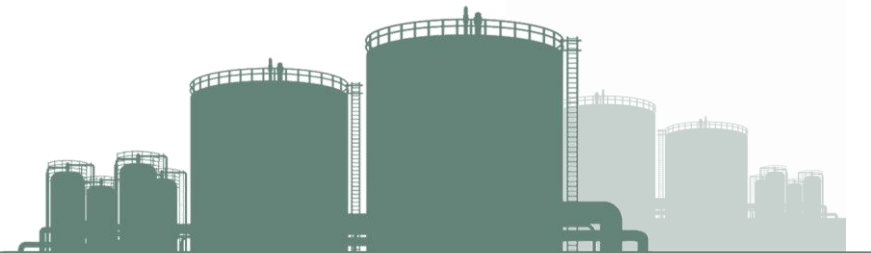
UNIQUE CONSIDERATIONS FOR LIQUID TERMINALS & AIRPORTS

7 out of 11 states with restrictions on the manufacturing, sale, distribution or use of PFAS firefighting foams have extensions or exemptions for **liquid terminals and airports**

- California, Colorado, Connecticut, Illinois, Maine, New York, Vermont

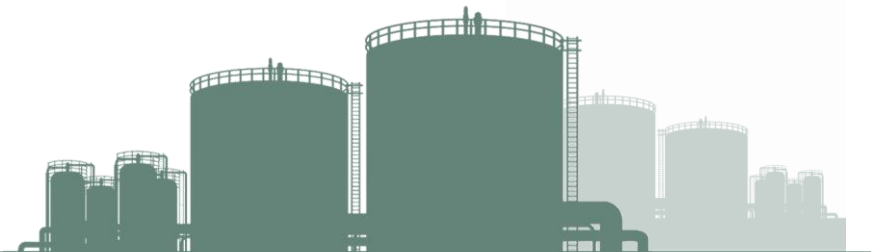


Image: 60,000-barrel jet fuel storage at LAX Airport. Source: Burns & McDonnell



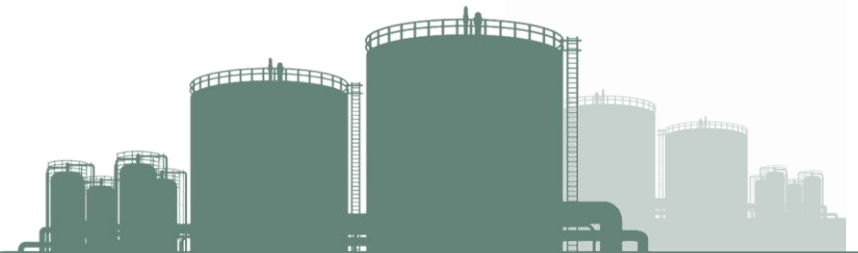
UNIQUE CONSIDERATIONS FOR LIQUID TERMINALS

- Why are liquid terminals unique?
 - They protect and manage critical infrastructure and commodities which demand special precautions due to their flammable properties
 - Liquid terminals must be prepared for:
 - Large-scale events
 - Alcohol-type fires
 - Deep tank fires
 - Although rare, fires at liquid terminals could potentially lead to the unintended release of harmful air pollutants if not suppressed in a timely manner



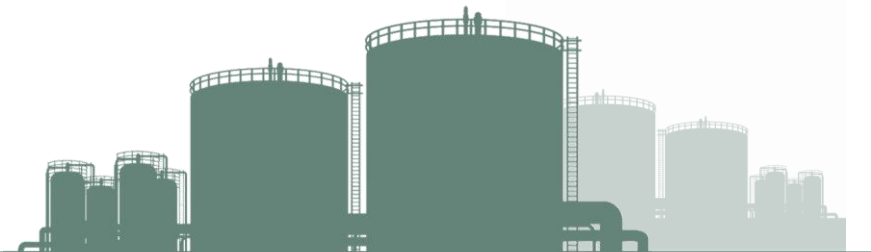
UNIQUE CONSIDERATIONS FOR LIQUID TERMINALS

- OSHA regulations require sufficient fire extinguishing equipment in accordance with approved engineering standards
- **OSHA 1910.106(f)(8) – Flammable liquids.**
 - ❑ **Fire control.** Suitable fire-control devices, such as small hose or portable fire extinguishers, shall be available to locations where fires are likely to occur. Additional fire-control equipment may be required where a tank of more than 50,000 gallons individual capacity contains Category 1 or 2 flammable liquids, or Category 3 flammable liquids with a flashpoint below 100 °F (37.8 °C), and where an unusual exposure hazard exists from surrounding property.
 - ❑ **Such additional fire-control equipment shall be sufficient to extinguish a fire in the largest tank. The design and amount of such equipment shall be in accordance with approved engineering standards.**
 - ❑ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.106>



UNIQUE CONSIDERATIONS FOR LIQUID TERMINALS

- National Fire Protection Association (NFPA)
 - “Evaluation of the fire protection effectiveness of fluorine free firefighting foams” (2020)
 - Acknowledges that further research is needed for certain fuel types (i.e., crude oil, kerosene based, polar solvents); chemical compatibility between surfactants and fuels, and larger fires – among other areas.
 - “...As of today, FFFs are not a “drop in” replacement for AFFF. However, some can be made to perform effectively as an AFFF alternative with proper testing and design (i.e., with higher application rates/densities).” (p. 12)
 - <https://www.iafc.org/docs/default-source/1safehealthshs/effectivenessofflourinefreefoam.pdf>
 - NFPA 11 “Low-, Medium-, and High-Expansion Foam” (2021)
 - “Presently, there is no drop-in replacement SFFF for AFFF.
 - “FFF typically require 1.5 to 3 times the application rates”
 - <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=11>



SAFELY TRANSITIONING TO PFAS-FREE FOAMS

- To date, AFFF has been the best available firefighting foam available to liquid terminal operators to maintain safety for the local community, workers, and infrastructure.
- There is a risk that terminal operators will be held legally and financially responsible for following the best safety practices to reduce health effects from fires to firefighters, terminal employees, and the community when suppressing fires in the rare occasion that they occur.
- The fire hazards and air quality impacts of fire events at these facilities have required the continued use of AFFF until adequate alternatives are commercially available for all facilities.
- Until the transition to alternative foams is complete across the industry, the risk of future liability should not weigh against a facility's options to respond to fire events.
- **ILTA encourages EPA to consider an exemption for the historic use of AFFF at liquid terminal facilities.**



SAFELY TRANSITIONING TO PFAS-FREE FOAMS

Additional Considerations for EPA when formulating policies to address AFFF

- Develop a strategic timeline to adequately prepare the liquid terminal industry to fully transition to fluorine-free foams
- Support Fluorine-free Foam Research, Development and Deployment
- Accommodate mutual aid in response to incidents
- Continue to support development of destruction and disposal methods for PFAS
- Work to ensure AFFF replacements are not toxic, minimizing potential replacement remorse





THANK YOU

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