

Smoke Oil (Identified as a Class II Combustible Hydrocarbon)

The storage of smoke oil (also referred to as fuel oil) is governed by the National Fire Protection Association (NFPA) and the International Fire Code (IFC). Fuel oil is classified as a Combustible Liquid that has more stringent storage requirements than standard oils but less volatile than AvGas, if that provides some context as to its volatility.

As the Airport Authority, you can implement tighter restrictions on those operating within your property that exceeds the standards established by the NFPA and enforced by the Fire Marshal. During an inspection of airport hangars, the Fire Marshal would use the following as guidelines.

Our office will enforce the standards; however, any requirements that exceed the standard will be the responsibility of the Airport Authority.

To clarify the regulatory framework, NFPA 409 (Standard on Aircraft Hangars) governs the storage and handling of flammable and combustible liquids within these facilities.

The International Fire Code also weighs in and was referenced during my research. While the Aircraft Owners and Pilots Association (AOPA) may provide valuable industry insights, they do not possess the regulatory authority to dictate or override NFPA codes.

1. Quantity & Container Limits

- **5-Gallon Rule:** You are typically limited to **5 gallons** of flammable or combustible liquid per hangar unless it is stored in a dedicated flammable liquid storage cabinet. [NFPA 409]
- **Safety Cans:** Liquids must be kept in **UL-listed Type I safety containers** or the original manufacturer's packaging. [NFPA 30]

2. Storage Cabinets & Locations

- **Flammable Cabinets:** If you exceed the basic 5-gallon limit, you must use an **approved storage cabinet**. Total capacity in a single cabinet is generally capped at **60 gallons** for Class II (fuel oil). [NFPA 30]
- **Hazardous Waste:** Storing **waste oil, used filters, or oily rags** inside a hangar is prohibited; these must be removed daily or stored in a designated outdoor waste tank. [NFPA 30; 409]
- **Separation:** Storage areas must be at least **50 feet** away from any ignition source or aircraft fueling operation. [NFPA 30; 409]

3. Infrastructure & Containment

- **Drainage:** Hangars must have an **ignitable liquid drainage system** (ILDFA) or an **oil/water separator** to ensure any spill doesn't enter the public sewer or spread fire across the floor. [NFPA 409]
- **No "Hazardous Operations":** If you store large quantities or perform fuel transfers, the hangar may be reclassified (Group I or II), requiring an **automatic foam-water fire suppression system**. [NFPA 409]

4. Prohibitions

- **Transferring Fuel:** Dispensing or removing fuel from containers is generally **prohibited inside the hangar**; aircraft must be moved outside. [NFPA 409]
- **Kerosene:** The storage of kerosene is specifically prohibited in hangars. [NFPA 30]

While I appreciate the perspective of the pilots and the convenience, they may be seeking in storing these fluids, I am obligated to enforce the standards set forth in NFPA

409. As previously outlined in our correspondence:

- **Deviation:** Regardless of the preferences expressed by interested parties, I cannot deviate from the safety standards established by the NFPA.
- The Fire Marshal's understanding is that the National Air Transportation Association (NATA), which solicits input from the AOPA, works closely with the National Fire Protection Association (NFPA) to develop these substantive standards, and established protocols.
- **Data-Driven Review:** If members of the AOPA wish to submit documentation supporting an alternative stance, I will review it. However, such documentation must be fully compliant with code, rather than anecdotal opinion.