

Checklist for dangerous liquids

Question: How can I identify common safety violations found in facilities using flammable fuels, solvents or chemicals?

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Answer: Safety managers can use the following “Quick Checklist” to identify the most common safety violations concerning flammable, combustible and hazardous liquids. Following it can quickly and effectively make your operations compliant with OSHA and industry best practices.

1. Look around – are flammable, combustible and hazardous liquids stored in open containers? This violates OSHA and Environmental Protection Agency regulations. All hazardous liquids should be stored in functionally closed containers. Ensure the lids on those containers are closed adequately, and repair or replace containers as required.

2. As an industry best practice and to meet OSHA regulations, flammable and combustible liquids should be stored in a safety can approved by Underwriters Laboratories and FM Global. Safety cans that have been in service should be inspected to ensure the lids operate and close effectively, a flame arrester is present, and that they do not leak. Replace all safety cans that no longer function properly.

3. Look for fluid-soaked rags. They can represent a fire hazard if they are left lying around or are not discarded in approved containers. Use UL- and FM-approved oily waste cans. Always make sure to empty the containers each night, or at the end of each shift, into a safety container located outside the building.

4. Do you have other combustible waste in open or overflowing containers? Replace these containers with UL- and FM-approved waste receptacles. This is important to your operation’s fire prevention plan.

5. Drum storage usually indicates the storage of bulk flammable, combustible or hazardous liquid. For EPA compliance, make sure you pick a spill protection pallet for your needs:

- For indoor applications, choose a polyethylene or metal spill pallet. Base your decision on chemical compatibility.
- Do you have outdoor drum storage? A covered pallet can offer spill protection and protect your sump from overflow due to rain as required by a responsible spill prevention plan.

6. Drum storage of flammable and combustible liquids should include a safety drum vent on each drum to ensure OSHA compliance. FM-approved safety drum vents provide emergency pressure venting in the event of a fire and the vacuum relief required for dispensing operations or to prevent the drum from crushing in the event of sudden cooling. Vents are available for horizontal or vertical stored drums.

7. If your operation requires dispensing of flammable and combustible liquids from a horizontal drum through a faucet, you need an FM-approved

self-closing faucet (required by OSHA).

8. FM-approved flammable safety cabinets help organize flammable and combustible liquids, increase the amount of flammable and combustible liquids stored in an area, and provide a margin of safe egress from an area by personnel in the event of a fire. Replace existing safety cabinets if the doors do not operate correctly or if they have been modified.

9. Always properly ground or bond containers when dispensing Class I flammable liquids.

By following this checklist, you can solve the most common safety violations in the handling of flammable, combustible and hazardous liquid, which will make your operation a safer one. S+H

Editor’s Note: This article represents the independent views of the author and should not be construed as a National Safety Council endorsement.

