



Description The purpose of this procedure is to ensure proper storage of combustible materials at compressor stations.

Regulatory Applicability Regulated Transmission Pipelines
 Regulated Gathering Pipelines (Type A)
 Regulated Gathering Pipelines (Type B)
 Regulated Distribution Pipelines

Frequency Ongoing

Reference 49 CFR 192.735 *Compressor Stations: Storage of Combustible Materials*
LA Title 43 Part XIII 2935 *Compressor Stations: Storage of Combustible Materials*

Forms / Record Retention None

Related Specifications NFPA 30 *Flammable and Combustible Liquids Code*

OQ Covered Task None



Procedure Steps

1. Storage of flammable and combustible material will comply with National Fire Protection Association (NFPA) Standard No. 30.
 - a) Flammable and Combustible Liquids
 - b) Flammable liquids are rated in three hazard classes based on the liquid's flash point and boiling point (see table below). Flash point is the minimum temperature at which a liquid generates vapors in a sufficient concentration to form an ignitable mixture in air.
 - i) A flammable liquid is any liquid with a flash point below 100°F.
 - ii) A combustible liquid is any liquid with a flash point at or above 100°F. Combustible liquids are rated in three classes based on the liquid's flash point.

Category	Class	Flash Point	Boiling Point
Flammable Liquids Examples: gasoline, methanol, condensate	Class IA	Below 73°F	Below 100°F
	Class IB	Below 73°F	At or above 100°F
	Class IC	At or above 73°F and below 100°F	NA
Combustible Liquids Examples: lube oil, kerosene	Class II	At or above 100°F and below 14 °F	NA
	Class IIIA	At or above 140°F and below 200°F	NA
	Class IIIB	At or above 200°F	NA

2. Combustible or flammable material, i.e. oily rags, absorbents, etc. are to be stored outside of the compressor building except for those items necessary for everyday use.
 - a) Portable Containers

When portable containers are used to transport flammable or combustible liquids, use only containers approved for flammable or combustible liquids. An approved container is a metal container with a capacity of 5 gallons or less and equipped with a spring-closing lid and spout cover, a means to relieve internal pressure and flash-arresting screen.
 - b) Drums

Flammable and combustible products transferred from drums into portable containers must be stored inside a diked area with a drip pan under the dispensing nozzle. Use a ground cable when transferring products into another container.



3. All flammable and combustible material that is necessary for everyday use inside the building will be kept in the approved flammable storage cabinet located in the compressor building.
 - a) Storage Cabinets
 - i) Manufactured storage cabinets must be designed and constructed to National Fire Protection Association (NFPA) Standard No. 30, FM, UFC 79 or other approved standard.
 - ii) The maximum volumes of flammable and combustible liquids that can be stored in a single cabinet are:
 - (1) Classes I or II liquids - a maximum of 60 gallons
 - (2) Class III liquids - a maximum of 120 gallons
4. Aboveground Tanks
 - a) An above ground tank must be located outside the building at least 5 ft. from the exterior wall and be protected according to NFPA 30.
 - b) Aboveground liquid storage tanks may be atmospheric tanks, low pressure tanks or pressure vessels.
 - c) Any flammable or combustible liquid storage tank with a capacity greater than 60 gallons must meet the following requirements:
 - i) Separate any two by a minimum of 3 feet measured shell to shell.
 - ii) Provide normal and emergency venting devices or a combination device
 - iii) Protect steel tank support legs over 12 inches high with fire-retardant materials, except for Class IIIB liquids
 - d) Grounding and Bonding
 - i) Ground each aboveground tank by installing a buried zinc anode or copper rod.
 - ii) All tank unloading valves must have an electrical bonding device (i.e., cable, retractable reel) to prevent static sparking during loading and unloading.
 - iii) Dispense Class I liquids only after both the tank and vehicle or both the dispensing and portable containers are electrically interconnected and grounded.
 - e) Venting
 - i) Install venting devices to prevent excessive pressure buildup that might cause the vessel or container to fail. Provide both:
 - (1) Normal venting to handle filling, draining and ambient heat transfers
 - (2) Emergency venting to handle fire exposure on all flammable and combustible liquid storage tanks, including portable tanks
 - f) Secondary Containment



- i) Provide secondary containment for any discharge from areas containing a tank or group of vessels storing flammable or combustible liquids. Contact Engineering for assistance in determining the proper containment and dike size.
- ii) Note: Do not store loose combustible materials or any containers within a tank's diked area. Keep diked areas clean and free of vegetation and liquids, including storm water runoff.