Committee Input No. 1-NFPA 30-2015 [New Section after 3.3]

General Definition: Protected Storage

Protected Storage: Storage installed after January 1, 1997, that is protected in accordance with Chapter **16** or through an alternate means of protection that has been approved by the authority having jurisdiction (See **16.3.5** and Section **16.9** .). This storage classification designates a fire risk that is managed to provide fire control and limit the extent of fire size at or below the design area of the automatic fire protection system..

General Definition: Unprotected Storage

Unprotected Storage: Any storage configuration that does not meet the definition of protected storage. This storage classification implies that should a fire occur, the total contents of the fire area may become involved in a fire, regardless of the fire protection features provided.

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Submittal Date: Thu Sep 10 17:22:57 EDT 2015

Committee Statement

Committee Statement: The committee determined that the proposed criteria for describing protected vs. unprotected storage is not uniformly explained so that it should be included in chapter 3 as a general definition. Therefore, the committee is considering including the proposed definitions or an amended version thereof into Section 16.2. The committee solicits opinions or suggestions on this issue. The resolution of this issue will be tasked to the Task Group on Protection Criteria.

Response Message:

Public Input No. 75-NFPA 30-2015 [New Section after 3.3]

Committee Input No. 27-NFPA 30-2015 [Section No. 3.3]

3.3 General Definitions.

3.3.1 Alcohol-Based Hand Rub (ABHR).

An alcohol-containing preparation designed for application to the hands for reducing the number of visible microorganisms on the hands and containing ethanol or isopropanol in an amount not exceeding 95 percent by volume.

3.3.2 Area.

3.3.2.1 Control Area.

For the purpose of this code, a building or portion of a building within which flammable and combustible liquids are allowed to be stored, dispensed, and used or handled in quantities that do not exceed the maximum allowable quantity (MAQ). *(See also 3.3.38, Maximum Allowable Quantity.)*

3.3.2.2 Fire Area.

An area of a building separated from the remainder of the building by construction having a fire resistance of at least 1 hour and having all communicating openings properly protected by an assembly having a fire resistance rating of at least 1 hour.

3.3.2.3 Inside Liquid Storage Area.

A room or building used for the storage of liquids in containers or portable tanks, separated from other types of occupancies.

3.3.3 Barrel.

A unit of volume used in the petroleum industry that is equal to 42 gal (159 L).

3.3.4 Basement.

For the purposes of this code, a story of a building or structure having one-half or more of its height below ground level and to which access for fire-fighting purposes is restricted.

3.3.5 Boiling Point.

The temperature at which the vapor pressure of a liquid equals the surrounding atmospheric pressure.

3.3.6* Boil-Over.

An event in the burning of certain oils in an open-top tank when, after a long period of quiescent burning, there is a sudden increase in fire intensity associated with expulsion of burning oil from the tank.

3.3.7 Bonding.

For the purpose of controlling static electric hazards, the process of connecting two or more conductive objects together by means of a conductor so that they are at the same electrical potential, but not necessarily at the same potential as the earth. [**77,**2014]

3.3.8 Building.

Any structure used or intended for supporting or sheltering any use or occupancy.

3.3.8.1* Important Building.

A building that is considered not expendable in an exposure fire.

3.3.8.2 Storage Tank Building.

A three-dimensional space that is enclosed by a roof and walls that cover more than one-half of the possible area of the sides of the space, is of sufficient size to allow entry by personnel, will likely limit the dissipation of heat or dispersion of vapors, and restricts access for fire fighting.

3.3.9 Building Code.

The building or construction code adopted by the jurisdiction. [**55,** 2013]

3.3.10 Chemical Plant.

A large integrated plant or that portion of such a plant, other than a refinery or distillery, where liquids are produced by chemical reactions or used in chemical reactions.

3.3.11 Closed-Top Diking.

A dike with a cover intended to minimize the entrance of precipitation into the diked area.

3.3.12* Container.

Any vessel of 119 gal (450 L) or less capacity used for transporting or storing liquids.

3.3.12.1 Closed Container.

A container as herein defined, so sealed by means of a lid or other device that neither liquid nor vapor will escape from it at ordinary temperatures.

3.3.12.2 Intermediate Bulk Container.

Any closed vessel having a liquid capacity not exceeding 3000 L (793 gal) and intended for storing and transporting liquids, as defined in Title 49, Code of Federal Regulations, Parts 100 through 199 or in Part 6 of the United Nations' *Recommendations on the Transport of Dangerous Goods*.

3.3.12.3* Nonmetallic Container.

A container as defined in 3.3.12, constructed of glass, plastic, fiber, or a material other than metal.

3.3.12.4* Nonmetallic Intermediate Bulk Container.

An intermediate bulk container, as defined in 3.3.12.2, constructed of glass, plastic, fiber, or a material other than metal.

3.3.13 Crude Petroleum.

Hydrocarbon mixtures that have a flash point below 150°F (65.6°C) and that have not been processed in a refinery.

3.3.14 Cryogenic Fluid.

A fluid with a boiling point lower than –130°F (–90°C) at an absolute pressure of 14.7 psi (101.325 kPa). [**55,**2013]

3.3.15 Damage-Limiting Construction.

For the purposes of this code, any set of construction elements, used individually or in combination, which will act to limit damage from an explosion, including open structures, pressure relieving construction, or pressure resistant construction.

3.3.16 Distillery.

A plant or that portion of a plant where liquids produced by fermentation are concentrated and where the concentrated products are also mixed, stored, or packaged.

3.3.17 Dwelling.

3.3.17.1 Multifamily Dwelling.

A building that contains three or more dwelling units.

3.3.17.2 One-Family Dwelling.

A building that consists solely of one dwelling unit.

3.3.17.3 Two-Family Dwelling.

A building that consists solely of two dwelling units.

3.3.18 Dwelling Unit.

One or more rooms arranged for complete, independent housekeeping purposes, with space for eating, living, and sleeping; facilities for cooking; and provisions for sanitation. [**5000,**2015]

3.3.19 Fire Code.

The fire code referenced in Chapter 2 of this code.

3.3.20 Fire Point.

The lowest temperature at which a liquid will ignite and achieve sustained burning when exposed to a test flame in accordance with ASTM D 92, *Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester*.

3.3.21 Flash Point.

The minimum temperature of a liquid at which sufficient vapor is given off to form an ignitible mixture with the air, near the surface of the liquid or within the vessel used, as determined by the appropriate test procedure and apparatus specified in Section 4.4.

3.3.22* Fugitive Emissions.

Releases of flammable vapor that continuously or intermittently occur from process equipment during normal operations.

3.3.23 Grounding.

The process of bonding one or more conductive objects to the ground, so that all objects are at zero (0) electrical potential; also referred to as *earthing*. [**77,**2014]

3.3.24* Hazardous Material or Hazardous Chemical.

Material presenting dangers beyond the fire problems relating to flash point and boiling point.

3.3.25 Hazardous Materials Storage Locker.

A movable prefabricated structure, manufactured primarily at a site other than the final location of the structure and transported completely assembled or in a ready-to-assemble package to the final location, and intended to meet local, state, and federal requirements for outside storage of hazardous materials.

3.3.26* Hazardous Reaction or Hazardous Chemical Reaction.

Reactions that result in dangers beyond the fire problems relating to flash point and boiling point of either the reactants or of the products.

3.3.27 Heat Transfer Fluid (HTF).

A liquid that is used as a medium to transfer heat energy from a heater or vaporizer to a remote heat consumer (e.g., injection molding machine, oven, or dryer, or jacketed chemical reactor).

3.3.28 High Hazard Level 2 Contents.

Contents that present a deflagration hazard or a hazard from accelerated burning. For the purposes of this code, this includes Class I, Class II, or Class IIIA liquids that are used or stored in normally open containers or systems, or in closed containers or systems at gauge pressures 15 psi (103 kPa) or greater.

3.3.29 High Hazard Level 3 Contents.

Contents that readily support combustion or that present a physical hazard. For the purposes of this code, this includes Class I, Class II, or Class IIIA liquids that are used or stored in normally closed containers or in closed systems at gauge pressures of less than 15 psi (103 kPa).

3.3.30 Hotel.

A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals. [***101,*** 2015]

3.3.31 Incidental Liquid Use or Storage.

Use or storage as a subordinate activity to that which establishes the occupancy or area classification.

3.3.32 Liquefied Gas.

A gas, other than in solution, that in a packaging under the charged pressure exists both as a liquid and a gas at a temperature of 68°F (20°C).

3.3.33 Liquid.

Any material that (1) has a fluidity greater than that of 300 penetration asphalt when tested in accordance with ASTM D 5, *Standard Test Method for Penetration of Bituminous Materials*, or (2) is a viscous substance for which a specific melting point cannot be determined but that is determined to be a liquid in accordance with ASTM D 4359, *Standard Test for Determining Whether a Material is a Liquid or a Solid*.

3.3.33.1 Combustible Liquid.

Any liquid that has a closed-cup flash point at or above 100°F (37.8°C), as determined by the test procedures and apparatus set forth in Section 4.4. Combustible liquids are classified according to Section 4.3.

3.3.33.2* Flammable Liquid.

Any liquid that has a closed-cup flash point below 100°F (37.8°C), as determined by the test procedures and apparatus set forth in Section 4.4, and a Reid vapor pressure that does not exceed an absolute pressure of 40 psi (276 kPa) at 100°F (37.8°C), as determined by ASTM D 323, *Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)*. Flammable liquids are classified according to Section 4.3.

3.3.33.3 Stable Liquid.

Any liquid not defined as unstable.

3.3.33.4* Unstable Liquid.

A liquid that, in the pure state or as commercially produced or transported, will vigorously polymerize, decompose, undergo condensation reaction, or become self-reactive under conditions of shock, pressure, or temperature.

3.3.33.5* Water-Miscible Liquid.

A liquid that mixes in all proportions with water without the use of chemical additives, such as emulsifying agents.

3.3.34 Liquid Storage Room.

A room that is used for the storage of liquids in containers, portable tanks, or intermediate bulk containers, has a floor area that does not exceed 500 ft^2 (46 m^2), and might be totally enclosed within a building — that is, the room might have no exterior walls.

3.3.35 Liquidtight.

The ability of an enclosure or device to prevent the unintended release of liquids at normal operating temperature and pressure ranges.

3.3.36 Liquid Warehouse.

See 3.3.62.2.

3.3.37 Lower Flammable Limit (LFL).

That concentration of a flammable vapor in air below which ignition will not occur. Also known as the lower explosive limit (LEL).

3.3.38* Maximum Allowable Quantity (MAQ).

For the purposes of this code, the quantity of flammable and combustible liquid permitted in a control area.

3.3.39 Occupancy.

The purpose for which a building or other structure, or part thereof, is used or intended to be used. [***101,*** 2015]

3.3.39.1 Ambulatory Health Care Occupancy.

[A building or portion thereof] used to provide services or treatment simultaneously to four or more patients that provides, on an outpatient basis, one or more of the following: (1) treatment for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others; (2) anesthesia that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others; (3) emergency or urgent care for patients who, due to the nature of their injury or illness, are incapable of taking action for self-preservation under emergency conditions without the assistance of others. [***101,*** 2015]

3.3.39.2 Assembly Occupancy.

An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load. [***101,*** 2015]

3.3.39.3 Business Occupancy.

An occupancy used for the transaction of business other than mercantile. [***101,*** 2015]

3.3.39.4 Day-Care Occupancy.

An occupancy in which four or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than 24 hours per day. [***101,*** 2015]

3.3.39.5 Detention and Correctional Occupancy.

An occupancy used to house [four] or more persons under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control. [***101,*** 2015]

3.3.39.6 Educational Occupancy.

An occupancy used for educational purposes through the twelfth grade by six or more persons for 4 or more hours per day or more than 12 hours per week. [***101,*** 2015]

3.3.39.7 Health Care Occupancy.

An occupancy used to provide medical or other treatment or care simultaneously to four or more patients on an inpatient basis, where such patients are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupants' control. [***101,*** 2015]

3.3.39.8 Industrial Occupancy.

An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted. [***101,*** 2015]

3.3.39.9 Mercantile Occupancy.

An occupancy used for the display and sale of merchandise. [***101,*** 2015]

3.3.39.10 Residential Occupancy.

An occupancy that provides sleeping accommodations for purposes other than health care or detention and correctional. [***101,*** 2015]

3.3.39.11 Residential Board and Care Occupancy.

An occupancy used for lodging and boarding of four or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services. [***101,*** 2015]

3.3.39.12 Storage Occupancy.

An occupancy used primarily for the storage or sheltering of goods, merchandise, products, or vehicles. [***101,*** 2015]

3.3.40 Occupancy Classification.

The system of defining the predominant operating characteristic of a portion of a building or plant for purposes of applying relevant sections of this code.

3.3.40.1 Outdoor Occupancy Classification.

The system of defining the predominant operating characteristic of an outdoor operation that is not enclosed in a building or shelter for purposes of applying relevant sections of this code.

3.3.41* Operating Unit (Vessel) or Process Unit (Vessel).

The equipment in which a unit operation or unit process is conducted. *(See also 3.3.53, Unit Operation or Unit Process.)*

3.3.42 Operations.

A general term that includes, but is not limited to, the use, transfer, storage, and processing of liquids.

3.3.43* Pier.

A structure, usually of greater length than width and projecting from the shore into a body of water with direct access from land, that can be either open deck or provided with a superstructure. [**307,** 2011]

3.3.44 Pressure Vessel.

A container or other component designed in accordance with the ASME *Boiler and Pressure Vessel Code* or CSA B51, *Boiler, Pressure Vessel and Pressure Piping Code.* [**52,**2013]

3.3.45* Process or Processing.

An integrated sequence of operations.

3.3.46 Protection for Exposures.

Fire protection for structures on property adjacent to liquid storage that is provided by (1) a public fire department or (2) a private fire brigade maintained on the property adjacent to the liquid storage, either of which is capable of providing cooling water streams to protect the property adjacent to the liquid storage.

3.3.47 Refinery.

A plant in which flammable or combustible liquids are produced on a commercial scale from crude petroleum, natural gasoline, or other hydrocarbon sources.

3.3.48* Safety Can.

A listed container of not more than 5.3 gal (20 L) capacity having a screen or strainer in each fill and pour opening and having a spring-closing lid and spout cover designed to safely relieve internal pressure when exposed to fire.

3.3.49 Solvent Distillation Unit.

An appliance that distills a flammable or combustible liquid to remove contaminants and recover the liquid.

3.3.50 Staging.

Temporary storage in a process area of liquids in containers, intermediate bulk containers, and portable tanks.

3.3.51 Tank.

3.3.51.1 Aboveground Tank.

A storage tank that is installed above grade, at grade, or below grade without backfill.

3.3.51.2* Atmospheric Tank.

A storage tank that has been designed to operate at pressures from atmospheric through a gauge pressure of 1.0 psi (6.9 kPa) (i.e., 760 mm Hg through 812 mm Hg) measured at the top of the tank.

3.3.51.3 Low-Pressure Tank.

For the purposes of this code, a storage tank designed to withstand an internal pressure above a gauge pressure of 1.0 psi (6.9 kPa) but not more than a gauge pressure of 15 psi (103 kPa) measured at the top of the tank.

3.3.51.4 Portable Tank.

Any vessel having a liquid capacity over 60 gal (230 L) intended for storing liquids and not intended for fixed installation.

3.3.51.4.1* Nonmetallic Portable Tank.

A portable tank, as herein defined, constructed of plastic, fiber, or a material other than metal.

3.3.51.5 Secondary Containment Tank.

A tank that has an inner and outer wall with an interstitial space (annulus) between the walls and that has a means for monitoring the interstitial space for a leak.

3.3.51.6 Storage Tank.

Any vessel having a liquid capacity that exceeds 60 gal (230 L), is intended for fixed installation, and is not used for processing.

3.3.52 Terminal.

That portion of a property where liquids are received by tank vessel, pipelines, tank car, or tank vehicle and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle, portable tank, or container.

3.3.53 Unit Operation or Unit Process.

A segment of a physical or chemical process that might or might not be integrated with other segments to constitute the manufacturing sequence.

3.3.54 Vapor Pressure.

The pressure, measured in pounds per square inch, absolute (psia), exerted by a liquid, as determined by ASTM D 323, *Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)*.

3.3.55 Vapor Processing Equipment.

Those components of a vapor processing system designed to process vapors or liquids captured during transfer or filling operations.

3.3.56* Vapor Processing System.

A system designed to capture and process vapors displaced during transfer or filling operations by use of mechanical or chemical means.

3.3.57* Vapor Recovery System.

A system designed to capture and retain, without processing, vapors displaced during transfer or filling operations.

3.3.58 Vaportight.

The ability of an enclosure or device to prevent the unintended release of flammable vapor at normal operating temperature and pressure ranges.

3.3.59 Vault.

An enclosure consisting of four walls, a floor, and a top for the purpose of containing a liquid storage tank and not intended to be occupied by personnel other than for inspection, repair, or maintenance of the vault, the storage tank, or related equipment.

3.3.60 Vent.

3.3.60.1 Emergency Relief Vent.

An opening, construction method, or device that will automatically relieve excessive internal pressure due to an exposure fire.

3.3.60.2 Normal Vent.

An opening, construction method, or device that allows the relief of excessive internal pressure or vacuum during normal storage and operations.

3.3.61* Ventilation.

For the purpose of this code, movement of air that is provided for the prevention of fire and explosion.

3.3.62* Warehouse.

3.3.62.1 General-Purpose Warehouse.

A separate, detached building or portion of a building used only for warehousing-type operations and classified as a “storage — low hazard” or “storage — ordinary hazard” occupancy by the building code and by NFPA *101*, *Life Safety Code*.

3.3.62.2 Liquid Warehouse.

A separate, detached building or an attached building that is used for warehousing-type operations for liquids and whose exterior wall comprises at least 25 percent of the building perimeter.

3.3.63* Wharf.

A structure at the shoreline that has a platform built along and parallel to a body of water with either an open deck or a superstructure. [**307,** 2011]

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Committee Statement

Committee Statement: It is suggested that definitions be created or revised for the following terms:

- Container (T/C on Storage and Warehousing)

- Portable Tank (T/C on Storage and Warehousing)

- Rack Section (T/C on Storage and Warehousing)

- Liquids in Process (T/C on Operations)

- Staged Liquids (T/C on Operations)

The designated technical committees are soliciting any comments or suggestions.

Response Message:

Committee Input No. 401-NFPA 30-2015 [Section No. 7.3.3]

7.3.3*

Table 7.3.3 shall be used to delineate and classify areas for the purpose of installation of electrical utilization equipment and wiring under normal operating conditions.

Table 7.3.3 Electrical Area Classifications

Location	*NEC* Class I		Extent of Classified Area
	Division	Zone	
Indoor equipment installed in accordance with Section 7.3 where flammable vapor–air mixtures can exist under normal operation	1	0	The entire area associated with such equipment where flammable gases or vapors are present continuously or for long periods of time
	1	1	Area within 5 ft of any edge of such equipment, extending in all directions
	2	2	Area between 5 ft and 8 ft of any edge of such equipment, extending in all directions; also, space up to 3 ft above floor or grade level within 5 ft to 25 ft horizontally from any edge of such equipment[1]
Outdoor equipment of the type covered in Section 7.3 where flammable vapor–air mixtures can exist under normal operation	1	0	The entire area associated with such equipment where flammable gases or vapors are present continuously or for long periods of time
	1	1	Area within 3 ft of any edge of such equipment, extending in all directions
	2	2	Area between 3 ft and 8 ft of any edge of such equipment, extending in all directions; also, space up to 3 ft above floor or grade level within 3 ft to 10 ft horizontally from any edge of such equipment
Tank storage installations inside buildings	1	1	All equipment located below grade level
	2	2	Any equipment located at or above grade level
Tank — aboveground, fixed roof	1	0	Inside fixed-roof tank
	1	1	Area inside dike where dike height is greater than the distance from the tank to the dike for more than 50 percent of the tank circumference
	2	2	Within 10 ft from shell, ends, or roof of tank; also, area inside dike up to top of dike wall
	1	0	Area inside of vent piping or vent opening
	1	1	Within 5 ft of open end of vent, extending in all directions
	2	2	Area between 5 ft and 10 ft from open end of vent, extending in all directions
Tank — aboveground, floating roof			
With fixed outer roof	1	0	Area between the floating and fixed-roof sections and within the shell
With no fixed outer roof	1	1	Area above the floating roof and within the shell
Tank vault — interior	1	1	Entire interior volume, if Class I liquids are stored within
Underground tank fill opening	1	1	Any pit, box, or space below grade level, if any part is within a Division 1 or 2 or Zone 1 or 2 classified location
	2	2	Up to 18 in. above grade level within a horizontal radius of 10 ft from a loose fill connection and within a horizontal radius of 5 ft from a tight fill connection
Vent — discharging upward	1	0	Area inside of vent piping or opening
	1	1	Within 3 ft of open end of vent, extending in all directions
	2	2	Area between 3 ft and 5 ft of open end of vent, extending in all directions
Drum and container filling — outdoors or indoors	1	0	Area inside the drum or container
	1	1	Within 3 ft of vent and fill openings, extending in all directions

Location	*NEC* Class I Division	*NEC* Class I Zone	Extent of Classified Area
	2	2	Area between 3 ft and 5 ft from vent or fill opening, extending in all directions; also, up to 18 in. above floor or grade level within a horizontal radius of 10 ft from vent or fill opening
Pumps, bleeders, withdrawal fittings			
Indoor	2	2	Within 5 ft of any edge of such devices, extending in all directions; also, up to 3 ft above floor or grade level within 25 ft horizontally from any edge of such devices
Outdoor	2	2	Within 3 ft of any edge of such devices, extending in all directions; also, up to 18 in. above grade level within 10 ft horizontally from any edge of such devices
Pits and sumps			
Without mechanical ventilation	1	1	Entire area within a pit or sump if any part is within a Division 1 or 2 or Zone 1 or 2 classified location
With adequate mechanical ventilation	2	2	Entire area within a pit or sump if any part is within a Division 1 or 2 or Zone 1 or 2 classified location
Containing valves, fittings, or piping, and not within a Division 1 or 2 or Zone 1 or 2 classified location	2	2	Entire pit or sump
Drainage ditches, separators, impounding basins			
Outdoor	2	2	Area up to 18 in. above ditch, separator, or basin; also, area up to 18 in. above grade within 15 ft horizontally from any edge
Indoor			Same as pits and sumps
Tank vehicle and tank car[2]			
Loading through open dome	1	0	Area inside of the tank
	1	1	Within 3 ft of edge of dome, extending in all directions
	2	2	Area between 3 ft and 15 ft from edge of dome, extending in all directions
Loading through bottom connections with atmospheric venting	1	0	Area inside of the tank
	1	1	Within 3 ft of point of venting to atmosphere, extending in all directions
	2	2	Area between 3 ft and 15 ft from point of venting to atmosphere, extending in all directions; also, up to 18 in. above grade within a horizontal radius of 10 ft from point of loading connection
Loading through closed dome with atmospheric venting	1	1	Within 3 ft of open end of vent, extending in all directions
	2	2	Area between 3 ft and 15 ft from open end of vent, extending in all directions; also, within 3 ft of edge of dome, extending in all directions
Loading through closed dome with vapor control	2	2	Within 3 ft of point of connection of both fill and vapor lines, extending in all directions
Bottom loading with vapor control or any bottom unloading	2	2	Within 3 ft of point of connections, extending in all directions; also, up to 18 in. above grade within a horizontal radius of 10 ft from point of connections
Storage and repair garage for tank vehicles	1	1	All pits or spaces below floor level
	2	2	Area up to 18 in. above floor or grade level for entire storage or repair garage
Garages for other than tank vehicles	Ordinary		If there is any opening to these rooms within the extent of an outdoor classified location, the entire room shall be classified the same as the area classification at the point of

Location	*NEC* Class I Division	Zone	Extent of Classified Area
			the opening
Outdoor drum storage	Ordinary		
Inside rooms or storage lockers used for the storage of Class I liquids	2	2	Entire room or locker
Indoor warehousing where there is no flammable liquid transfer	Ordinary		If there is any opening to these rooms within the extent of an indoor classified location, the classified location shall extend through the opening to the same extent as if the wall, curb, or partition did not exist
Office and rest rooms	Ordinary		If there is any opening to these rooms within the extent of an indoor classified location, the room shall be classified the same as if the wall, curb, or partition did not exist
Piers and wharves			See Figure 29.3.22.

For SI units, 1 in. = 25 mm; 1 ft = 0.3 m.

[1]The release of Class I liquids can generate vapors to the extent that the entire building, and possibly an area surrounding it, should be considered a Class I, Division 2, or Zone 2 location.

[2]When classifying extent of area, consideration should be given to the fact that tank cars or tank vehicles can be spotted at varying points. Therefore, the extremities of the loading or unloading positions should be used.

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Committee Statement

Committee Statement: The committee may initiate a task group jointly with the technical committee on electrical equipment in chemical atmospheres (NFPA 497) to consider appropriate changes to eliminate any conflicts between chapter 7 of NFPA 30 and NFPA 497.

Response Message: