Seattle Fire Department
Permit Conditions

801-AG

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

NOTICE

This permit shall be kept on the premises designated herein at all times and shall be readily available for inspection by the fire code official. (SFC 105.3.5)

The fire code official shall be immediately notified by calling 9-1-1 when an unauthorized discharge of a hazardous material becomes reportable under state, federal, or local regulations, or when any release inside or outside a building could present a fire or life safety hazard. (SFC 5003.3.1)

GENERAL PROVISIONS:

1. Flammable and combustible liquids on site shall not exceed, or differ from, the maximum quantities, types and locations specified on the face of this permit. (SFC 105.3)

2. Safety data sheets shall be readily available on the premises for flammable and combustible liquids regulated by this permit. (SFC 5003.4)

3. Containers, cylinders and tanks shall be of an approved type and shall be designed in accordance with nationally recognized standards. (SFC 5003.2.1, 5704.3.1)

4. Equipment, machinery, and required detection and alarm systems associated with flammable and combustible liquids shall be listed or approved and shall be maintained in an operable condition. (SFC 5003.2.3)

5. Electrical wiring and equipment shall be installed and maintained in accordance with SFC Section 603 and the Electrical Code. (SFC 5703.1)

6. Where the following systems are present, they shall be tested not less than annually or in accordance with an approved schedule. Written records of the tests conducted shall be available to the fire code official at all times or such records as the fire code official designates shall be filed with the fire code official.
    1. Limit controls systems for liquid level, temperature and pressure.
    2. Emergency alarm and supervision.
    3. Monitoring devices and alarm.

    EXCEPTIONS:

    1. Where written documentation is provided by the system manufacturer documenting that testing will damage the device or system.
    2. Periodic testing is not required for equipment, devices and systems that fail in a fail-safe manner.
    3. Periodic testing is not required for equipment, devices and systems that self-diagnose and report trouble.
    4. Periodic testing is not required if system activation occurs during the required test cycle for the components activated during the test cycle.
    5. If approved maintenance is performed per SFC Section 5003.2.6 not less than annually. (SFC 5003.2.9)

Seattle Fire Department
Permit Conditions

801-AG

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

7. The storage of empty containers and tanks previously used for the storage of flammable or combustible liquids, unless free from residual material and explosive vapors, shall be stored as required for filled containers and portable tanks. (SFC 5704.3.3.4)

8. Portable tanks and containers, when emptied, shall have the covers or plugs immediately replaced in openings. (SFC 5704.3.3.4)

9. Defective packages, containers or tanks shall be removed from service, repaired in accordance with standards or disposed of in an approved manner. (SFC 5003.2.6.2)

10. Tank cars and tank vehicles shall not be used as storage tanks. (SFC 5704.2.2)

11. In all occupancies, quantities of flammable and combustible liquids in excess of 10 gallons used for maintenance purposes, demonstration, treatment, and laboratory work, and the operation of equipment shall be stored in approved flammable liquid storage cabinets. (SFC 5704.3.4.4)

12. The combined total quantity of flammable and combustible liquids inside an approved flammable liquid cabinet shall not exceed 120 gallons. (SFC 5704.3.2.2)

13. Atmospheric tanks having a capacity greater than 500 gallons and which contain flammable or combustible liquids shall be equipped with a liquid-level limit control or other approved means to prevent overfilling of the tank. (SFC 5003.2.7)

14. Machinery and equipment utilizing flammable or combustible liquids shall be braced and anchored in accordance with the seismic design requirements of the Seattle Building Code. (SFC 5003.2.8)

15. Provisions shall be made for controlling and mitigating unauthorized discharges of flammable and combustible liquids. (SFC 5003.3.1.2)

16. Flammable and combustible liquids shall not be released into a sewer, storm drain, ditch, drainage canal, creek, stream, river, lake, or tidal waterway, or upon the ground, sidewalk, street, highway, or into the atmosphere.

    EXCEPTIONS:

    1. Releases or emissions allowed by federal, state or local regulations or permits.
    2. Release of pesticides when in accordance with registered label directions.
    3. Release of fertilizer and soil amendments in accordance with manufacturer's specifications. (SFC 5003.3)

17. The person, firm, or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharges, whether sudden or gradual, at no cost to the jurisdiction. (SFC 5003.3.1.4)

18. Visible hazard identification signs as specified by NFPA 704 shall be placed on stationary containers and aboveground tanks and at entrances to locations where flammable and combustible liquids are stored, dispensed used or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official. (SFC 5003.5, 5703.5.2)

19. Piping containing flammable liquids shall be identified in accordance with ASME A13.1. (SFC 5703.5.2)

Seattle Fire Department
Permit Conditions

801-AG

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

20. Each tank shall bear a permanent nameplate or marking indicating the standard used as the basis of design. (SFC 5704.2.7)

21. Tanks more than 100 gallons in capacity shall bear a label and placard identifying the materials therein. Placards shall be in accordance with NFPA 704.
    EXCEPTIONS:
    1. Tanks of 300-gallon capacity or less located on private property and used for heating and cooking fuels in single family dwellings.
    2. Tanks located underground. (SFC 5704.2.3.2)

22. Individual containers, cartons or packages shall be conspicuously marked or labeled in an approved manner and in accordance with nationally recognized standards. (SFC 5703.5.3)

23. Smoking and open flames shall be prohibited as follows, and approved “NO SMOKING” signs shall be posted as follows:
    1. In rooms or areas where flammable and combustible liquids are stored, or dispensed or used in open systems, in amounts requiring a permit.
    2. Within 25 feet of outdoor storage, dispensing or open use areas. (SFC 5003.7.1, 5704.2.4)

24. Warning signs shall be of a durable material, shall have white lettering on a red background and shall read: DANGER - FLAMMABLE LIQUIDS. Letters shall not be less than 3 inches in height and 0.5 inch in stroke. (SFC 5703.5.1)

25. Open flames and high temperature devices shall not be used in a manner that creates a hazardous condition. (SFC 5003.7.2)

26. Individuals responsible for the operation of areas in which flammable and combustible liquids are stored, dispensed, handled, or used shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak, or spill. (SFC 5003.9.1)

27. Responsible persons shall be designated and trained to be liaison personnel to the fire department. These persons shall aid the fire department in preplanning emergency responses and identifying the locations where flammable and combustible liquids are located, and shall have access to the Material Safety Data Sheets and be knowledgeable in the site's emergency response procedures. (SFC 5003.9.1.1)

28. Flammable and combustible liquid storage, dispensing, use and handling areas shall be secured against unauthorized access and safeguarded with such protected facilities as public safety requires. (SFC 5003.9.2)

29. A minimum rated 40BC fire extinguisher shall be located within 30 feet of all flammable and combustible liquid storage and use. (SFC 906, 5704.3.3.1)

30. Flammable and combustible liquids and other combustible materials shall not be stored near or be allowed to obstruct physically the route of egress. (SFC 5704.3.3.3)

31. Flammable and combustible liquids and other combustible materials shall not be stored in exits or exit enclosures or under exit stairways unless such stairways are in accordance with SFC 1011.7. (SFC 315.3.2)

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

32. Shelf storage of flammable and combustible liquids shall be orderly. (SFC 5704.3.3.5.3)

33. Guard posts or other approved means shall be provided to protect storage tanks and connected piping, valves, and fittings; dispensing areas; and use areas subject to vehicular damage. Where guard posts are installed they shall comply with all of the following:
    1. Constructed of steel not less than 4 inches in diameter and concrete filled.
    2. Spaced not more than 4 feet between posts on center.
    3. Set not less than 3 feet deep in a concrete footing of not less than 15-inch diameter.
    4. Set with the top of the posts not less than 3 feet aboveground.
    5. Located not less than 3 feet from the protected object. (SFC 5003.9.3, 312)

34. When processes or conditions exist where a flammable mixture could be ignited by static electricity, means shall be provided to prevent the accumulation of a static charge. (SFC 5003.9.5)

35. Incompatible materials in storage and storage of materials that are incompatible with materials being used shall be separated when the stored materials are in containers having a capacity of more than 5 pounds or ½ gallon.
    Separation shall be accomplished by one of the following methods:
    1. Segregating incompatible materials in storage by a distance of not less than 20 feet,
    2. Isolating incompatible materials in storage by a noncombustible partition extending not less than 18 inches above and to the sides of the stored material,
    3. Storing liquid and solid materials in approved hazardous materials or flammable liquid storage cabinets

    Materials that are incompatible shall not be stored within the same cabinet or exhausted enclosure. (SFC 5003.9.8, 5704.2.6)

36. Shelving shall be of substantial construction and shall be braced or anchored in accordance with the seismic design requirements of the Seattle Building Code and shall be treated, coated or constructed of materials that are compatible with the materials stored. (SFC 5704.3.3.5)

37. Shelves shall be of sufficient depth and provided with a lip or guard to prevent individual containers from being displaced.
    EXCEPTION:
    1. Storage in flammable liquid storage cabinets or laboratory furniture specifically designed for such use. (SFC 5704.3.3.5.2)

38. Where storage of flammable and combustible liquids on racks is approved, a minimum 4-foot-wide aisle shall be provided between adjacent rack sections and any adjacent storage of liquids. Main aisles shall be a minimum of 8 feet wide. (SFC 5704.3.3.6)

39. Containers in piles shall be stacked in such a manner as to provide stability and to prevent excessive stress on container walls. Portable tanks stored more than one tier high shall be designed to nest securely, without dunnage. (SFC 5704.3.3.10)

Seattle Fire Department
Permit Conditions

801-AG

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

40. Containers of flammable and combustible liquids having a hazard ranking of 3 or 4 in accordance with NFPA 704 and transported within corridors or exit enclosures, shall be on a cart or truck in accordance with SFC 5003.10.3.

    EXCEPTIONS:

    1. Two hazardous materials containers which are hand carried in acceptable safety containers.
    2. Not more than 4 drums not exceeding 55 gallons each, which are transported by suitable drum truck. (SFC 5003.10.2)

41. Carts and trucks used to transport hazardous materials shall be designed to provide a stable base for the commodities transported and shall have a means of restraining containers to prevent accidental dislodgment. (SFC 5003.10.3.1)

42. Storage areas shall be kept free of weeds, debris and common combustible materials not necessary to the storage. (SFC 5704.2.6)

STORAGE IN CONTROL AREAS:

Maximum Allowable Quantities per Control Area

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE[b]	USE-CLOSED SYSTEMS[b]	USE-OPEN SYSTEMS[b]
			Liquid gallons	Liquid gallons	Liquid gallons
Combustible liquid[c, i]	II	H-2 or H-3	120[d, e]	120[d]	30[d]
	IIIA	H-2 or H-3	330[d, e]	330[d]	80[d]
	IIIB	NA	13,200[e, f]	13,200[f]	3,300[f]
Flammable liquid[c]	IA	H-2 or H-3	30[d, e]	30[d]	10d
	IB and IC		120[d, e]	120[d]	30d
Flammable liquid, combination (IA, IB, IC)	NA	H-2 or H-3	120[d, e, h]	120[d, h]	30[d, h]

NA = Not Applicable

a. For use of control areas, see Section 5003.8.3.
b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
c. The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons. In retail and whole- sale sales occupancies, the quantities of medicines, foodstuff or consumer products and cosmetics containing not more than 50 percent by volume of water-miscible liquids with the remainder of the solutions not being flammable shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
d. Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e applies, the increase for both notes shall be applied accumulatively.

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

e. Maximum allowable quantities shall be increased 100 percent where stored in approved storage cabinets, day boxes, gas cabinets, gas rooms, exhausted enclosures or in listed safety cans in accordance with Section 5003.9.10. Where Note d applies, the increase for both notes shall be applied accumulatively.
f. Quantities shall not be limited in a building equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.
g. Allowed only in buildings equipped throughout with an approved automatic sprinkler system.
h. Containing not more than the maximum allowable quantity per control area of Class IA, Class IB or Class IC flammable liquids.
i. The maximum allowable quantity shall not apply to fuel oil storage complying with Section 605.4.2.
j. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.

43. Class I liquids shall be allowed to be stored in basements in amounts not exceeding the maximum allowable quantity per control area for use-open systems in table 5003.1.1(1) provided that automatic suppression and other fire protection systems are provided in accordance with Chapter 9 (SFC 5704.3.5.1)

44. Class II and III-A combustible liquids are allowed to be stored in basements that are protected throughout by an approved automatic fire suppression system. (SFC 5704.3.5.1)

45. Containers having less than 30-gallon capacity which contain Class I or Class II liquids shall not be stacked more than 3 feet or two containers high, whichever is greater, unless stacked on fixed shelving or otherwise satisfactorily secured. (SFC 5704.3.5.2)

46. Containers of Class I or Class II liquids having a capacity of 30 gallons or more shall not be stored more than one container high and shall be stored in an upright position. (SFC 5704.3.5.2)

47. Piles of containers or portable tanks shall not be stored closer than 3 feet to the nearest beam, chord, girder or other obstruction, and shall be 3 feet below sprinkler deflectors or discharge orifices of water spray or other overhead fire protection system (SFC 5704.3.5.3)

48. In areas that are inaccessible to the public, Class I, II and III-A liquids shall not be stored in the same pile or rack section as ordinary combustible commodities unless such materials are packaged together as kits. (SFC 5704.3.5.4)

FLAMMABLE AND COMBUSTIBLE LIQUIDS IN GROUP M (MERCANTILE) OCCUPANCIES:

49. Containers for Class I liquids shall be metal.
    EXCEPTION: In sprinklered buildings up to 120 gallons of water-miscible Class I-B and Class I-C liquids is allowed in nonmetallic containers, each having a capacity of 16-oz or less. (SFC 5704.3.6.1)

50. Containers for Class I liquids shall not exceed a capacity of 5 gallons.
    EXCEPTION: Metal containers not exceeding 55 gallons are permitted to store up to 240 gallons of Class I-B and I-C flammable liquids in a control area provided the building is equipped throughout with an approved automatic sprinkler system. The containers shall be provided with plastic caps without cap seals and shall be stored upright. Containers shall not be stacked or stored in racks and shall not be located in areas open to the public. (SFC 5704.3.6.2)

51. Storage on pallets or racks or in piles shall not exceed 4 feet 6 inches in height, and ceilings shall not exceed 18 feet in height unless protected in accordance with Seattle Fire Code Section 5704.3.6.3. (SFC 5704.3.6.3)

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

52. Table 5704.3.6.3(1) of the SFC shall be used for the maximum storage height requirements. (SFC 5704.3.6.3)

TABLE 5704.3.6.3(1)
MAXIMUM STORAGE HEIGHT IN CONTROL AREA

TYPE OF LIQUID	NONSPRINKLERED AREA (feet)	SPRINKLERED AREA[a] (feet)	SPRINKLERED WITH IN-RACK PROTECTION[a,b] (feet)
Flammable liquids:			
Class IA	4	4	4
Class IB	4	8	12
Class IC	4	8	12
Combustible liquids:			
Class II	6	8	12
Class IIIA	8	12	16
Class IIIB	8	12	20

For SI: 1 foot = 304.8 mm.

a. In buildings protected by an automatic sprinkler system, the storage height for containers and portable tanks shall not exceed the maximum storage height permitted for the fire protection scheme set forth in NFPA 30 or the maximum storage height demonstrated in a full-scale fire test, whichever is greater. NFPA 30 criteria and fire test results for metallic containers and portable tanks shall not be applied to nonmetallic containers and portable tanks.

b. In-rack protection shall be in accordance with Table 5704.3.6.3(5), 5704.3.6.3(6) or 5704.3.6.3(7).

53. Storage on shelves shall not exceed 6 feet in height, and shelving shall be metal. (SFC 5704.3.6.3)

54. Combustible commodities shall not be stored above flammable and combustible liquids. (SFC 5704.3.6.3)

55. All cans, containers and vessels containing flammable liquids or flammable liquid compounds or mixtures offered for sale shall be provided with a warning indicator, painted or printed on the container and stating that the liquid is flammable, and shall be kept away from heat and an open flame. (SFC 5704.3.6.4)

FLAMMABLE AND COMBUSTIBLE LIQUIDS IN EXCESS OF THE MAXIMUM ALLOWABLE QUANTITY IN CONTROL AREAS:

56. The quantity and storage arrangement in liquid storage rooms shall be in accordance with Tables 5704.3.6.3(2) and 5704.3.6.3(3). (SFC 5704.3.7.2)

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

TABLE 5704.3.6.3(2)
STORAGE ARRANGEMENTS FOR PALLETIZED OR SOLID-PILE STORAGE IN LIQUID STORAGE ROOMS AND WAREHOUSES

CLASS	STORAGE LEVEL	MAXIMUM STORAGE HEIGHT			MAXIMUM QUANTITY PER PILE (gallons)		MAXIMUM QUANTITY PER ROOM[a] (gallons)	
		Drums	Containers[b] (feet)	Portable tanks[b] (feet)	Containers	Portable tanks	Containers	Portable tanks
IA	Ground floor Upper floors Basements	1 1 0	5 5 Not Allowed	Not Allowed Not Allowed Not Allowed	3,000 2,000 Not Allowed	Not Allowed Not Allowed Not Allowed	12,000 8,000 Not Allowed	Not Allowed Not Allowed Not Allowed
IB	Ground floor Upper floors Basements	1 1 0	6.5 6.5 Not Allowed	7 7 Not Allowed	5,000 3,000 Not Allowed	20,000 10,000 Not Allowed	15,000 12,000 Not Allowed	40,000 20,000 Not Allowed
IC	Ground floor[d] Upper floors Basements	1 1 0	6.5[c] 6.5[c] Not Allowed	7 7 Not Allowed	5,000 3,000 Not Allowed	20,000 10,000 Not Allowed	15,000 12,000 Not Allowed	40,000 20,000 Not Allowed
II	Ground floor[d] Upper floors Basements	3 3 1	10 10 5	14 14 7	10,000 10,000 7,500	40,000 40,000 20,000	25,000 25,000 7,500	80,000 80,000 20,000
III	Ground floor Upper floors Basements	5 5 3	20 20 10	14 14 7	15,000 15,000 10,000	60,000 60,000 20,000	50,000 50,000 25,000	100,000 100,000 40,000

For SI: 1 foot = 304.8 mm, 1 gallon = 3.785 L.

a. See Section 5704.3.8.1 for unlimited quantities in liquid storage warehouses.

b. In buildings protected by an automatic sprinkler system, the storage height for containers and portable tanks shall not exceed the maximum storage height permitted for the fire protection scheme set forth in NFPA 30 or the maximum storage height demonstrated in a full-scale fire test, whichever is greater. NFPA 30 criteria and fire test results for metallic containers and portable tanks shall not be applied to nonmetallic containers and portable tanks.

c. These height limitations are allowed to be increased to 10 feet for containers having a capacity of 5 gallons or less.

d. For palletized storage of unsaturated polyester resins (UPR) in relieving-style metal containers with 50 percent or less by weight Class IC or II liquid and no Class IA or IB liquid, height and pile quantity limits shall be permitted to be 10 feet and 15,000 gallons, respectively, provided that such storage is protected by sprinklers in accordance with NFPA 30 and that the UPR storage area is not located in the same containment area or drainage path for other Class I or II liquids.

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

TABLE 5704.3.6.3(3)
STORAGE ARRANGEMENTS FOR RACK STORAGE IN LIQUID STORAGE ROOMS AND WAREHOUSES

CLASS	TYPE RACK	STORAGE LEVEL	MAXIMUM STORAGE HEIGHT[b] (feet)	MAXIMUM QUANTITY PER ROOM[a] (gallons)
			Containers	Containers
IA	Double row or Single row	Ground floor Upper floors Basements	25 15 Not Allowed	7,500 4,500 Not Allowed
IB IC	Double row or Single row	Ground floor Upper floors Basements	25 15 Not Allowed	15,000 9,000 Not Allowed
II	Double row or Single row	Ground floor Upper floors Basements	25 25 15	24,000 24,000 9,000
III	Multirow Double row Single row	Ground floor Upper floors Basements	40 20 20	48,000 48,000 24,000

For SI: 1 foot = 304.8 mm, 1 gallon = 3.785 L.

a. See Section 5704.3.8.1 for unlimited quantities in liquid storage warehouses.

b. In buildings protected by an automatic sprinkler system, the storage height for containers and portable tanks shall not exceed the maximum storage height permitted for the fire protection scheme set forth in NFPA 30 or the maximum storage height demonstrated in a full-scale fire test, whichever is greater. NFPA 30 criteria and fire test results for metallic containers and portable tanks shall not be applied to nonmetallic containers and portable tanks.

57. Piles shall be separated from each other by at least 4-foot aisles. Aisles shall be provided so that all containers are 20 feet or less from an aisle. (SFC 5704.3.7.2.2)

OUTDOOR STORAGE OF CONTAINERS AND PORTABLE TANKS:

58. Outdoor storage of liquids in containers and portable tanks shall be in accordance with Table 5704.4.2. (SFC 5704.4.2)

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

TABLE 5704.4.2
OUTDOOR LIQUID STORAGE IN CONTAINERS AND PORTABLE TANKS

CLASS OF LIQUID	CONTAINER STORAGE—MAXIMUM PER PILE		PORTABLE TANK STORAGE—MAXIMUM PER PILE		MINIMUM DISTANCE BETWEEN PILES OR RACKS (feet)	MINIMUM DISTANCE TO LOT LINE OF PROPERTY THAT CAN BE BUILT UPON[c,d] (feet)	MINIMUM DISTANCE TO PUBLIC STREET, PUBLIC ALLEY OR PUBLIC WAY[d] (feet)
	Quantity[a,b] (gallons)	Height (feet)	Quantity[a,b] (gallons)	Height (feet)			
IA	1,100	10	2,200	7	5	50	10
IB	2,200	12	4,400	14	5	50	10
IC	4,400	12	8,800	14	5	50	10
II	8,800	12	17,600	14	5	25	5
III	22,000	18	44,000	14	5	10	5

For SI: 1 foot = 304.8 mm, 1 gallon 3.785 L.

a. For mixed class storage, see Section 5704.4.2.
b. For storage in racks, the quantity limits per pile do not apply, but the rack arrangement shall be limited to not more than 50 feet in length and two rows or 9 feet in depth.
c. If protection by a public fire department or private fire brigade capable of providing cooling water streams is not available, the distance shall be doubled.
d. When the total quantity stored does not exceed 50 percent of the maximum allowed per pile, the distances are allowed to be reduced 50 percent, but not less than 3 feet.

59. The storage area shall be protected against tampering or trespassers by fencing or other approved control measures. (SFC 5704.4.4)

60. The area surrounding an exterior storage area shall be kept free of weeds, debris and other combustible materials not necessary to the storage for a minimum distance of 15 feet. (SFC 5704.4.6)

61. A maximum of 1,100 gallons of liquids is allowed adjacent to a building located on the same premises and under the same management provided that:
    1. The building does not exceed one story in height. Such building shall be of fire-resistive construction with noncombustible exterior surfaces or noncombustible construction, or
    2. The exterior building wall adjacent to the storage area shall have a fire-resistance rating of not less than 2 hours, having no openings to above-grade areas within 10 feet horizontally of such storage and no openings to below-grade areas within 50 feet horizontally of such storage. (SFC 5704.4.2.4)

INDOOR USE, MIXING OR DISPENSING:

62. Class I liquids, or Class II and Class III liquids that are heated up to or above their flash points, shall be transferred by one of the following methods:
    1. From safety cans complying with UL 30.
    2. Through an approved closed piping system.

3. From containers or tanks by an approved pump taking suction through an opening in the top of the container or tank.
4. For Class IB, IC, II and III liquids, from containers or tanks by gravity through an approved self-closing or automatic closing valve when the container or tank and dispensing operations are provided with approved spill control and secondary containment.
5. Approved engineered liquid transfer systems.
   Exception: Liquids in containers not exceeding 5.3-gallon (20 L) capacity. (SFC 5705.2.4)

63. Class IA liquids shall not be dispensed by gravity from tanks. (SFC 5705.2.4(4))

64. Class I liquids, or Class II and Class III liquids heated to or above their flash points shall not be transferred into containers unless the nozzle and containers are electrically interconnected by an approved method. (SFC 5705.2.5)

65. Vessels used for mixing or blending of Class I liquids and Class II or Class III liquids heated up to or above their flash points shall be provided with self-closing, tight fitting, noncombustible lids that will control a fire within such vessel. (SFC 5705.3.1)

66. Vessels containing Class I liquids or liquids handled at or above their flash points shall be electrically connected by bond wires, ground cables, piping or similar means to a static grounding system to maintain equipment at the same electrical potential to prevent sparking. (SFC 5705.3.2)

OUTDOOR USE, MIXING OR DISPENSING:

67. Dispensing activities that exceed the quantities set forth in Table 5705.3.8.2 shall not be conducted within 15 feet of buildings or combustible materials or within 25 feet of building openings, lot lines, public streets, public alleys or public ways. Dispensing activities that exceed the quantities set forth in Table 5705.3.8.2 shall not be conducted within 15 feet of storage of Class I, II or III liquids unless such liquids are stored in tanks that are listed and labeled as 2-hour protected tank assemblies in accordance with UL 2085.
    Exceptions:
    1. The requirements shall not apply to areas where only the following are dispensed: Class III liquids; liquids that are heavier than water; water-miscible liquids; and liquids with viscosities greater than 10,000 centipoise (cp) (10 Pa • s).
    2. Flammable and combustible liquid dispensing in refineries, chemical plants, process facilities, gas and crude oil production facilities and oil-blending and packaging facilities, terminals and bulk plants. (SFC 5705.3.8.2)

Site Address:_____ Inspector:_____

Flammable and Combustible Liquid Storage and Use

TABLE 5705.3.8.2
MAXIMUM ALLOWABLE QUANTITIES FOR DISPENSING OF
FLAMMABLE AND COMBUSTIBLE LIQUIDS IN OUTDOOR CONTROL AREAS[a,b]

CLASS OF LIQUID	QUANTITY (gallons)
Flammable	
Class IA	10
Class IB	15
Class IC	20
Combination Class IA, IB and IC	30[c]
Combustible	
Class II	30
Class IIIA	80
Class IIIB	3,300

For SI: 1 gallon = 3.785 L.

a. For definition of "Outdoor Control Area," see Section 202.

b. The fire code official is authorized to impose special conditions regarding locations, types of containers, dispensing units, fire control measures and other factors involving fire safety.

c. Containing not more than the maximum allowable quantity per control area of each individual class.