## MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

## **BUREAU OF FIRE SERVICES**

#### STORAGE TANK DIVISION

# STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS

(By authority conferred on the Michigan Department of Licensing and Regulatory Affairs by Section 3c of 1941 PA 207, MCL 29.3c, and Executive Reorganization Order Nos. 1998-2, 2012-7, MCL 29.461 and 29.462)

# R 29.5601 Applicability.

Rule 601. These rules apply to the storage and handling of flammable and combustible liquids (FL/CL) as specified in parts 2 to 5 of these rules. Compliance with these rules does not excuse compliance with other applicable state and federal statutes and rules and regulations.

History: 2014 AACS.

# R 29.5602 Flammable and combustible liquids (FL/CL) code; adoption by reference.

Rule 602. The provisions of the National Fire Protection Association (NFPA) pamphlet number 30, 2012 edition, entitled "Flammable and Combustible Liquids (FL/CL) Code," referred to in part 2 of these rules, are adopted by reference. Copies of the adopted NFPA 30 are available for inspection and distribution either at the office of the Bureau of Fire Services, Storage Tank Division, 3101 Technology Boulevard, Lansing, Michigan 48910, or from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts, 02269-9101. The cost of NFPA 30, as of the time of adoption of these rules, is \$52.50 per copy.

History: 2014 AACS.

# R 29.5603 Code for motor fuel dispensing facilities and repair garages; adoption by reference.

Rule 603. The provisions of the National Fire Protection Association (NFPA) pamphlet number 30A, 2012 edition, entitled, "Code for Motor Fuel Dispensing Facilities and Repair Garages," referred to in part 3 of these rules, is adopted by reference. Copies of the adopted NFPA 30A are available for inspection and distribution either at the office of the Bureau of Fire Services, Storage Tank Division, 3101 Technology Boulevard, Lansing, Michigan 48910, or from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts, 02269-9101. The cost of NFPA 30A, as of the time of adoption of these rules, is \$40.50 per copy.

# R 29.5604 Standard for installation of oil-burning equipment; adoption by reference.

Rule 604. The provisions of the National Fire Protection Association (NFPA) pamphlet number 31, 2011 edition, entitled "Standard for the Installation of Oil-Burning Equipment," referred to in part 4 of these rules, are adopted by reference. Copies of the adopted NFPA 31 are available for inspection and distribution either at the office of the Bureau of Fire Services, Storage Tank Division, 3101 Technology Boulevard, Lansing, Michigan 48910, or from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts, 02269-9101. The cost of NFPA 31, as of the time of adoption of these rules, is \$44.50 per copy.

History: 2014 AACS.

# R 29.5605 Standard for installation and use of stationary combustion engines and gas turbines; adoption by reference.

Rule 605. The provisions of the National Fire Protection Association (NFPA) pamphlet number 37, 2010 edition, entitled "Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines," referred to in part 5 of these rules, are adopted by reference. Copies of the adopted NFPA 37 are available for inspection and distribution either at the office of the Bureau of Fire Services, Storage Tank Division, 3101 Technology Boulevard, Lansing, Michigan 48910, or from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts, 02269-9101. The cost of NFPA 37, as of the time of adoption of these rules, is \$40.50 per copy.

History: 2014 AACS.

#### R 29.5651 Scope.

# Rule 651. Sections 1.1.2(10), 1.1.2(11), 1.1.2(12), and 1.1.2(13) are added to the FL/CL code as follows:

- 1.1.2 (10) Any portion of a new or existing stationary fire pump system where the requirements of part 2 conflict with the requirements of NFPA 20.
  - 1.1.2 (11) Storage and handling of Class IIIb liquids.
  - 1.1.2 (12) Flow-through process tanks.
- 1.1.2 (13) Oil and gas operations utilized for the purpose of exploration, development, operation, and abandonment of hydrocarbon resources regulated under part 615, supervisor of wells, of the natural resources and environmental protection act, 1994 PA 451, MCL 324.61501 to 324.61527. Part 615 does not regulate crude petroleum collection tanks that do not receive crude petroleum directly from a wellhead through a pipeline system.

# R 29.5652 Equivalency.

- Rule 652. Sections 1.5.2(a) and 1.5.2(b) are added to the FL/CL code, and section 1.5.3 of the FL/CL code is adopted with changes as follows:
- 1.5.2(a) An owner or operator may apply for a variance to the rules by applying to the bureau with a satisfactory explanation as to why compliance is not possible. The bureau may approve a variance upon finding that the variance is based on the best interests of public health, safety, welfare, and property and the environment.
- 1.5.2(b) A person aggrieved by a final decision of the bureau on a request for variance may appeal to the circuit court within 21 days of the decision.
  - 1.5.3(3) Part 3 of these rules.
  - 1.5.3(4) Part 4 of these rules.
  - 1.5.3(10) Part 5 of these rules.

History: 2014 AACS.

#### R 29.5653 Prohibitions.

Rule 653. Section 1.7 of the FL/CL code is adopted with the following changes and sections 1.7.1, 1.7.2, 1.7.3, 1.7.4, 1.7.4.1, 1.7.4.1.1, 1.7.4.1.2, 1.7.4.1.3, and 1.7.5 are added to the FL/CL code as follows:

- 1.7 Prohibitions.
- 1.7.1 Upon notification by the bureau a person shall not deliver any liquid into a storage tank system under any circumstances that are prohibited by these rules or if a tank is not in compliance with these rules. The notification may include verbal or written communication or an affixed written notification on the storage tank system.
- 1.7.2 A person shall not tamper with, remove, or disregard written notification affixed to the storage tank system.
- 1.7.3 A storage tank system or practice that is not in compliance with these rules is in violation of these rules.
- 1.7.4 An owner or operator shall not continue to use a storage tank system that is causing a release and shall expeditiously empty the system or the component that is causing the release until the system is repaired or replaced, pursuant to these rules.
- 1.7.4.1 A leak from the primary tank into the interstice of a new or existing secondary containment tank is not considered a release requiring that the secondary containment tank be emptied, provided all of the following are met:
- 1.7.4.1.1 The secondary containment tank is repaired, replaced, or permanently closed within 6 months of discovery of the release.
- 1.7.4.1.2 Temporary or permanent liquid tight spill control is provided for the secondary containment tank within 7 days of discovery of the release to the secondary containment tank interstice.
  - 1.7.4.1.3 There is no release from the outer shell of the secondary containment tank.
- 1.7.5 The bureau may order, at the expense of the owner, a tightness test of the storage tank system when there is reason to believe that the integrity of the storage tank system is compromised.

#### R 29.5654 Permits.

Rule 654. Section 1.8 of the FL/CL code is adopted with the following changes and sections 1.8.1, 1.8.2, 1.8.3, 1.8.4, and 1.8.5 are added to the FL/CL code as follows:

- 1.8 Permits.
- 1.8.1 For installations, where individual storage capacity is more than 1,100 gallons (4,180 liters), an owner or owner's designee shall submit an application for plan review to the bureau not less than 30 days before the installation of an aboveground storage tank system. Tanks with storage capacity of 1,100 gallons or less shall comply with these rules but are not required to submit an application for plan review and are not required to be certified.
- 1.8.2 The installation application shall include a plot map that shows all of the following information:
  - (a) The locations of buildings, public roadways, railroad mainlines, and power lines.
  - (b) Storm sewers, sanitary sewers, manholes, and catch basins.
  - (c) The proposed locations of tanks and buildings.
  - (d) The location of property lines.
- (e) The location of existing tanks, aboveground and underground, within 50 feet (15 meters) of the installation.
  - (f) The material of construction, the dimension, and the capacity of each tank.
  - (g) The class of liquid stored.
  - (h) The type of venting and pressure relief.
  - (i) The method of spill control provided.
- 1.8.3 The bureau shall issue a plan review report within 30 days of the receipt. If the report is not issued within 30 days, the installation may be constructed according to the submitted plans and comply with these rules.
- 1.8.4 Upon completion of the installation, the owner or designee shall notify the bureau not fewer than 7 calendar days before the installation is placed in service. The bureau shall inspect the installation following the receipt of notification and shall certify the installation if the requirements of these rules have been met. If the inspection is not made within 7 calendar days of receipt of notification, the installation may be placed in service and a notarized affidavit shall be submitted to the bureau attesting to the fact that the installation complies with the plans submitted and applicable rules.
- 1.8.5 Upon request, all plans and specifications that are submitted to the bureau for review shall be returned after the bureau has certified the installation or within 30 working days after notification to the authority having jurisdiction of the completion of the installation. Plans and specifications may be marked "confidential do not copy" when they are submitted.

History: 2014 AACS.

# R 29.5655 Referenced publications.

Rule 655. NFPA publications. Section 2.2 is adopted with the following addition:

NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, 2013 edition.

# R 29.5656 STI publications.

Rule 656. Section 2.3.8 of the FL/CL code is adopted with the following changes:

2.3.8 STI Publications. Steel Tank Institute, Division of STI/SPFA, 944 Donata Court, Lake Zurich, IL 60047.

STI SP001, Standard for the Inspection of Aboveground Storage Tanks, 2011.

History: 2014 AACS.

#### R 29.5657 Definitions.

Rule 657. General. Sections 3.2.1 and 3.2.2 of the FL/CL code are adopted with the following changes and sections 3.1.1, 3.2.2(a), 3.3.21.1, 3.3.64, 3.3.65, and 3.3.66 are added to the FL/CL code:

3.1.1 Definitions in chapter 3 apply to existing and new storage tank installations.

History: 2014 AACS.

## R 29.5658 NFPA official definitions.

Rule 658. Sections 3.2.1 and 3.2.2 of the FL/CL code are adopted with the following changes and section 3.2.2(a) is added to the FL/CL code:

- 3.2.1 "Approved" means acceptable to the bureau.
- 3.2.2 "Authority having jurisdiction (AHJ)" means the bureau of fire services.
- 3.2.2(a) "Bureau" means bureau of fire services.

History: 2014 AACS.

## R 29.5659 General definitions.

Rule 659. Sections 3.3.21.1, 3.3.64, 3.3.65, and 3.3.66 are added to the FL/CL code:

- 3.3.21 "Flash point" means the minimum temperature of a liquid at which sufficient vapor is given off to form an ignitable 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.
- 3.3.21.1 "Flow-through process tank" means a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process and the tank is utilized to carry out or control the heating, cooling, mixing, blending, separating, metering, or chemical action of materials. The processing is done on a regular basis and it is the primary function of the tank. A flow-through process tank does not include a tank that is used for the storage of materials before its introduction into the production process or for the storage of finished products or byproducts from the production process or a tank that is only used to recirculate materials.

- 3.3.64 "Aboveground storage tank system (AST)" means a tank, or combination of tanks, including the pipes that are connected to the tank(s) or ancillary equipment containment systems, if any, that has less than 10% of its combined volume beneath the surface of the ground. The tank or tanks may presently be in use, or may have been used in the past, to contain an accumulation of liquids.
  - 3.3.65 "Tank System" means an AST system or an UST system.
- 3.3.66 "Underground storage tank system (UST)" means a tank, or combination of tanks, including the underground pipes that are connected to the tank or tanks or underground ancillary equipment containment systems, if any, that has 10% or more of its combined volume beneath the surface of the ground. The tank or tanks may presently be in use, or may have been used in the past, to contain an accumulation of liquids.

# R 29.5660 Testing requirements for tanks.

Rule 660. Section 21.5.1.5 is added to the FL/CL code as follows:

21.5.1.5 Testing of existing tanks may be performed pursuant to section 21.5, instead of R 29.5224 of these rules.

History: 2014 AACS.

# R 29.5661 Closure of aboveground storage tanks.

Rule 661. Section 21.7.4.1 of the FL/CL code is adopted with the following changes:

21.7.4.1 Closure of aboveground storage tanks. An owner or operator shall close tanks that have not been used for more than 12 months. To permanently close an aboveground storage tank that is no longer needed to store regulated substance, the owner or operator shall notify the department, not less than 30 days before the intended closure, on form BFS 3858 provided by the bureau. To permanently close an aboveground storage tank, the owner or operator shall empty and clean the tank of all liquid and sludge, render it vapor-free, and safeguard it against trespassing. Piping that is permanently removed from service shall be emptied of all liquids and sludge, be purged and capped, or be removed from the ground.

History: 2014 AACS.

# R 29.5662 Inspection and maintenance of storage tanks and storage tank appurtenances.

Rule 662. Section 21.8.1.1 is added to the FL/CL code as follows:

21.8.1.1 Inspection of existing tanks may be performed pursuant to section 21.8.1, instead of R 29.5221 and R 29.5231 of these rules.

History: 2014 AACS.

# R 29.5663 Inspection and maintenance of aboveground storage tanks.

Rule 663. Section 22.17.2.1 is added to the FL/CL code as follows:

22.17.2.1 Inspection of existing tanks may be performed pursuant to section 22.17.2, instead of R 29.5221 of these rules.

History: 2014 AACS.

# R 29.5664 Location of loading and unloading facilities.

Rule 664. Sections 28.4.2.1 and 28.4.2.2 are added to the FL/CL code as follows:

- 28.4.2.1 A fire protected tank or a tank in a vault is exempt from compliance with the separation distance requirements for the loading and unloading risers.
- 28.4.2.2 A tank which has a capacity of 3,000 gallons (11,340 liters) or less which is located 10 feet (3 meters) from any building, and which is provided with spill and audible overfill protection or other means acceptable to the bureau based on the best interests of public health, safety, and welfare and the environment, is exempt from compliance with the separation distance requirements for loading and unloading risers.

# R 29.5701 Scope.

Rule 701. Sections 1.1.1.1 and 1.1.3 are added to the FL/CL code as follows:

- 1.1.1.1 This part does not apply to new or existing motor fuel dispensing facilities that are part of an automotive assembly process and dispense fuel exclusively during the assembly process.
  - 1.1.3 All of the provisions of part 2 of these rules apply to this part.

History: 2014 AACS.

# R 29.5702 Equivalency.

Rule 702. Sections 1.5.3 and 1.5.4 are added to the FL/CL code as follows:

- 1.5.3 An owner or operator may apply for a variance to the rules by applying to the bureau with a satisfactory explanation as to why compliance is not possible. The bureau may approve a variance upon finding that the variance is based on the best interests of public health, safety, welfare, and property and the environment.
- 1.5.4 A person aggrieved by a final decision of the bureau on a request for variance may appeal to the circuit court within 21 days of the decision.

History: 2014 AACS.

#### R 29.5703 Prohibitions.

Rule 703. Sections 1.8, 1.8.1, 1.8.2, 1.8.3, 1.8.4, 1.8.4.1, 1.8.4.1.1, 1.8.4.1.2, 1.8.5 are added to the FL/CL code as follows:

1.8 Prohibitions.

1.8.1 Upon notification by the bureau a person shall not deliver any liquid into a storage tank system under any circumstances that are prohibited by these rules or if a tank is not in compliance with these rules. The notification may include verbal or written communication or an affixed written notification on the storage tank system.

- 1.8.2 A person shall not tamper with, remove, or disregard written notification affixed to the storage tank system.
- 1.8.3 Any storage tank system or practice that is not in compliance with these rules is in violation of these rules.
- 1.8.4 An owner or operator shall not continue to use a storage tank system that is causing a release and shall expeditiously empty the system or the component that is causing the release until the system is repaired or replaced, pursuant to these rules.
- 1.8.4.1 A leak from the primary tank into the interstice of a new or existing secondary containment tank is not considered a release requiring that the tank be emptied, provided all of the following are met:
- 1.8.4.1.1 The secondary containment tank is repaired, replaced, or permanently closed within 6 months of discovery of the release.
- 1.8.4.1.2 Temporary or permanent liquid tight spill control is provided for the secondary containment tank within 7 days of discovery of the release to the secondary containment tank interstice.
  - 1.8.4.1.3 There is no release from the outer shell of the secondary containment tank.
- 1.8.5 The bureau may order, at the expense of the owner, a tightness test of the storage tank system when there is reason to believe that the integrity of the storage tank system is compromised.

# R 29.5704 Application.

Rule 704. Sections 1.9 and 1.9.1 are added to the FL/CL code as follows:

- 1.9 Installation Application Submittal Requirements.
- 1.9.1 An aboveground storage tank system installation application shall meet the requirements of section 1.8 of part 2 of these rules.

History: 2014 AACS.

#### R 29.5705 Definitions.

Rule 705. General. Section 3.1.1 of the FL/CL code is adopted with the following changes:

3.1.1 Definitions in chapter 3 apply to existing and new storage tank installations.

History: 2014 AACS.

# R 29.5706 NFPA official definitions.

Rule 706. Sections 3.2.1 and 3.2.2 of the FL/CL code are adopted with the following changes:

- 3.2.1 "Approved" means acceptable to the bureau.
- 3.2.2 "Authority having jurisdiction (AHJ)" means the bureau of fire services.

## R 29.5707 General definitions.

- Rule 707. Sections 3.3.11.6, and 3.3.15.1 of the FL/CL code are adopted with the following changes, and sections 3.3.15.4, 3.3.15.5, 3.3.19, 3.3.20, 3.3.20.1, and 3.3.20.2 are added to the FL/CL code as follows:
- 3.3.11.6 "Unattended self-service motor fuel dispensing facility" means a motor fuel dispensing facility that does not have an attendant or employee on duty. The customer or vehicle operator conducts the dispensing operation. This includes coin, currency, membership card, and credit card dispensing operations. Unattended self-service motor fuel dispensing facilities shall include those, new or existing, where access is limited by locked dispensers, security fencing, or other means to effectively prevent unauthorized access or dispensing.
- 3.3.15.1 "Aboveground storage tank (AST) system" means a tank or combination of tanks, including the pipes that are connected to the tank, tanks, or ancillary equipment containment systems, if any, which is, was, or may have been, used to contain an accumulation of liquids and which has less than 10% of its volume, including the volume of the underground pipes that are connected to the tank, or tanks, beneath the surface of the ground.
  - 3.3.15.4 "Tank system" means an AST system or an UST system.
- 3.3.15.5 "Underground storage tank (UST) system" means a tank or combination of tanks including the underground pipes that are connected to the tank or tanks or underground ancillary equipment containment system, if any, which is, was, or may have been, used to contain an accumulation of liquids and which has 10% or more of its volume, including the volume of the underground pipes that are connected to the tank or tanks, beneath the surface of the ground.
  - 3.3.19 "Bureau" means bureau of fire services.
- 3.3.20 "Building" means any structure used or intended for supporting or sheltering any use or occupancy.
- 3.3.20.1 "Important building" means a building that is considered not expendable in an exposure fire.
- 3.3.20.2 "Storage tank building" means a 3-dimensional space that is enclosed by a roof and walls that cover more than 1/2 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.

History: 2014 AACS.

## R 29.5708 Aboveground storage tanks.

Rule 708. Section 4.3.2.6.1 is added to the FL/CL code as follows:

4.3.2.6.1 A minimum separation is not required for a listed secondary containment tank which is 4,000 gallons (15,120 liters) or less and which has a 64 inch (162.6 centimeters) nominal diameter or smaller.

# R 29.5709 General construction requirements.

Rule 709. Section 7.4.2 of the FL/CL code is adopted with the following changes:

7.4.2 General construction requirements. In major repair garages, where CNG, LNG, hydrogen or LPG fueled vehicles are repaired, all applicable requirements of R 29.4601 to R 29.4652, R 29.7001 to R 29.7127, or R 29.6001 to R 29.6097 shall be met.

History: 2014 AACS.

# R 29.5801 Scope.

Rule 801. Section 1.1.6 is added to the FL/CL code as follows:

1.1.6 All of the provisions of part 2 of these rules apply to this part.

History: 2014 AACS.

# R 29.5802 Equivalency.

Rule 802. Sections 1.5.3 and 1.5.4 are added to the FL/CL code as follows:

- 1.5.3 An owner or operator may apply for a variance to the rules by applying to the bureau with a satisfactory explanation as to why compliance is not possible. The bureau may approve a variance upon finding that the variance is based on the best interests of public health, safety, welfare, and property and the environment.
- 1.5.4 A person aggrieved by a final decision of the bureau on a request for variance may appeal to the circuit court within 21 days of the decision.

History: 2014 AACS.

# R 29.5803 Application.

Rule 803. Section 1.7 of the FL/CL code is adopted with the following changes and section 1.7.1 is added to the FL/CL code as follows:

- 1.7 Installation application submittal requirements.
- 1.7.1 An aboveground storage tank system installation application shall meet the requirements of section 1.8 of part 2 of these rules.

History: 2014 AACS.

#### R 29.5804 Prohibitions.

Rule 804. Sections 1.8, 1.8.1, 1.8.2, 1.8.3, 1.8.4, 1.8.4.1, 1.8.4.1.1, 1.8.4.1.2, 1.8.4.1.3, 1.8.5 are added to the FL/CL code as follows:

1.8 Prohibitions.

1.8.1 Upon notification by the bureau a person shall not deliver any liquid into a storage tank system under any circumstances that are prohibited by these rules or if a tank is not in compliance with these rules. The notification may include verbal or written communication or an affixed written notification on the storage tank system.

- 1.8.2 A person shall not tamper with, remove, or disregard written notification affixed to the storage tank system.
- 1.8.3 Any storage tank system or practice that is not in compliance with these rules is in violation of these rules.
- 1.8.4 An owner or operator shall not continue to use a storage tank system that is causing a release and shall expeditiously empty the system or the component that is causing the release until the system is repaired or replaced, pursuant to these rules.
- 1.8.4.1 A leak from the primary tank into the interstice of a new or existing secondary containment tank is not considered a release requiring that the tank be emptied, provided all of the following are met:
- 1.8.4.1.1 The secondary containment tank is repaired, replaced, or permanently closed within 6 months of discovery of the release.
- 1.8.4.1.2 Temporary or permanent liquid tight spill control is provided for the tank within 7 days of discovery of the release to the secondary containment tank interstice.
  - 1.8.4.1.3 There is no release from the outer shell of the secondary containment tank.
- 1.8.5 The bureau may order, at the expense of the owner, a tightness test of the storage tank system when there is reason to believe that the integrity of the storage tank system is compromised.

#### R 29.5805 Definitions.

Rule 805. Scope. Section 3.1.1 is added to the FL/CL code as follows:

3.1.1 Definitions in chapter 3 apply to existing and new storage tank installations.

History: 2014 AACS.

## R 29.5806 NFPA official definitions.

Rule 806. Sections 3.2.1 and 3.2.2 of the FL/CL code are adopted with the following changes:

- 3.2.1 "Approved" means acceptable to the bureau.
- 3.2.2 "Authority having jurisdiction (AHJ)" means the bureau of fire services.

History: 2014 AACS.

### R 29.5807 General definitions.

Rule 807. Sections 3.3.57.6, 3.3.57.7, 3.3.57.8, 3.3.68, 3.3.69, 3.3.69(a), 3.3.69(b) are added to the FL/CL code as follows:

3.3.57.6 "Aboveground storage tank (AST) system" means a tank or combination of tanks, including the pipes that are connected to the tank, tanks, or ancillary equipment containment systems, if any, which is, was, or may have been, used to contain an accumulation of liquids and which has less than 10% of its volume, including the volume of the underground pipes that are connected to the tank, or tanks, beneath the surface of the ground.

- 3.3.57.7 "Tank system" means an AST system or UST system.
- 3.3.57.8 "Underground storage tank (UST) system" means a tank or combination of tanks including the underground pipes that are connected to the tank or tanks or underground ancillary equipment containment system, if any, which is, was, or may have been, used to contain an accumulation of liquids and which has 10% or more of its volume, including the volume of the underground pipes that are connected to the tank or tanks, beneath the surface of the ground.
  - 3.3.68 "Bureau" means bureau of fire services.
- 3.3.69 "Building" means any structure used or intended for supporting or sheltering any use or occupancy.
- 3.3.69(a) "Important building" means a building that is considered not expendable in an exposure fire.
- 3.3.69(b) "Storage tank building" means a 3-dimensional space that is enclosed by a roof and walls that cover more than 1/2 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.

# R 29.5808 Acceptable liquid fuels.

Rule 808. Sections 4.5.1(6) and 4.5.1(7) of the FL/CL code are adopted with the following changes:

- 4.5.1 (6) ASTM D7467, Standard specification for Diesel Fuel Oil, Biodiesel Blend (B6-B20)
  - 4.5.1 (7) ASTM D975, Standard Specification for Diesel Fuel Oils.

History: 2014 AACS.

## R 29.5809 Basic design and construction of tanks.

Rule 809. Section 7.2.3 of the FL/CL code is adopted with the following changes:

7.2.3 Tanks meeting the requirements of part 2 of these rules meet the requirements of this section.

History: 2014 AACS.

## R 29.5810 Areas subject to flooding or earthquake.

Rule 810. Section 7.2.8.1 of the FL/CL code is adopted with the following changes:

7.2.8.1 When in a designated flood zone, the applicable requirements of part 2 of these rules shall be met.

History: 2014 AACS.

# R 29.5811 Installation of underground tanks.

- Rule 811. Sections 7.4.5 and 7.4.7 of the FL/CL code are adopted with the following changes:
- 7.4.5 Underground tanks shall be installed pursuant to manufacturer's instructions and pursuant to the applicable requirements of part 2 of these rules.
- 7.4.7 Underground tanks that are taken out of service shall be removed or permanently closed pursuant to part 2 of these rules.

# R 29.5812 Installation of outside aboveground tanks.

Rule 812. Section 7.8.3 of the FL/CL code is adopted with the following changes:

7.8.3 A tank or tanks whose capacity exceeds 660 gallons (2500L) shall be installed pursuant to part 2 of these rules.

History: 2014 AACS.

# R 29.5813 Tank leakage testing and periodic inspection.

Rule 813. Section 7.11.1(2) of the FL/CL code is adopted with the following changes:

7.11.1(2) For field-erected tanks, the applicable requirements of part 2 of these rules apply.

History: 2014 AACS.

## R 29.5814 Permanent abandonment of underground tanks.

Rule 814. Section 7.14 of the FL/CL code is adopted with the following changes:

7.14 Permanent abandonment of underground tanks. If an underground fuel storage tank is permanently removed from service, the applicable requirements of part 2 of these rules apply.

History: 2014 AACS.

## R 29.5815 Centralized oil distribution systems.

Rule 815. Section 9.2.9 of the FL/CL code is adopted with the following changes:

9.2.9 Aboveground tanks shall be provided with spill control by meeting the applicable requirements of part 2 of these rules.

History: 2014 AACS.

## R 29.5816 Installation clearances.

Rule 816. Section 12.6.2 of the FL/CL code is adopted with the following changes:

12.6.2 Used oil burning appliances shall be separated from flammable or combustible liquids pursuant to part 3 of these rules.

# R 29.5901 Scope.

Rule 901. Section 1.1.1 is added to the FL/CL code as follows:

1.1.1 All of the provisions of part 2 of these rules apply to this part.

History: 2014 AACS.

# R 29.5902 Application.

Rule 902. Section 1.3.4 added to the FL/CL code as follows:

1.3.4 This part does not apply to any portion of a new or existing stationary fire pump system where the requirements of part 5 conflict with the requirements of NFPA 20.

History: 2014 AACS.

# R 29.5903 Equivalency.

Rule 903. Sections 1.5.3 and 1.5.4 are added to the FL/CL code as follows:

- 1.5.3 An owner or operator may apply for a variance to the rules by applying to the bureau with a satisfactory explanation as to why compliance is not possible. The bureau may approve a variance upon finding that the variance is based on the best interests of public health, safety, welfare, and property and the environment.
- 1.5.4 A person aggrieved by a final decision of the bureau on a request for variance may appeal to the circuit court within 21 days of the decision.

History: 2014 AACS.

## R 29.5904 Installation application.

Rule 904. Sections 1.7 and 1.7.1 are added to the FL/CL code as follows:

- 1.7 Installation application submittal requirements.
- 1.7.1 An aboveground storage tank system installation application shall meet the requirements of section 1.8 of part 2 of these rules.

History: 2014 AACS.

#### R 29.5905 Prohibitions.

Rule 905. Sections 1.8, 1.8.1, 1.8.2, 1.8.3, 1.8.4, 1.8.4.1, 1.8.4.1.1, 1.8.4.1.2, 1.8.4.1.3, and 1.8.5 are added to the FL/CL code as follows:

- 1.8 Prohibitions.
- 1.8.1 Upon notification by the bureau a person shall not deliver any liquid into a storage tank system under any circumstances that are prohibited by these rules or if a tank is not in

compliance with these rules. The notification may include verbal or written communication or an affixed written notification on the storage tank system.

- 1.8.2 A person shall not tamper with, remove, or disregard written notification affixed to the storage tank system.
- 1.8.3 Any storage tank system or practice that is not in compliance with these rules is in violation of these rules.
- 1.8.4 An owner or operator shall not continue to use a storage tank system that is causing a release and shall expeditiously empty the system or the component that is causing the release until the system is repaired or replaced, pursuant to these rules.
- 1.8.4.1 A leak from the primary tank into the interstice of a new or existing secondary containment tank is not considered a release requiring that the tank be emptied, provided all of the following are met:
- 1.8.4.1.1 The secondary containment tank is repaired, replaced, or permanently closed within 6 months of discovery of the release.
- 1.8.4.1.2 Temporary or permanent liquid tight spill control is provided for the secondary containment tank within 7 days of discovery of the release to the secondary containment tank interstice.
  - 1.8.4.1.3 There is no release from the outer shell of the secondary containment tank.
- 1.8.5 The bureau may order, at the expense of the owner, a tightness test of the storage tank system when there is reason to believe that the integrity of the storage tank system is compromised.

History: 2014 AACS.

## R 29.5906 NFPA publications.

Rule 906. Section 2.2 of the FL/CL code is amended to add reference to NFPA 20 as follows:

NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, 2013 edition.

History: 2014 AACS.

### R 29.5907 Definitions.

Rule 907. General. Section 3.1.1 is added to the FL/CL code as follows:

3.1.1 Definitions in chapter 3 apply to existing and new storage tank installations.

History: 2014 AACS.

## R 29.5908 Definitions.

Rule 908. NFPA official definitions. Sections 3.2.1 and 3.2.2 of the FL/CL code are adopted with the following changes:

- 3.2.1 "Approved" means acceptable to the bureau.
- 3.2.2 "Authority having jurisdiction (AHJ)" means the bureau of fire services.

## R 29.5909 Definitions.

Rule 909. General definitions. Sections 3.3(a), 3.3(a)(1), 3.3(a)(2), 3.3(b), 3.3.11.4, 3.3.11.5, and 3.3.11.6 are added to the FL/CL code as follows:

- 3.3(a) "Building" means any structure used or intended for supporting or sheltering any use or occupancy.
- 3.3(a)(1) "Important building" means a building that is considered not expendable in an exposure fire.
- 3.3(a)(2) "Storage tank building" means a 3-dimensional space that is enclosed by a roof and walls that cover more than 1/2 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(b) "Bureau" means bureau of fire services.
- 3.3.11.4 "AST system" means a tank or combination of tanks, including the pipes that are connected to the tank, tanks, or ancillary equipment containment systems, if any, which is, was, or may have been, used to contain an accumulation of liquids and which has less than 10% of its volume, including the volume of the underground pipes that are connected to the tank, or tanks, beneath the surface of the ground.
  - 3.3.11.5 "Tank system" means an AST system or UST system.
- 3.3.11.6 "UST system" means a tank or combination of tanks including the underground pipes that are connected to the tank or tanks or underground ancillary equipment containment system, if any, which is, was, or may have been, used to contain an accumulation of liquids and which has 10% or more of its volume, including the volume of the underground pipes that are connected to the tank or tanks, beneath the surface of the ground.

History: 2014 AACS.

## **R 29.5910** Gas piping.

Rule 910. Section 5.1.1(3) of the FL/CL code is adopted with the following changes:

5.1.1(3) LP-gas systems shall be installed pursuant to the provisions of R 29.6001 to R 29.6097.

History: 2014 AACS.

#### R 29.5911 Design and construction of liquid fuel tanks.

Rule 911. Section 6.1 of the FL/CL code is adopted with the following changes and section 6.1.3 is added to the FL/CL code as follows:

- 6.1 Design and construction of liquid fueled tanks. Fuel tanks shall be constructed pursuant to the applicable tank specifications in part 2 of these rules.
- 6.1.3 Tanks not used to store liquids for 12 months shall be permanently closed by complying with the requirements of part 2 of these rules.

## R 29.5912 Installation criteria for fuel tanks containing class I fuels.

Rule 912. Section 6.2.2 of the FL/CL code is adopted with the following changes:

6.2.2 Fuel tanks shall be installed pursuant to the applicable installation provisions of part 2 of these rules.

History: 2014 AACS.

# R 29.5913 Fuel tanks outdoors (aboveground or underground) or beneath a structure.

Rule 913. Section 6.3.3 of the FL/CL code is adopted with the following changes:

6.3.3 Fuel tanks outdoors (aboveground or underground) or beneath a structure. Fuel tanks located outside, either aboveground or underground, or beneath a structure shall comply with the applicable provisions of part 2 of these rules.

History: 2014 AACS.

# R 29.5914 Installation criteria for fuel tanks containing liquefied petroleum gases.

Rule 914. Section 6.4 of the FL/CL code is adopted with the following changes:

6.4 Installation criteria for fuel tanks containing liquefied petroleum gases. LP-Gas systems in the liquid phase shall be installed pursuant to the provisions of R 29.6001 to R 29.6097.

History: 2014 AACS.

## R 29.5915 Filling.

Rule 915. Section 6.6.3 of the FL/CL code is adopted with the following changes: 6.6.3 Piping for fuel tanks shall be pursuant to part 2 of these rules.

History: 2014 AACS.

## **R 29.5916** Vent piping.

Rule 916. Section 6.7.1 of the FL/CL code is adopted with the following changes: 6.7.1 Vent piping for fuel tanks shall be pursuant to part 2 of these rules.

History: 2014 AACS.

## R 29.5917 Fuel piping, valves, and fittings.

Rule 917. Section 6.8.1 of the FL/CL code is adopted with the following changes: 6.8.1 Piping shall be pursuant to part 2 of these rules, except that piping shall be steel or other metal and the provisions of section 6.8.2 shall apply.