

**PUBLIC SAFETY DEPARTMENT[661]**

**Notice of Intended Action**

**Proposing rule making related to flammable and combustible liquids  
and providing an opportunity for public comment**

The State Fire Marshal hereby proposes to amend Chapter 221, “Flammable and Combustible Liquids,” Iowa Administrative Code.

*Legal Authority for Rule Making*

This rule making is proposed under the authority provided in Iowa Code section 101.23.

*State or Federal Law Implemented*

This rule making implements, in whole or in part, Iowa Code chapter 101.

*Purpose and Summary*

The purpose of amending Chapter 221 is to update the process for submittal of construction plans for review, plan review fees, and inspection fees and to provide contact information for the program.

*Fiscal Impact*

This rule making has no fiscal impact to the State of Iowa.

*Jobs Impact*

After analysis and review of this rule making, no impact on jobs has been found.

*Waivers*

Pursuant to the provisions of rule 661—10.222(17A), the Department does not have authority to waive requirements established by statute. Any person who believes that the application of the discretionary provisions of this rule making would result in hardship or injustice to that person may petition the Department for a waiver of the discretionary provisions, if any, pursuant to the provisions of rule 661—10.222(17A).

*Public Comment*

Any interested person may submit written or oral comments concerning this proposed rule making. Written or oral comments in response to this rule making must be received by the Department no later than 4:30 p.m. on December 22, 2020. Comments should be directed to:

Sarah Jennings  
Department of Public Safety  
Oran Pape State Office Building  
215 East 7th Street  
Des Moines, Iowa 50319  
Phone: 515.725.6185  
Email: [jennings@dps.state.ia.us](mailto:jennings@dps.state.ia.us)

*Public Hearing*

No public hearing is scheduled at this time. As provided in Iowa Code section 17A.4(1)“b,” an oral presentation regarding this rule making may be demanded by 25 interested persons, a governmental

subdivision, the Administrative Rules Review Committee, an agency, or an association having 25 or more members.

*Review by Administrative Rules Review Committee*

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rule making by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rule making at its [regular monthly meeting](#) or at a special meeting. The Committee's meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

The following rule-making actions are proposed:

ITEM 1. Amend **661—Chapter 221**, title, as follows:

FLAMMABLE ~~AND~~ OR COMBUSTIBLE LIQUIDS

ITEM 2. Amend rules 661—221.1(101) to 661—221.4(101) as follows:

**661—221.1(101) Scope.** This chapter provides the rules of the state fire marshal for safe transportation, storage, handling, and use of flammable ~~and~~ or combustible liquids. IFC, 2006 edition, sections 102.1 and 102.2, is adopted by reference.

**221.1(1)** The flammable or combustible liquids program is part of the aboveground flammable or combustible liquid storage tanks program and is located at the following address:

State Fire Marshal Division

Iowa Department of Public Safety

Attn: Aboveground Storage Tank Administration

215 East 7th Street

Des Moines, Iowa 50319

**221.1(2)** The program may be contacted by electronic mail at [sfmast@dps.state.ia.us](mailto:sfmast@dps.state.ia.us) or by the United States Postal Service.

**221.1(3)** The website for the flammable or combustible liquids program is: [dps.iowa.gov/divisions/state-fire-marshal/licensing/above-ground-storage-tanks](http://dps.iowa.gov/divisions/state-fire-marshal/licensing/above-ground-storage-tanks).

**661—221.2(101) Definitions.** The following definitions shall apply to rules 661—221.1(101) through 661—221.8(101). These definitions are adopted in addition to those which appear in the International Fire Code, 2006 edition; NFPA 30, Flammable and Combustible Liquids Code, 2003 edition; and NFPA 30A, Code for Motor Fuel Dispensing and Repair Garages, 2003 edition. If a definition adopted in this rule conflicts with a definition included in a code or standard adopted by reference in this chapter, the definition found in this rule shall apply.

*“Approved by the state fire marshal”* means a laboratory which has requested and received recognition by the state fire marshal to test equipment whose use or installation is required by rules of the state fire marshal, including rules in 661—Chapters 200 through 299, inclusive. A laboratory which seeks approval of the state fire marshal shall contact the state fire marshal division and shall provide information required by the state fire marshal. Approval or disapproval shall be granted only by a letter from the state fire marshal to the laboratory making the request, although advance notice of the decision of the state fire marshal regarding whether or not approval is to be granted may be provided by electronic mail.

*“Diesel fuel”* means a liquid, other than gasoline, which is suitable for use as a fuel in a diesel fuel-powered engine and which meets the applicable standards established in Iowa Code section 214A.2 and rule 21—85.33(214A,208A). A blend of “diesel fuel” which meets these standards and contains 6 percent biodiesel or more is “biodiesel fuel.” Diesel fuel blends which meet these standards and contain less than 6 percent biodiesel are diesel fuel and not biodiesel fuel.

*“Fire State fire code official”* means any employee of the state fire marshal division of the department of public safety, of any local fire department, or of the department of natural resources if the employee

is operating under an agreement between the department of public safety and the department of natural resources.

“*ICC*” means the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041.

“*IFC*” means the International Fire Code, published by the ICC. “IFC” will be followed by a year (e.g., IFC, 2006), which indicates the specific edition of the IFC to which reference is made.

“*Independent testing laboratory*” means a laboratory recognized by the federal Occupational Safety and Health Administration as a nationally recognized testing laboratory or a laboratory approved by the state fire marshal.

“*Listed*” means listed or approved by an independent testing laboratory for a specific use. A product shall be considered to be listed if it is of a model which has been listed for the use to which it is being put, whether it was manufactured prior to or after the date on which the listing became effective.

“*Mobile air-conditioning system*” means mechanical vapor compression equipment which is used to cool the driver or passenger compartment of any motor vehicle.

“*NFPA*” means the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. References to the form “NFPA xx,” where “xx” is a number, refer to the NFPA standard or pamphlet of the corresponding number.

“*SPCC plan*” means a spill prevention, control and countermeasure plan, as defined in 40 CFR 112, published January 1, 2007.

“*Under dispenser containment*” or “*UDC*” means containment underneath a dispenser that will prevent leaks from the dispenser from reaching soil or groundwater.

**661—221.3(101) Flammable ~~and~~ or combustible liquids.** The International Fire Code, 2006 edition, published by the ICC, Chapter 34 and references contained therein, and NFPA 30, Flammable and Combustible Liquids Code, 2003 edition and references contained therein, are adopted by reference as the rules for transportation, storage, handling, and use of flammable ~~and~~ or combustible liquids. In any case in which a provision of the IFC conflicts with a provision of NFPA 30, the IFC provision shall apply. Any refinery shall comply with the provisions of this rule and with any applicable provisions of 661—Chapter 201.

**221.3(1)** The IFC, 2006 edition, is adopted with the following amendments:

a. and b. No change.

c. Add the following new sections:

3403.6.12 Each connection to an aboveground tank through which liquid can normally flow shall be provided with an external control valve that is located as close as practical to the shell of the tank. In addition to the control valve or any other normal tank valves, there shall be an emergency internal check valve at each pipe connection to any tank opening below normal liquid level. The emergency internal check valve shall be effectively located inside the tank shell and shall be operable both manually and by an effective heat-activated device that, in case of fire, will automatically close the valve to prevent the flow of liquid from the tank even though the pipelines from the tank are broken.

~~3403.6.13 Any new or replacement piping connected to an aboveground storage tank shall be double-walled unless it lies entirely within the area of secondary containment.~~

~~3403.6.14~~ 3403.6.13 Any device dispensing Class I or Class II flammable liquids shall not be constructed or installed less than 100 feet from any existing dwelling unit.

d. to f. No change.

g. Delete section 3404.2.9.1.2.1, introductory paragraph, and insert in lieu thereof the following:

3404.2.9.1.2.1 Where foam fire protection is required, it shall be provided in accordance with NFPA 11, 2005 edition, and shall be of a type or types and amount appropriate to suppress fires involving types and amounts of flammable ~~and~~ or combustible liquids found on the premises. Where the flammable or combustible liquid contains more than 10 percent alcohol, the foam shall be alcohol-resistant. Fire-fighting foam shall be stored separately from any area in which flammable ~~and~~ or combustible liquids are stored and in an area or areas that will be readily accessible to fire fighters responding to a fire at the facility.

*h.* Amend the exception to section 3404.2.9.1.2.1 by adding the following new numbered paragraphs:

6. The premises ~~is~~ are not a refinery.

7. The premises ~~does~~ do not include bulk storage of flammable or combustible liquids.

8. The premises ~~does~~ do not contain total storage capacity to store one million gallons or more of flammable or combustible liquids.

*i.* No change.

**221.3(2)** No change.

**221.3(3)** Plans and plan review fees.

*a.* The owner of any premises on which flammable or combustible liquids are or will be stored or used is required to submit construction plans to the state fire marshal division, online or by mail as established in rule 661—221.1(101), prior to commencing initial construction of the facility or prior to commencing any construction at an existing facility which includes the addition or replacement of an aboveground flammable or combustible liquid storage tank. The construction plans shall be sealed by a licensed professional engineer if the facility at which the construction will occur is or will be a refinery or if preparation of the plans by a licensed professional engineer is required by another provision of Iowa law.

Construction for which plans are required to be submitted for review shall not commence until approval of the plan has been received from the state fire marshal.

EXCEPTION 1: Submission of construction plans is not required if the total flammable ~~and~~ or combustible liquid storage capacity on the premises is or will be 1,100 gallons or less.

EXCEPTION 2: If an SPCC plan has been prepared pursuant to 40 CFR 112 for a facility other than a refinery, a copy of the SPCC plan may be submitted to the state fire marshal in lieu of submission of separate construction plans, provided that the SPCC plan includes all of the elements required to be included in construction plans for the specific facility in this subrule. If the state fire marshal agrees, copies of portions of the SPCC plan may be submitted in lieu of a copy of the complete plan provided that all elements of construction plans which are required for the specific facility by this subrule are included. If an SPCC plan or portions thereof are submitted to the state fire marshal, the person making the submission shall provide any additional information required by the state fire marshal to evaluate compliance with the provisions of this chapter and Iowa Code chapter 101. The copy of the SPCC plan or portions thereof submitted to the state fire marshal shall clearly identify the licensed professional engineer who prepared the plan or shall be accompanied by a letter making this identification.

*b.* No change.

*c.* Fees for plan reviews shall apply as follows:

(1) \$100 plus \$25 for each new or replacement tank included in the plan, for any site or facility at which flammable or combustible liquids are or will be stored, except for new construction of a refinery.

(2) \$500 for review of the initial construction plans of a refinery if the projected construction costs are \$100,000,000 or less and \$1,000 for the initial construction plans for a refinery if the projected construction costs are greater than \$100,000,000.

(3) The owner shall submit payment of plan review fees electronically or in the form of a check, money order, or warrant payable to Treasurer, State of Iowa the State Fire Marshal as established in rule 661—221.1(101). Payment shall not be made in cash.

*d.* Plan review fees shall be refunded to the submitter if the plan review has not been completed and the submitter has not been notified of approval or disapproval of the plans within 60 days of receipt of the complete plans by the state fire marshal division.

**221.3(4)** Inspections.

*a.* Any facility at which flammable or combustible liquids are stored is subject to inspection by any state fire code official during the regular business hours of the facility. If the facility does not operate under regular business hours, a state fire code official shall have access to the facility between 8 a.m. and 4 p.m. on any day which is a business day for the state of Iowa, within four hours of notifying the owner of intent to inspect the facility.

b. Any inspection of a facility pursuant to this subrule conducted by an employee of the state fire marshal division of the department of public safety shall result in an inspection fee of \$100 plus \$25 for each aboveground flammable or combustible liquid storage tank, except that there shall be no fee for an initial inspection or the first reinspection after an initial inspection that is conducted pursuant to the receipt of a complaint alleging that the facility is in violation of any provision of this chapter, 661—Chapter 224 or Iowa Code chapter 101. The owner shall submit payment of inspection fees electronically or in the form of a check, money order, or warrant payable to the State Fire Marshal as established in rule 661—221.1(101). Payment shall not be made in cash.

c. Inspections may be initiated by the inspecting official at random or on any other basis; may be conducted at the request of the owner, operator, or manager of a facility; or may be conducted to investigate allegations made in a complaint. Such a complaint shall be in writing and submitted as established in rule 661—221.1(101) and shall specify the location and nature of the alleged violations. The complainant may or may not be identified. Complainants who identify themselves may request to be notified of the outcome of the inspection conducted in response to the complaint.

**661—221.4(101) Motor fuel dispensing facilities and repair garages.** The International Fire Code, 2006 edition, published by the ICC, Chapter 22 and references contained therein, and NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, 2003 edition and references contained therein, are adopted by reference as the rules for motor fuel dispensing facilities and repair garages. If any provision of the International Fire Code adopted herein is in conflict with any provision of NFPA 30A, the International Fire Code provision shall apply. The International Fire Code, 2006 edition, Chapter 22, is adopted with the following amendments:

**221.4(1)** No change.

**221.4(2)** Add the following new sections:

2206.7.1.1 Dispensing of blended biofuels.

2206.7.1.1.1 Definitions.

“*B-blend*” means biodiesel blended fuel as defined in Iowa Code section 214A.1 with the blend including between 6 and 20 percent biodiesel, as defined in Iowa Code section 214A.1.

NOTE: For purposes of the rules contained in this chapter and other chapters of rules of the state fire marshal (661—Chapters 200 through 299 inclusive), diesel fuel may contain biodiesel provided that the concentration of biodiesel is less than 6 percent in accordance with rule 21—85.33(214A,208A), which adopts by reference standards for the content of motor fuels established by ASTM International (formerly known as the American Society for Testing and Materials).

“*E-10*” means a blend of petroleum and ethanol including no more than 16 percent ethanol intended for use as a motor vehicle fuel.

“*E-blend*” means a blend of petroleum and ethanol including more than 16 percent ethanol intended for use as a motor vehicle fuel.

“*Existing E-blend dispenser*” means a dispenser installed on or before October 24, 2010, for use in dispensing E-blend.

2206.7.1.1.2 E-blend may be dispensed only if (1) or (2) applies:

(1) ~~The~~ the dispenser is listed by an independent testing laboratory for use with E-blend or E-85.

(2) ~~The dispenser is an existing E-blend dispenser and either (a) or (b) applies:~~

(a) ~~The dispenser is listed by an independent testing laboratory as compatible with E-10 gasoline, and the owner or operator visually inspects the dispenser and the dispenser sump daily for leaks and equipment failure. The owner or operator shall maintain a record of such inspection for at least one year after the inspection. The record shall be located on the premises of the owner or operator and shall be made available to the department of natural resources or the state fire marshal upon request. If a leak is detected, the department of natural resources shall be notified pursuant to Iowa Code section 455B.386.~~

(b) ~~The dispenser’s manufacturer has submitted the dispenser to an independent testing laboratory to be listed as compatible for use with E-85 gasoline, and the owner or operator has installed an under-dispenser containment system with electronic monitoring.~~

NOTE: Option (2) will not be available after August 25, 2014. On or after August 26, 2014, E-blend will be allowed to be dispensed only from dispensers listed by independent testing laboratories for use with E-blend or E-85.

2206.7.1.1.3 B-blend may be dispensed only if (1) and either (2), (3), (4), or (5) apply:

(1) Only a dispenser listed by an independent testing laboratory as compatible with diesel fuel shall be used to dispense B-blend.

(2) The owner or operator shall visually inspect the dispenser and the dispenser sump daily for leaks and equipment failure and maintain a record of such inspection for at least one year after the inspection. The record shall be located on the premises of the owner or operator and shall be made available to the department of natural resources or the state fire marshal upon request. If a leak is detected, the department of natural resources shall be notified pursuant to Iowa Code section 455B.386.

(3) The dispenser's manufacturer has submitted the dispenser to an independent testing laboratory to be listed as compatible for use with B-blend, and the owner or operator has installed an under-dispenser containment system with electronic monitoring.

(4) Information published or provided by the manufacturer of the dispenser is available stating that the dispenser is compatible with B-blend.

(5) The owner or operator of the dispenser has in force insurance for environmental liability in a minimum amount of \$500,000, which would cover damage resulting from the operation of the dispenser and the owner or operator is able to produce documentation of the insurance coverage upon request from the state fire marshal or the department of natural resources.

NOTE: If option (2), (4), or (5) is used, under-dispenser containment shall be provided if otherwise required by the rules in this chapter, rules of the department of natural resources, or any other applicable provision of law.

This subrule is intended to implement Iowa Code sections 101.1 and 455G.31.

**221.4(3)** No change.

**221.4(4)** Temporary storage in disaster emergencies. Notwithstanding any provision to the contrary found in this chapter or found in the International Fire Code or NFPA 30A as adopted by reference herein, aboveground ~~petroleum~~ flammable or combustible liquid storage tanks may be used to store flammable ~~and~~ or combustible liquids in motor fuel dispensing operations, provided that all of the following apply:

a. The facility is in an area covered by a disaster emergency proclamation issued by the governor pursuant to Iowa Code section 29C.6 or, if not in such an area, the facility has applied to the state fire marshal and has been approved for storage of flammable ~~and~~ or combustible liquids in compliance with this subrule.

b. The facility has suffered damage which has rendered the storage tanks normally used by the facility for flammable ~~and~~ or combustible liquids inoperable. Storage of flammable ~~and~~ or combustible liquids in compliance with this subrule shall continue only for as long as the normal storage tanks are inoperable and in no event for more than 90 days.

EXCEPTION: In extraordinary circumstances, storage of flammable ~~and~~ or combustible liquids in compliance with this subrule may continue for more than 90 days if the facility has sought and received specific written approval from the state fire marshal for such storage.

c. The facility has written confirmation from the facility's insurance provider that insurance coverage will apply while storage of flammable ~~and~~ or combustible liquids in compliance with this subrule is occurring.

d. Any aboveground ~~petroleum~~ flammable or combustible liquid storage tank used pursuant to this subrule shall be rated or listed by an independent testing laboratory for aboveground storage of flammable ~~and~~ or combustible liquids.

e. Any aboveground ~~petroleum~~ flammable or combustible liquid storage tank used pursuant to this subrule shall be of no more than 1,000 gallons capacity.

EXCEPTION EXCEPTION: A storage tank larger than 1,000 gallons capacity may be used pursuant to this subrule if the facility has received specific written approval from the state fire marshal for its use. In reviewing such a request, the state fire marshal shall consider, but is not limited to considering, the following factors:

- (1) Volume of throughput of the facility.
- (2) Ability to meet setback requirements appropriate to the size of the tanks used.

*f. to h.* No change.

*i.* Aboveground ~~petroleum~~ flammable or combustible liquid storage tanks used pursuant to this subrule shall be plumbed into existing dispensers, if practical. If this is impractical, all fueling at the facility shall be by attendant only; no self-service dispensing shall be allowed at the facility.

*j.* Any aboveground ~~petroleum~~ flammable or combustible liquid storage tank used in compliance with this subrule shall be located so as to be protected from prospective damage from vehicle collisions and shall be located with due regard to vehicular traffic patterns and the location of property lines and significant buildings, particularly those which are frequently occupied by humans.