

STATE OF WASHINGTON STATE BUILDING CODE COUNCIL

May 2018 Log No. _____

1. State Building Code to be Amended:

- International Building Code
- ☐ ICC ANSI A117.1 Accessibility Code
- International Existing Building Code
- International Residential Code
- International Fire Code
- Uniform Plumbing Code

International Mechanical Code
International Fuel Gas Code
NFPA 54 National Fuel Gas Code
NFPA 58 Liquefied Petroleum Gas Code
Wildland Urban Interface Code

For the Washington State Energy Code, please see specialized energy code forms

Section(s): 5707

Title: On-Demand Mobile Fueling Operations

2. Proponent Name (Specific local government, organization or individual):

Proponent: 2024 International Fire Code Technical Advisory GroupTitle: TAG MemberDate: 8/15/2024

3. Designated Contact Person:

Name: Dave Kokot, P.E. Title: Fire Protection Engineer Address:

Office Phone: (509) 625-7056 **Cell:** (509) 435-7056 **E-Mail address:** dkokot@spokanefire.org **4. Proposed Code Amendment**. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert <u>new</u> sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code, additional pages may be attached.

Clearly state if the proposal modifies an existing amendment or if a new amendment is needed. If the proposal modifies an **existing amendment**, show the modifications to the existing amendment by underlining all added language and striking through all deleted language. If a new amendment is needed, show the modifications to the **model code** by underlining all added language and striking through all deleted language.

Code(s) _____ IFC _____ Section(s) ____ 5707 _____

Enforceable code language must be used. Amend section to read as follows:

5707.1 General. On-demand *mobile fueling* operations that dispense Class I, II and III liquids into the fuel tanks of motor vehicles shall comply with Sections 5707.1 through 5707.6.6.

Exception: Fueling from an *approved* portable container in cases of an emergency or for personal use.

5707.1.1 Approval required. Mobile fueling operations shall not be conducted without first obtaining a permit and approval from the fire code official. Mobile fueling operations shall occur only at approved locations. The fire code official is authorized to approve individual locations or geographic areas where mobile fueling is allowed.

5707.1.1 Approval required. *Mobile fueling* operations shall not be conducted without first obtaining an operational permit in accordance with Section 105.5.18.

5707.1.2 Location. Mobile fueling operations shall occur only at *approved* locations. The *fire code official* is authorized to approve individual locations or geographic areas where *mobile fueling* is allowed.

5707.1.23 Coordination of permits. Permits across multiple authorities having jurisdiction shall be coordinated in accordance with Sections 5707.1.2.1 through 5707.1.2.4.

5707.1.23.1 Acceptance of permits issued by other authorities having jurisdiction. Local authorities having jurisdiction that allow mobile on demand fueling trucks may accept conforming permits issued and/or inspections performed by any other local authorities having jurisdiction in Washington state. Local authorities having jurisdiction that choose to accept conforming permits issued by other local authorities having jurisdiction in Washington state retain the right to enforce the provisions of this section.

5707.1.23.2 Local authorities having jurisdiction not offering operator or truck certification. A conforming operator or vehicle permit issued by one local authority having jurisdiction shall be recognized and accepted by all local authorities having jurisdiction in Washington state, if those local authority having jurisdictions allow mobile on demand fueling and do not offer such operator or truck certification. Under no circumstances will an issuing local authority having jurisdiction be expected to perform permissive inspections beyond their jurisdiction.

5707.1.2<u>3</u>**.3 Commencing permit issuance.** When a local authority having jurisdiction that has previously authorized mobile fueling operations but not issued their own permits commences permit issuance for mobile fueling operations or vehicles, that local authority having jurisdiction shall continue to accept permits previously issued by another local authority having jurisdiction in Washington state for three months or until their expiration date, whichever is sooner.

5707.1.23.4 Permit record maintenance. Issuing local authorities having jurisdiction shall maintain a publicly available list of current permits or other information source to enable all parties to have information about whether permits are in good standing.

5707.2 Mobile fueling vehicle. An on-demand mobile fueling vehicle shall be utilized in on-demand fueling operations for the dispensing of Class I, II or III liquids into the fuel tanks of motor vehicles and shall comply with Sections 5707.2.1 and 5707.2.2.

5707.2 Mobile fueling vehicle. An on-demand *mobile fueling* vehicle shall be that which is utilized in on-demand fueling operations for the dispensing of Class I, II or III liquids into the fuel tanks of motor vehicles.

5707.2.1 Mobile fueling vehicle classifications. An on demand mobile fueling vehicle shall be classified as one of the following: 1. Type 1 Mobile Fueling Vehicle - A tank vehicle that complies with NFPA 385 and that has chassis mounted tanks where the aggregate capacity does not exceed 1600 gallons (6057 L).

2. Type 2 Mobile Fueling Vehicle - A vehicle with one or more chassis mounted tanks or chassis mounted containers, not to exceed 110 gallons (415 L) capacity for each tank or container and having an aggregate capacity not exceeding 800 gallons (3028 L) or the weight capacity of the vehicle in accordance with DOTn.

3. Type 3 Mobile Fueling Vehicle - A vehicle that carries a maximum aggregate capacity of 60 gallons (227 L) of motor fuel in metal safety cans listed in accordance with UL 30 or other approved metal containers, each not to exceed 5 gallons (19 L) in capacity.

5707.2.1 Mobile fueling vehicle classifications. An on demand mobile fueling vehicle shall be classified as one of the following:

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- **1.** Type 1 Mobile Fueling Vehicle A tank vehicle that complies with NFPA 385 and that has chassis-mounted tanks where the aggregate capacity does not exceed 1600 gallons (6057 L).
- 2. Type 2 Mobile Fueling Vehicle A vehicle with one or more chassis-mounted tanks or chassis-mounted containers, not to exceed 110 gallons (415 L) capacity for each tank or container and having an aggregate capacity not exceeding 800 gallons (3028 L) or the weight capacity of the vehicle in accordance with DOTn.
- 3. Type 3 Mobile Fueling Vehicle A vehicle that carries a maximum aggregate capacity of 60 gallons (227 L) of motor fuel in metal safety cans listed in accordance with UL 30 or other approved metal containers, each not to exceed 5 gallons (19 L) in capacity.
- 1. **Tier 1** *mobile fueling* vehicle. A tank vehicle that complies with NFPA 385 and that has chassis-mounted tanks where the aggregate capacity does not exceed 1,600 gallons (6057 L).
- 2. <u>Tier 2 mobile fueling vehicle.</u> A vehicle with one or more chassis-mounted tanks or containers that do not exceed <u>110 gallons (416 L) in capacity with an aggregate capacity that does not exceed 800 gallons (3028 L) or the weight capacity of the vehicle in accordance with DOTn.</u>
- 3. <u>Tier 3 mobile fueling vehicle.</u> A vehicle that carries a maximum aggregate capacity of 60 gallons (227 L) of motor fuel in metal safety cans *listed* in accordance with UL 30 or other *approved* metal containers, each not to exceed 5 gallons (19 L) in capacity.

5707.2.2 Mobile fueling vehicle requirements. Each *mobile fueling* vehicle shall comply with all local, state and federal requirements, as well as the following:

- 1. *Mobile fueling* vehicles with a chassis-mounted tank in excess of 110 gallons (416 L) shall also comply with the requirements of Section 5706.6 and NFPA 385.
- 2. The *mobile fueling* vehicle and its equipment shall be maintained in good repair.
- 3. Safety cans and *approved* metal containers shall be secured to the *mobile fueling* vehicle except when in use.
- 4. Fueling a motor vehicle from tanks or containers mounted in a trailer connected to a *mobile fueling* vehicle shall be prohibited.

5707.3 Required documents. Documents developed to comply with Sections 5707.3.1 through 5707.3.3 shall be updated as necessary by the *owner* of the *mobile fueling* operation and shall be maintained in compliance with Section 108.3 110.3.

5707.3.1 Safety and emergency response plan. Mobile fueling operators shall have an approved written safety and emergency response plan that establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code. The safety and emergency response plan shall specifically address and require that all operators assess surroundings prior to fueling to consider the presence of items listed in Section 5707.3.3.

5707.3.2 Training records. Mobile fueling vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. Training records of operators shall be maintained.

5707.3.3 Site plan. Where required by the fire code official, a site plan shall be developed for each location or area at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate but not be limited to the following:

1. All buildings, structures.

2. Lot lines or property lines.

3. Electric car chargers.

4. Solar photovoltaic parking lot canopies.

5. Appurtenances on-site and their use or function.

6. All uses adjacent to the lot lines of the site.

7. Fueling locations.

8. Locations of all storm drain openings and adjacent waterways or wetlands.

9. Information regarding slope, natural drainage, curbing, and impounding.

10. How a spill will be kept on the site property.

11. Scale of the site plan.

5707.3.1 Safety and emergency response plan. *Mobile fueling* operators shall have an *approved* written safety and emergency response plan that establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code.

5707.3.2 Training records. *Mobile fueling* vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. Training records of operators shall be maintained.

5707.3.3 Site plan. Where required by the *fire code official*, a site plan shall be developed for each location or area at which *mobile fueling* occurs. The site plan shall be in sufficient detail to indicate the following:

- 1. All buildings and structures.
- 2. Lot lines or property lines.
- 3. Electric car chargers.
- 4. Solar photovoltaic parking lot canopies.
- 5. Appurtenances on-site and their use or function.
- 6. All uses adjacent to the *lot lines* of the site.
- 7. Fueling locations.
- 8. Locations of all storm drain openings and adjacent waterways or wetlands.
- 9. Information regarding slope, natural drainage, curbing and impounding.
- 10. How a spill will be kept on the site property.
- 11. Scale of the site plan.

5707.3.4 Tiered sites. Where a site permitting process is required by the local jurisdiction, a site shall be designated by the fire code official to be one of the following and based on local provisions as necessitated by zoning laws, environmental laws, public safety, and other characteristics.

5707.3.4.1 Tier 1 sites. Sites that do not present atypical geographic, safety or environmental concerns shall be provided expedited permitting review and shall allow permit issuance prior to site inspection. The fire code official may impose additional conditions and may perform a site inspection during the period of permit validity.

5707.3.4.2 Tier 2 sites. Sites that require an inspection shall be approved by the fire code official prior to permit issuance.

5707.4 Mobile fueling areas. During fueling, the mobile fueling vehicle and point of connection of the vehicle being fueled shall not be located on public streets, public ways or inside buildings. Fueling on the roof level of parking structures or other buildings is prohibited.

5707.4 Mobile fueling areas. During fueling, the *mobile fueling* vehicle and point of connection to the vehicle shall not be located on public streets, *public ways* or inside *buildings*. Fueling on the roof level of parking structures or other *buildings* is prohibited.

5707.4.1 Separation. During fueling, the point of connection of the vehicle being fueled shall not take place within 25 feet (7620 mm) of buildings, lot lines, property lines or combustible storage. Mobile fueling vehicles shall not park within 10 feet (3048 mm) of buildings, lot lines, property lines or combustible storage.

EXCEPTIONS: 1. The fire code official shall be authorized to decrease the separation distance for dispensing from metal safety cans or other approved metal containers in accordance with Section 5707.2.

2. The point of fueling shall not take place within 10 feet (3048 mm) of buildings, lot lines, property lines or combustible storage when the mobile fueling vehicle has an approved vapor recovery system or is servicing vehicles with on board refueling vapor recovery.

Where dispensing operations occur within 15 feet (4572 mm) of a storm drain, an approved storm drain cover or an approved equivalent method that will prevent any fuel from reaching the drain shall be used.

5707.4.2 Sources of ignition. Smoking, open flames and other sources of ignition shall be prohibited within 25 feet (7620 mm) of fuel dispensing activities. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the vehicle or the point of fueling shall be prominently posted on the mobile fueling vehicle. The engines of vehicles being fueled shall be shut off during fueling.

5707.4.3 Electrical equipment. Mobile fueling shall not occur within 20 feet of electrical equipment located within 18 inches of the ground unless such electrical equipment is rated for Class 1, Division 2 hazardous locations in accordance with NFPA 70.

5707.5 Equipment. Mobile fueling equipment shall comply with Sections 5707.5.1 through 5707.5.5.

5707.5.1 Dispensing hoses and nozzles. Where equipped, the dispensing hose shall not exceed 50 feet (15240 mm) in length. The dispensing nozzles and hoses shall be of an approved and listed type. Where metal to metal contact cannot be made between the nozzle and the fuel fill opening, then a means for bonding the mobile fueling vehicle to the motor vehicle shall be provided and employed during fueling operations.

5707.5.2 Break-away device. A listed break-away device shall be provided at the nozzle.

EXCEPTION: Mobile fueling vehicles equipped with an approved brake interlock tied to the nozzle holder that prohibits movement of the mobile fueling vehicle when the nozzle is removed from its holder or tied to the delivery of fuel that prevents activation of the pumping system.

5707.5.3 Shut off valve and fuel limit. Mobile fueling vehicles shall be equipped with a listed shut-off valve assembly and a fuel limit switch set to a maximum of 30 gallons (116 L).

5707.5.4 Fire extinguisher. An approved portable fire extinguisher complying with Section 906 with a minimum rating of 4A:80-B:C shall be provided on the mobile fueling vehicle with signage clearly indicating its location.

5707.5.5 Spill kit. Mobile fueling vehicles shall contain a minimum 5 gallon (19 L) spill kit of an approved type.

5707.6 Operations. Mobile fueling vehicles shall be constantly attended during fueling operations with brakes set and warning lights in operation. Mobile fueling vehicles shall not obstruct emergency vehicle access roads.

5707.6.1 Dispensing hose. Where equipped, mobile fueling vehicles shall be positioned in a manner to preclude traffic from driving over the dispensing hose. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the mobile fueling vehicle.

5707.6.2 Drip control. Operators shall place a drip pan or an absorbent pillow under the nozzle and each fuel fill opening prior to and

during dispensing operations to catch drips.

5707.6.3 Safety cones. Safety cones or other visual barriers shall be employed as warning devices to highlight the vehicle fueling area. Signs prohibiting smoking or open flames within 25 feet (7620 mm) shall be prominently posted in the vehicle fueling area.

5707.6.4 Vehicle lights. The mobile fueling vehicle flasher lights shall be in operation while dispensing operations are in progress.

5707.4.1 Separation. During fueling, the point of connection to the vehicle being fueled shall not take place within 25 feet (7620 mm) of buildings, *lot lines*, property lines or combustible storage. *Mobile fueling* vehicles shall not park within 10 feet (3048 mm) of buildings, *lot lines*, property lines or combustible storage.

Exceptions:

- 1. The *fire code official* shall be authorized to decrease the separation distance for dispensing from metal safety cans or other *approved* metal containers in accordance with Section 5707.2.
- 2. The point of fueling shall not take place within 10 feet (3048 mm) of buildings, *lot lines*, property lines or combustible storage where the *mobile fueling* vehicle has an *approved* vapor recovery system or is servicing vehicles with onboard refueling vapor recovery.

Where dispensing operations occur within 15 feet (4572 mm) of a storm drain, an *approved* storm drain cover or an *approved* equivalent method that will prevent any fuel from reaching the drain shall be used.

5707.4.2 Sources of ignition. Smoking, open flames and other sources of ignition shall be prohibited within 25 feet (7620 mm) of fuel dispensing activities. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the vehicle or the point of fueling shall be prominently posted on the *mobile fueling* vehicle. The engines of vehicles being fueled shall be shut off during fueling.

5707.4.3 Electrical equipment. *Mobile fueling* shall not occur within 20 feet (6096 mm) of electrical equipment located within 18 inches (457 mm) of the ground unless such electrical equipment is rated for Class I, Division 2, hazardous locations in accordance with NFPA 70.

5707.5 Equipment. Mobile fueling equipment shall comply with Sections 5707.5.1 through 5707.5.5.

5707.5.1 Dispensing hoses and nozzles. Where equipped, the dispensing hose shall not exceed 50 feet (15 240 mm) in length. The dispensing nozzles and hoses shall be of an *approved* and *listed* type. Where metal-to-metal contact cannot be made between the nozzle and the fuel fill opening, a means for bonding the *mobile fueling* vehicle to the motor vehicle shall be provided and employed during fueling operations.

5707.5.2 Breakaway device. A listed breakaway device shall be provided at the nozzle.

Exception: *Mobile fueling* vehicles equipped with an *approved* brake interlock tied to the nozzle holder that prohibits movement of the *mobile fueling* vehicle when the nozzle is removed from its holder or tied to the delivery of fuel that prevents activation of the pumping system.

5707.5.3 Shutoff valve and fuel limit. *Mobile fueling* vehicles shall be equipped with a *listed* shutoff valve assembly and a fuel limit switch set to a maximum of 30 gallons (116 L).

5707.5.4 Fire extinguisher. An *approved* portable fire extinguisher complying with Section 906 with a minimum rating of 4-A:80-B:C shall be provided on the *mobile fueling* vehicle with signage clearly indicating its location.

5707.5.5 Spill kit. Mobile fueling vehicles shall contain a minimum 5-gallon (19 L) spill kit of an approved type.

5707.6 Operations. *Mobile fueling* vehicles shall be constantly attended during fueling operations with brakes set and warning lights in operation. *Mobile fueling* vehicles shall not obstruct emergency vehicle access roads.

5707.6.1 Dispensing hose. Where equipped, *mobile fueling* vehicles shall be positioned in a manner to preclude traffic from driving over the dispensing hose. The dispensing hose shall be properly placed on an *approved* reel or in an *approved* compartment prior to moving the *mobile fueling* vehicle.

5707.6.2 Drip control. Operators shall place a drip pan or an absorbent pillow under the nozzle and each fuel fill opening prior to and during dispensing operations to catch drips.

5707.6.3 Safety cones. Safety cones or other visual barriers shall be employed as warning devices to highlight the vehicle fueling area. **5707.6.4 Vehicle lights.** The *mobile fueling* vehicle flasher lights shall be in operation while dispensing operations are in progress.

5707.6.5 Nighttime deliveries. Nighttime deliveries shall be made only in areas deemed adequately lighted by the *fire code official*. **5707.6.5 Nighttime deliveries**. Nighttime deliveries shall only be made in areas adequately lighted per WAC 296-800-21005.

5707.6.6 Spill reporting. Spills shall be reported in accordance with Section 5003.3.1.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Added new wording from model code to state amendment.

6. Specify what criteria this proposal meets. You may select more than one.

The amendment is needed to address a critical life/safety need.

The amendment clarifies the intent or application of the code.

The amendment is needed to address a specific state policy or statute.

 \boxtimes The amendment is needed for consistency with state or federal regulations.

The amendment is needed to address a unique character of the state.

The amendment corrects errors and omissions.

7. Is there an economic impact: \Box Yes \boxtimes No

If no, state reason

: The proposal is an update to code references and sections that were in the State amendment to provide some consistency.

If yes, provide economic impact, costs and benefits as noted below in items a - f.

- a. Life Cycle Cost. Use the OFM Life Cycle Cost <u>Analysis tool</u> to estimate the life cycle cost of the proposal using one or more typical examples. Reference these <u>Instructions</u>; use these <u>Inputs</u>. Webinars on the tool can be found <u>Here</u> and <u>Here</u>). If the tool is used, submit a copy of the excel file with your proposal submission. If preferred, you may submit an alternate life cycle cost analysis.
- b. *Construction Cost.* Provide your best estimate of the construction cost (or cost savings) of your code change proposal.

\$Click here to enter text./square foot

(For residential projects, also provide \$Click here to enter text./ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

- c. *Code Enforcement.* List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:
- d. *Small Business Impact.* Describe economic impacts to small businesses:
- e. Housing Affordability. Describe economic impacts on housing affordability:
- f. *Other.* Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Please send your completed proposal to: <u>sbcc@des.wa.gov</u>

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.