U.S. CONSUMER PRODUCT SAFETY COMMISSION
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February 1, 2016

Mr. Jarrod Kuhn, JD, GLS
Chair, UL 1370 STP Task Group on Requirements for Portable Fireplaces
Director, Logistics, Regulatory & Product Safety
Sterno
1880 Compton Avenue, Ste. 101
Corona, CA 92881
Email: JKuhn@sternocandlelamp.com

RE: *Draft language for a proposed standard for unvented liquid and gel fuel burning portable devices*

Dear Mr. Kuhn:

U.S. Consumer Product Safety Commission ("CPSC," or "Commission") staff offers the following language for requirements on definitions, liquid accumulation, labeling, and stability for consideration by the Underwriters Laboratories Inc. ("UL") Standards Technical Panel ("STP") 1370 task group on portable fireplaces. CPSC staff believes these requirements would help to ensure that unvented liquid and gel fuel-burning portable devices are safe. CPSC staff offers this language as a starting point for task group consideration.

I would like to thank you and the rest of the task group for the opportunity to collaborate on this very important consumer safety issue. If you have any questions or need additional information, please contact me at: sayers@cpsc.gov or 301-987-2030.

Sincerely,

Scott Ayers, P.E.
Technical Lead, Portable Fireplaces Project

Cc: Scott Heh, CPSC Acting Voluntary Standards Coordinator
Angela Heggs, CPSC Office of the Secretary, Docket Manager

Safety Standard for Unvented Liquid and Gel Fuel-Burning Portable Devices

Definitions.

- *Unvented Liquid and Gel Fuel Burning Portable Device* means an unvented, fuel-burning product that:
    - burns a liquid, gelled, or otherwise non-solid fuel in an open reservoir;
    - sustains a flame over the fuel surface; and
    - is intended to be easily carried or moved by hand.
- *Combustible liquid* means a liquid that has a flash point at and above 100 °F (37.8 °C), as determined by the test method described in ASTM D 3828.
- *Fuel* means a material that is burned to produce light, heat, or power.
- *Fuel-burning feature* means a component intended to contain fuel and intended to produce a flame. Fuel-burning features include non-refillable canisters, refillable canisters with wicks, and integral fuel reservoirs with wicks.
- *Furniture article* means a movable article used to support people or things, such as a bookcase, chair, chest, table, dresser, or desk.
- *Integral fuel reservoir with a wick* means a fuel reservoir with an installed wick or wick media that is part of the device that fuel can be poured into and is designed to allow the fuel to burn.
- *Noncombustible material* means a material that will not combust or ignite under expected usage conditions.
- *Non-refillable canister* means a replaceable fuel container that is intended to allow the fuel supplied within the container to burn, then be discarded upon complete consumption of the fuel. A non-refillable canister may include a wick.
- *Refillable canister with a wick* means a replaceable fuel container with an installed wick or wick media that is required for fuel within the canister to burn.
- *Wick* means a piece of material that draws up fuel to a flame by capillary action.
- *Wick media* means volume-filling material that draws up fuel to a flame by capillary action.

General requirements.

- *Liquid accumulation*. Pourable liquid, gelled, or otherwise non-solid fuel must not be able to accumulate or otherwise pool in any location in the device that is intended to support or hold a fuel-burning feature. The following products are exempt from this requirement:
    - Devices with fuel-burning features that use wicks and are labeled for use only with combustible liquid fuels; and
    - Non-refillable canisters.
- *Material construction*. Devices must only be constructed of noncombustible materials.

- *Labeling*. Devices and fuel-burning features must meet the labeling requirements set forth below.

Labeling and instructions.

- *Warning label content.*
  - Each device must contain the following warning label:

  - Each refillable canister with a wick must contain the following warning label

  - Each non-refillable canister to be used with a device must contain the following warning label:

- Devices with integral fuel reservoirs with wicks must contain the following warning that specifies the type of combustible liquid fuel that will be used with the device: WARNING Only use _____(manufacturer to insert the type of fuel, such as brand name, model name or number) to avoid flash fire.
- *Warning label size and placement.* The warning label must be in contrasting color(s), permanent, conspicuous, and in sans serif style font. A conspicuous label is visible when the unit is in a manufacturer's recommended use position to a person standing near the unit from at least one position around the unit but not necessarily visible from all positions. The safety alert symbol (an equilateral triangle surrounding an exclamation point) and the word "WARNING" must be at least 0.2 in (5 mm) high. The remainder of the text must be characters whose upper case must be at least 0.1 in (2.5 mm) high.
- *Permanency of warning label.* Warning labels must withstand manufacturer-specified indoor and outdoor use conditions, including expected surface temperature and weather. Warning labels, whether paper or non-paper, must be permanent when tested in accordance with the warning label test procedure

below. In addition, the warning label must remain attached and readable if exposed to the supplied fuel contents of the canister intended to be used with the device.

- *Warning label test procedure*.
  - Type of labels:
    - A paper label will be considered permanent if, during an attempt to remove it without the aid of tools or solvents, the label cannot be removed, the label tears into pieces upon removal, or such action damages the surface to which the label is attached.
    - A non-paper label will be considered permanent if, during an attempt to remove it without the aid of tools or solvents, the label cannot be removed or such action damages the surface to which the label is attached.
  - Simulated use and storage conditions: A label will be considered permanent if, during a procedure that simulates the use and storage conditions of the product, it cannot be removed or such action damages the surface to which the label is attached.
- *Instructional literature*.
  - Devices, refillable canisters with wicks, and non-refillable canisters must be accompanied by instructions. These instructions must include assembly, maintenance, cleaning, and operating information. Instructional literature must bear the applicable warning label required by this standard.
  - Devices intended to be used with non-refillable canisters or refillable canisters with wicks must have a statement that specifies the canister size. The instructions must advise that the device should always be placed on a stable and level surface. The instructions must advise that a lit device should never be unattended and must be kept away from objects that can catch fire. The instructions must also advise that the device should be kept away from children.
  - *Warning statements within the instructional literature*.
    - In warning statements, the symbol "⚠"and the word "WARNING" must not be less than 0.2 in. (5 mm) high. The remainder of the text must be in characters whose upper case must be at least 0.1 in. (2.5 mm) high.
    - For devices intended to be used with refillable canisters with a wick, the refillable canisters with a wick must contain the following warning that specifies the type of combustible liquid fuel that will be used with the device: ⚠WARNING Only use ______(manufacturer to insert the type of fuel such as brand name, model name or number) to avoid flash fire.

Performance requirement and test method for static stability.

- *Purpose.* This requirement is intended to eliminate or substantially reduce the risk of injury associated with the unintentional overturning of a burning device.

- *Performance requirement*. When testing the device in accordance with the test method stated below, the device must not tip over.
- *Test method.*
    - *Summary of test method*. A device must be placed on a minimum 20.0° incline to determine if the device remains in a stable, upright position without tipping over.
    - *Apparatus and test materials*.
        - *Incline plane*. The incline plane must either be fixed or adjustable, capable of achieving a minimum of 20.0° from level. The plane may need a stop to help prevent the fire pot from slipping during this test. When a stop is used, the stop's maximum height must not exceed 6.4 mm (0.25 in.). (Figure 1)

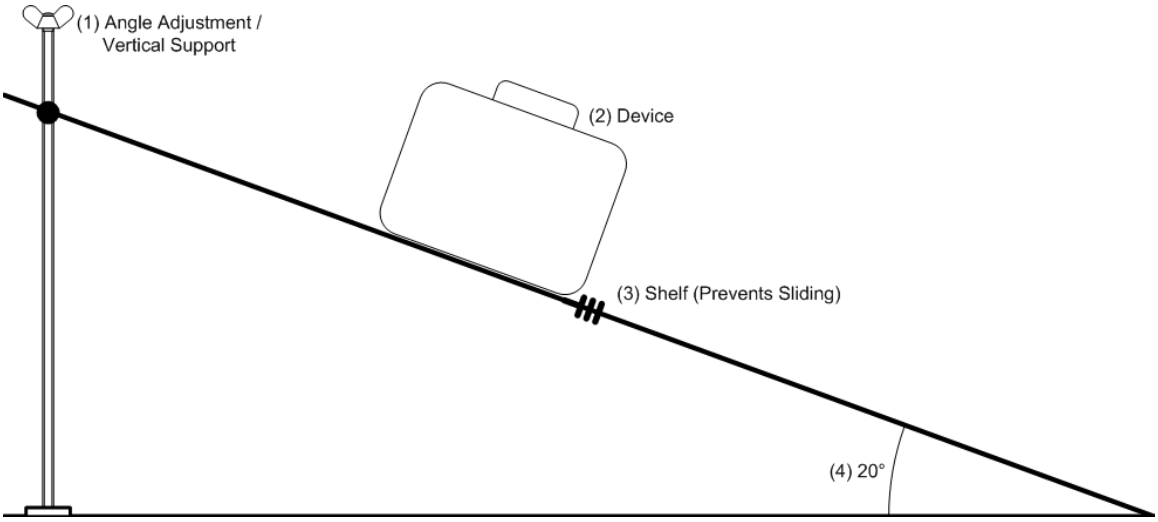

Figure 1. Incline Plane Apparatus

        - *Fuel-burning feature* that is intended to be used with the device.
    - *Procedure*
    - Fuel-burning feature installation
        - For devices that use integral fuel reservoirs with wicks, fill the fuel reservoirs with water until the water surface reaches the top of the reservoir or a permanent maximum fill line.
        - For devices that use refillable canisters with wicks, install the refillable canister with a wick in the device according to the manufacturer's instructions and then fill with water until the water surface reaches the top of the container or a permanent maximum fill line. If the manufacturer's instructions do not specify a non-integral fuel container with a wick, use the largest available size, unused non-refillable canister that fits within the device.
            - Place the device with the fuel-burning feature installed according to above on an incline apparatus at a minimum of 20.0° from level. The device and fuel-burning feature must remain stable and not fall over for 10 seconds.

- If the device is asymmetrical, rotate the device around the device's vertical axis while the device is on the incline apparatus. The device and fuel-burning feature must remain stable and not fall over for 10 seconds in any position