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May 22, 2011

Mr. Todd Stevenson, Director
Office of the Secretary
US Consumer Product Safety Commission
4330 East-West Highway
Bethesda, Maryland 20814

RE: Petition for a Standard, for Gas Fireplaces

Dear Mr. Stevenson,

I am writing in reference to the ANSI Z21.88 standard for Gas Vented/ Unvented Fireplaces. In recent months there has been much talk and media attention focused on the potential for serious burn injury related to the high temperatures reached by the glass fronts of Gas Vented/ Unvented Fireplaces. As you know, the current standard allows the glass front of these units to reach temperatures up to 500° F. At these temperatures, even minimal contact has the potential to inflict significant injury.

Well documented, peer-reviewed, scientific literature clearly states that it takes only one second of direct contact at 158° F to sustain a partial thickness burn injury. Clearly, higher temperatures and longer exposures increase the risk for deeper, full thickness burns. Significant and disabling injuries are a real possibility. The morbidity associated with such injuries is staggering. Burn injuries of this nature often require transferring patients to specialized centers, multiple surgical procedures, physiotherapy and result in lifelong disability and deformity. With more than 2000 documented burn injuries in the NEISS database alone, the problem is real and clear cut.

Mitigation of this risk must be a priority for ANSI, CSA, CPSC and the manufacturers of Gas Vented/ Unvented Fireplaces. To date, proposals to do so have fallen into three main categories:

- Education
- Screens
- High Temperature Warning Systems

Education takes the form of owner's manuals, written instructions and warning labels. Each is

helpful, but none solve the problem. How can we guarantee that Owner's Manuals and Instructions for Use are always read carefully and understood? They rarely pass from one homeowner to the next, and are not available to patrons at restaurants, country clubs, hotels etc. Warning labels may not always immediately obvious to the consumer. Labels can be removed. Fireplaces cannot be manufactured with a permanent warning in place as they are not always hot. Additionally, a warning large enough to be effective would affect the esthetics of the unit.

Screens have been proposed as a means to avoid injury- particularly in the pediatric population. Placing a barricade between the consumer and the fireplace is an odd choice. It does nothing to make the product safer. It also sets a dangerous precedent. If placing a screen in front of a fireplace will decrease the risk of injury, will manufacturers and consumers be required to build walls around barbecue grills, space heaters, outdoor fireplaces, hot plates and cooktops?

A standard that requires a screen is nothing more than "institutionalized baby-proofing". While a screen may be the right choice for some households, legislating its use is unprecedented and unnecessary. Although there are many products available for the purpose of "baby-proofing" one's home, their use is entirely optional and remains a personal choice. Using locks for kitchen cabinets, plugs that block small fingers from exploring electrical outlets and wrapping the sharp edges of a coffee table with diapers are all choices that some parents make. No one can deny that cabinets may contain toxic chemicals, electrical injuries are potentially severe and falling against the sharp corner of a table is painful. But, do we need product safety standards that require their use?

Screens are not fool-proof. A metal screen placed in front of a fireplace will get hot; hot enough to cause injury. Recent tests run by a leading components manufacturer reveal that after 200 minutes of use, the glass front of the unit reached a maximum temperature of 453° F, the maximum temperature of the screen was 249° F.

In order for a screen to be effective, it must be permanently mounted to prevent instability. Unless it is properly mounted, the weight of a child leaning against it can cause it to topple over. In this case, the screen itself becomes another possible cause of injury. Do we install a screen in front of the screen?

As the fireplace industry advances, more and more products are being developed that look less and less like traditional hearths. Fireplaces are now multi-sided, project into rooms, and are mounted high on the wall as works of art. Is the intention to build a screen, barricading the fireplace from the consumer? If so, will the requirement of a screen stifle the design process? How does one construct a screen for a fireplace mounted off the floor and hung on a wall?

If we do not require barricades to be constructed around barbecues, wood-burning stoves, and traditional wood-burning fireplaces, why would we treat a gas vented fireplace differently.

The third and best option is a high temperature warning system that is built into, and is an integral part of the fireplace itself. Using a heat sensor or a timer, a warning system projects a clear "high temperature" alert onto the glass front of the fireplaces that will remain visible from the time the fireplace is lit until the glass is cool enough to touch safely. The warning is projected from the interior of the fireplace, rendering it tamper-proof.

A fully integrated safety system such as this has several advantages over other options:

- All consumers are aware of the significance of a steady or blinking red light. Simply put, this is a universally accepted warning of danger. We see red lights on products every day, and nobody doubts their intent. Their use does not require significant education or re-education of the consumer- it is already a part of our culture. To be clear, not having a red, high-temperature warning light is a significant act of omission at this point.
- An integrated high-temperature warning system addresses the critical time period after the fireplace has been turned off, but remains dangerously hot. Once the flame is extinguished, there is no visual, auditory or olfactory clue indicating that the unit is hot. The warning light will remain on, providing an alert until the glass has cooled to a safe temperature.
- Implementation of a high temperature warning system can be accomplished quickly and easily. The standardized implementation of screens will require testing of various characteristics of the materials used in their manufacture. Their stability, weight bearing, push-pull and transfer of heat are some examples of traits that would require standardization.
- An integrated high-temperature alert is tamper proof
- A warning light does not interfere with the design/ esthetics of the product
- Can be used in conjunction with other educational tools as well as screens.

In short, the addition of an integrated "high-temperature" alert is the only solution that actually fosters the development of a safer product. Other options are merely "work-arounds" that do not address the real issue. If the regulatory agencies that oversee the manufacture and sale of these products see the need to step in and require that the safety risks are addressed, they should require a safer product- not a barricade around an unsafe one.

There is no doubt that all the stakeholders in this conversation want to insure that the gas vented fireplaces are as safe as possible for the consumer. In the past, manufacturers did not have the ability to add a warning light to their fireplaces. There were no good options. However, recent advances in Light Guide Technology have made the addition of a standardized warning a possibility. Just as the design and esthetics of fireplaces continues to evolve, safety technology is evolving as well. Manufacturers now have the ability to offer a standardized high temperature alert that will serve the consumer regardless of the shape, style or design of the fireplace. The evolution of design and safety technology go hand in hand, and must not be separated.

Using a high-temperature warning system does not preclude the use of educational materials or screens. It is, however, the only option for providing a standardized, understandable, tamper-proof warning to the consumer. Screens have been and always will be an option for every consumer. An integrated warning light is the only way to provide important safety information in a clear, concise and universally recognizable way.

I respectfully request that you move quickly to initiate Commission rule-making in order to address and revise the ANSI Z21.88 standard for Gas Vented/ Unvented Fireplaces to reflect the advances in safely technology; specifically, the inclusion of a standardized high-temperature alert.

Thank you in advance for your consideration of this request,

Respectfully yours,

William S. Lerner