

National Consumer League CPSC Docket 2006–0057

My name is Matt Gillen. I am here on behalf of National Consumer League CEO Sally Greenberg – who is traveling abroad and can't be here today. I am a retired safety and health professional working as a consultant to NCL on portable generators and other issues. I will use my time to highlight key issues we describe more fully in our written comments.

1) Introduction

Consumers rely on portable generators when utility-provided power is not available. This includes many emergency settings during or after tornados, hurricanes, wildfires, snowstorms, or other severe weather events.

But portable generators emit carbon monoxide (CO) at levels hundreds of times more than the average car – and CPSC reports about 74 deaths a year associated with their use. Many other cases are non-fatal but involve serious health effects.

We support CPSC's finding that portable generators present an unreasonable risk of injury and death associated with acute carbon monoxide (CO) poisoning.

This rulemaking takes on extra urgency because extreme weather conditions are becoming more common with climate change. Portable generator usage is likely to grow substantially in the years ahead.

We are submitting several suggestions for improving the CPSC proposal.

2) Regulation is preferable to voluntary standards.

Regulations are far superior to voluntary standards for protecting consumers from safety and health hazards of generators. Each of the two

available voluntary standards¹ have significant deficiencies and the CPSC has taken the proper course in combining and strengthening useful features from each.

CPSC surveys have shown that substantial compliance with these standards has not occurred. Even if compliance were better, CPSC must proceed with regulation because the voluntary standards are not likely to eliminate or adequately reduce the risk of injury.

3) The best approach: primary prevention to reduce CO emissions at the source.

Maximize Inherently Safe Design. CO-related deaths and poisonings are preventable. By relying on “inherently safer design” measures these risks can be eliminated “at the source”.²

The primary design measure is to reduce emissions. The secondary design measure is to incorporate CO alarms and mechanisms to shut off generators when CO levels of concern are detected. The CPSC proposed rule appropriately incorporates both measures.

It is important to note that fatal incidents and scenario simulations demonstrate that alarms and shutoff systems, while valuable secondary controls, are insufficient as sole measures to protect consumers from death or serious injury.

Portable generators that feature lower CO emissions are currently on the market. The rule is not prescriptive, and we understand that there are no

¹ (ANSI/PGMA G300–2018 *Safety and Performance of Portable Generators*; and UL 2201, *Standard for Safety for Carbon Monoxide (CO) Emission Rate of Portable Generators, Second Edition*)

² See ISO/IEC Guide 51 for a framework to be used for developing safety standards. ISO/IEC Guide 51. *Safety Aspects – Guidelines for their inclusion in standards*. Third Edition. 2014-04-01 [ISO/IEC Guide 51:2014 - Safety aspects – Guidelines for their inclusion in standards](#).

intellectual property obstacles to wider adoption of the technologies used to lower emissions.

Should bona fide technical feasibility issues arise during CPSC's consideration of these issues, we urge the Commission to be steadfast in pursuing primary prevention strategies. It is better to allow manufacturers additional time for compliance than to compromise inherently safe design requirements.

Minimize reliance on Residual Risk warnings. Portable generators are used in complex and stressful settings often found in the aftermath of severe weather events such as hurricanes, tornados, high winds, flooding, and snow and ice storms. Consumers may have worries about family-member safety or structural damage to their homes or whether they have sufficient food and supplies to last through the emergency. The safer portable generators can be made, the less likely that other distractions, unfamiliarity with the device because of rare use, or errors in attention will contribute to sub-optimal operations related to placement, electrical options, or fueling considerations.

Proposed warnings and instructions must be clear, consistent, and relevant to consumers. For CO poisoning, the most critical message is that portable generators must never be operated inside. The second most critical message is where and how to properly place the portable generator outside. On this point, NCL believes that the proposed rule does not sufficiently address this second critical message. The proposed rule calls for requiring this language:

*“Only use OUTSIDE and far away from windows, doors, and vents.”*³

Our concern is that “far away” does not provide the same clarity as the current warning language used by CPSC itself along with CDC and FEMA

³ ANSI/PGMA G300–2018, *Safety and Performance of Portable Generators*, Figure A1.

– which is to place portable generators at least 20 feet away from the home.^{4, 5, 6}

Without such bright line warnings, we are concerned that competing factors can influence consumers to place generators closer to their homes. Our written comments describe the following examples in additional detail:

Electrical cord length. Our review of several portable generator operating manuals found references to 10- and 15-foot length cords in various tables describing power requirements.⁷ These inconsistent messages could influence consumers to assume that 10- and 15-foot distances are sufficiently “far away” for generator placement.

Rain and wind. Portable generators do not routinely include storage covers yet operating manuals stress that units are not supposed to get wet. Conflicting concerns about operation during rainy and windy conditions can influence consumers to position or re-position generators to more sheltered positions closer to their homes or in garage door openings.

Yard size. Placing a generator “far away” from windows, doors and vents that also does not encroach on a neighbor’s home may be challenging on smaller lots that are common in most cities and some suburbs. Thus, yard size factors can constrain and influence consumers to position generators closer to their homes than recommended.

Theft concerns. Unfortunately, prolonged power outages can lead to hardship conditions and increases in crimes such as thefts and looting.

⁴ CPSC NSN-04-022022 [Carbon Monoxide - The Invisible Killer | CPSC.gov](#)

⁵ CDC Generator Safety Factsheet. WHEN THE POWER GOES OUT, KEEP YOUR GENERATOR OUTSIDE [Carbon Monoxide - Generator Safety Fact Sheet | Natural Disasters and Severe Weather \(cdc.gov\)](#)

⁶ FEMA 2020. Keep Your Family, Pets Safe When Using Generators NR-002 [Keep Your Family, Pets Safe When Using Generators | FEMA.gov](#)

⁷ NorthStar M165601AF.1 Owner’s Manual, p 20; and Duromax XP13000HX User Manual p 47 -Choosing the right power cord.

This includes theft of portable generators. Such concerns may influence consumers to not position portable generators “far away” from the house.

In sum, the intended use for portable generators includes extreme weather events. While strong messages against using portable generators inside are warranted, emissions reduction, improved alarms and shutoffs, and clearer instructions will increase the margin of safety for exterior use of portable generators.

4) Specific comments on the proposed requirements

1281.3 [a] CO Emission Rate Requirements. NCL supports including emission rate requirements (150 g/h) as an essential inherently safe design feature.

1281.3 [c] CO shutoff levels. NCL supports including the lower cutoff levels proposed (400ppm and 150ppm).

1281.3 [g] CO Shutoff Event Notification. NCL is concerned that consumers (both visually impaired and those with normal vision) may not receive a visible message that the generator-mounted CO monitor has detected elevated levels and has shut off the generator. We recommend that requirements for audible indicators be added as well.

1281.3 (j) Marketing, labeling and instructional requirements. NCL supports the proposed changes to strengthen and clarify the instructions. However, NCL believes that the rule needs to go further by explicitly specifying:

- That portable generators be placed at least 20 feet away from homes with a specific section to address finding the best exterior location for the portable generator.
- That power cord instructions do not contradict the 20-foot instruction.
- The steps consumers should take for safe operation during wet conditions.

5) Summary

In conclusion, the National Consumers League strongly supports the promulgation of the rule with noted suggestions for improving specific language. As stated by NCL CEO Sally Greenberg:

“Portable generators help consumers when the power goes out. But they cause an average of 74 carbon monoxide fatalities each year. The good news is that the CPSC proposed regulation will substantially eliminate these preventable deaths. And with extreme weather events surging, time is of the essence to get this done.”

Respectfully submitted,

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