



U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

March 15, 2006

Subj: CPSC Staff Comments on Underwriters Laboratories Draft Outline of Investigation, 2201 *Portable Engine-Generator Assemblies*

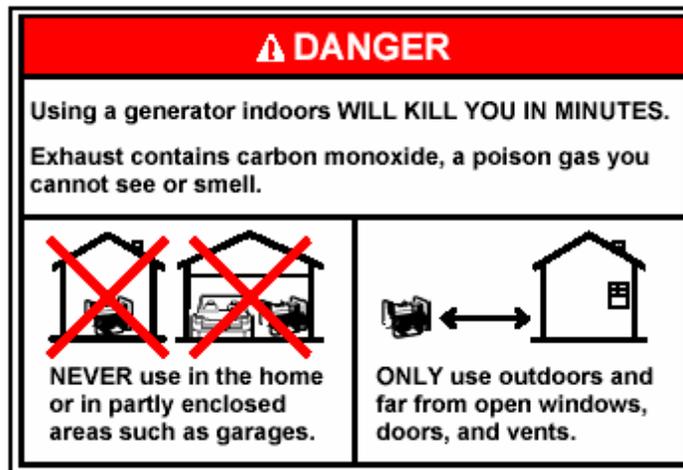
Ref: (a) Draft 2201 *Portable Engine-Generator Assemblies*, Issue number 1
(b) CPSC staff comments on UL's draft Outline of Investigation, 2201 *Portable Engine-Generator Assemblies*, dated February 13, 2006

The items below represent the U.S. Consumer Product Safety Commission (CPSC) staff's recommendations for requirements for the on-product CO hazard label and instruction manual for Underwriters Laboratories' (UL) Outline of Investigation, ref (a). These recommendations supersede those for the equivalent requirements that were presented to UL in ref (b) and discussed with UL during a meeting held on February 14, 2006 at CPSC. Please note that these comments were prepared by the CPSC staff, have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

Staff Recommendations for On-Product CO Hazard Label Requirements

The CO poisoning hazard label illustrated in Figure 1 shall be used on the product.

Figure 1. On-product carbon monoxide poisoning hazard label



A different representation of the generator may be substituted for accuracy if consumers are likely to recognize it as the generator to which this label is affixed.

a.) The signal word “DANGER” shall be in letters not less than 0.15 inch (3.8 mm) high and at least 50% larger than the remaining warning message text. The remaining message text shall be in type with uppercase letters not less than 0.1 inch (2.5 mm) high.

b.) The signal word “DANGER” shall appear in white letters on a safety red background.



The safety alert symbol shall appear immediately before and next to the signal word and be no smaller than the height of the signal word with the base of the triangle on the same horizontal line as the base of the signal word. The solid portion of the triangle (within the lines of the triangle, around the exclamation mark) shall be white and the exclamation mark shall be safety red. The prohibition “X”s shall be safety red.

c.) The on-product hazard label shown in Figure 1 shall be located:

- 1) On a non-removable part of the portable generator, and
- 2) On a location that is visible to an operator while performing at least two of the following actions:
 - Filling the fuel tank
 - Accessing the receptacle panel
 - Starting the engine

d.) The manufacturer may substitute Figure 2 or Figure 3 for Figure 1 where warnings in Spanish are expected to promote safety. Versions in other languages are not permitted for units sold to end users in the United States. The Spanish text shall:

- 1) Include text only (no pictograms included in the separate Spanish panel), and
- 2) Have the signal word “PELIGRO” in letters not less than 0.12 inch (3.0 mm) high, at least 50% larger than the remaining warning message text, but not larger than the English-language portion of the hazard label. The remaining Spanish text shall be in type of which uppercase letters are not less than 0.08 inch (2.0 mm) high, but not larger than the English-language portion of the hazard label, and
- 3) Be formatted as shown in either Figure 2 or Figure 3.

Figure 2. On-product carbon monoxide poisoning hazard label in English and Spanish, vertical format

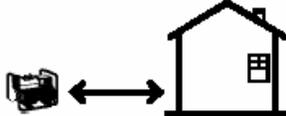
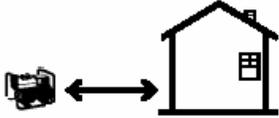
⚠ DANGER	
<p>Using a generator indoors WILL KILL YOU IN MINUTES.</p> <p>Exhaust contains carbon monoxide, a poison gas you cannot see or smell.</p>	
 <p>NEVER use in the home or in partly enclosed areas such as garages.</p>	 <p>ONLY use outdoors and far from open windows, doors, and vents.</p>
⚠ PELIGRO	
<p>El usar un generador en espacios interiores le causará la muerte en unos minutos.</p> <p>Los gases de combustión contienen monóxido de carbono, un gas venenoso que usted no puede ver ni oler.</p> <ul style="list-style-type: none">• NUNCA lo use dentro del hogar ni en lugares parcialmente cerrados tales como garajes.• SOLO úselo al aire libre y lejos de ventanas abiertas, puertas y respiraderos.	

Figure 3. On-product carbon monoxide poisoning hazard label in English and Spanish, horizontal format

⚠ DANGER		⚠ PELIGRO
<p>Using a generator indoors WILL KILL YOU IN MINUTES. Exhaust contains carbon monoxide, a poison gas you cannot see or smell.</p>		<p>El usar un generador en espacios interiores le causará la muerte en unos minutos.</p> <p>Los gases de combustión contienen monóxido de carbono, un gas venenoso que usted no puede ver ni oler.</p>
 <p>NEVER use in the home or in partly enclosed areas such as garages.</p>	 <p>ONLY use outdoors and far from open windows, doors, and vents.</p>	<ul style="list-style-type: none"> • NUNCA lo use dentro del hogar ni en lugares parcialmente cerrados tales como garajes. • SOLO úselo al aire libre y lejos de ventanas abiertas, puertas y respiraderos.

- e.) For on-product hazard labels other than those shown in Figures 1 through 3,
- 1) Each shall be on one or more labels that are physically separate from the CO poisoning hazard label.
 - 2) For those hazard labels using the signal word “WARNING” or “CAUTION”, the signal word shall be in letters not less than 0.12 inch (3.0 mm) high, at least 50% larger than the remaining warning message text, but not larger than the size used for “DANGER.” The remaining text shall be in type whose uppercase letters are not less than 0.08 inch (2.0 mm) high, but not larger than the size used in the hazard label shown in Figure 1.

Staff Recommendations for Instruction Manual Requirements

The instruction manual shall include step-by-step operating instructions. The first step in these operating instructions shall describe where to operate the generator and how to select an appropriate site. The first step in the operating instructions shall also include the following text, at a minimum:

▲ DANGER
CARBON MONOXIDE

Using a generator indoors WILL KILL YOU IN MINUTES.

Generator exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. If you can smell the generator exhaust, you are breathing CO. But even if you cannot smell the exhaust, you could be breathing CO.

- NEVER use a generator inside homes, garages, crawlspaces, or other partly enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air.
- ONLY use a generator outdoors and far away from open windows, doors, and vents. These openings can pull in generator exhaust.

Even when you use a generator correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home.

If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You could have carbon monoxide poisoning.

If there are alternate language translations of the instruction manual, the alternate language versions shall have equivalent translations of the above requirement.