

**Congress of the United States**  
Washington, DC 20515

August 10, 2006

Director R. David Paulison  
Federal Emergency Management Agency  
Department of Homeland Security  
500 C Street SW  
Washington, D.C. 20472

Dear Director Paulison:

We are writing to express concern that many displaced Katrina evacuees are being exposed to hazardous levels of formaldehyde gas in their FEMA-issued trailers. In providing housing for evacuees, FEMA has a responsibility to ensure that such housing does not threaten the health and safety of evacuees by exposing them to unnecessary health risks.

In May, a public interest group conducted indoor air testing in FEMA-issued trailers in Louisiana and Mississippi to investigate reports from Katrina evacuees experiencing a variety of respiratory problems associated with formaldehyde exposure.<sup>1</sup> These tests revealed that 94 percent of the trailers tested had indoor levels of formaldehyde in excess of levels that the Environmental Protection Agency (EPA) and Consumer Products Safety Commission (CPSC) have identified as triggering adverse health effects in humans.<sup>2</sup> While the EPA and CPSC guidelines identify adverse health impacts at 0.1 ppm, several trailers exhibited formaldehyde levels more than three times above that level. Formaldehyde exposure, even at low levels, can trigger coughing, wheezing, and other respiratory ailments, while continuous exposure to the gas can trigger attacks in asthma sufferers.<sup>3</sup> In addition, the International Agency for Research on Cancer classifies formaldehyde as a known human carcinogen.<sup>4</sup>

FEMA-issued travel trailers appear to have been built with pressed wood products containing formaldehyde. The chemical “gasses off” from wood products containing formaldehyde-based adhesives and then mixes with the indoor air. This process is more likely to

---

<sup>1</sup> Sierra Club, *Toxic Trailers? Tests Reveal High Formaldehyde Levels in FEMA Trailers* (May 2006) (online at [http://sierraclub.org/gulfcoast/formaldehyde\\_test.pdf](http://sierraclub.org/gulfcoast/formaldehyde_test.pdf)).

<sup>2</sup> See, Sierra Club, *Toxic Trailers? Tests Reveal High Formaldehyde Levels in FEMA Trailers* (May 2006); EPA, *Sources of Indoor Air Pollution- Formaldehyde* (online at <http://www.epa.gov/iaq/formalde.html#Health%20Effects>); Consumer Product Safety Commission, *An Update on Formaldehyde* (1997) (online at <http://www.cpsc.gov/cpscpub/pubs/725.pdf>).

<sup>3</sup> EPA, *Sources of Indoor Air Pollution- Formaldehyde*; Consumer Product Safety Commission, *An Update on Formaldehyde* (1997).

<sup>4</sup> International Agency for Research on Cancer, *IARC Classifies Formaldehyde as Carcinogenic to Humans* (June 2004) (online at: [http://www.iarc.fr/ENG/Press\\_Releases/archives/pr153a.html](http://www.iarc.fr/ENG/Press_Releases/archives/pr153a.html)).

occur in hot and humid environments. The recent testing indicates that the toxic chemicals are mixing with indoor air at unsafe levels in many trailers. As we are now in the midst of the hottest months of the year, the exposure levels may well be even higher than indicated in the May tests.<sup>5</sup>

The Department of Housing and Urban Development (HUD) regulates formaldehyde levels in mobile homes and other prefabricated dwellings, but travel trailers are not covered under the governing regulations.<sup>6</sup> As a result, it appears that there has been little if any scrutiny of the human health risks associated with long term domicile use of the FEMA-issued trailers.

To better understand the scope of the problem, as well as FEMA's response, please provide the following information by August 23, 2006:

1. Was FEMA aware of potential for formaldehyde exposure when FEMA ordered the trailers? If so, what assessment did FEMA make of the risks? Did FEMA consider the potential impact of heat and humidity on formaldehyde levels in evacuees' trailers?
2. Did FEMA consider purchasing trailers that did not contain formaldehyde-emitting materials? Did FEMA consider purchasing trailers that meet the HUD standards for mobile homes and other prefabricated dwellings, to protect against risks that are likely to be associated with long term residence in the trailers? If not, why not? How much additional cost, if any, would have been incurred if FEMA had purchased trailers that either did not contain formaldehyde-emitting materials or met the HUD standards?
3. Does FEMA have any information regarding whether the manufacturers of FEMA-issued trailers took manufacturing shortcuts in the rush to get the trailers to evacuees?
4. What information does FEMA have on the scope of the problem, in terms of the number of trailers affected, the number of evacuees affected, and the formaldehyde levels they are being exposed to? Has FEMA conducted any additional testing? If so, please provide those results. If not, why not?

---

<sup>5</sup> See Consumer Product Safety Commission, *An Update on Formaldehyde* (1997) ("As the temperature rises, more formaldehyde is emitted from the product. The reverse is also true; less formaldehyde is emitted at lower temperature. Humidity also affects the release of formaldehyde from the product. As humidity rises more formaldehyde is released").


<sup>6</sup> See 24 CFR § 3280.308 (2006).

Acting Director R. David Paulison  
August 10, 2006  
Page 3

5. What is FEMA's assessment of the health risks to the residents of these trailers? Please explain the scientific basis for that assessment.
6. How is FEMA addressing this problem? Is FEMA proactively informing evacuees of the risks associated with exposure? If so, what information is FEMA providing? Is FEMA offering to test trailers upon a resident's request? Is FEMA offering to move evacuees from trailers with formaldehyde levels above the EPA and CSPC guidelines? If FEMA is not taking any of these actions, please explain why not.
7. In the future, will FEMA purchase more travel trailers to house either Katrina refugees or future new disaster refugees? If so, what steps will FEMA take to ensure that any trailers purchased in the future will not have this problem?
8. Please provide all documents in FEMA's possession that relate to the issue of formaldehyde levels in FEMA-provided trailers.

Thank you for your prompt attention to this very important matter.

Sincerely,

  
Henry A. Waxman  
Member of Congress

  
Charlie Melancon  
Member of Congress