U.S. Department of Homeland Security Washington, DC 20528



July 13, 2007

The Honorable Gene Taylor U.S. House of Representatives 2269 Rayburn House Office Building Washington, DC 20515-2405

Dear Representative Taylor,

You recently received communication from Dr. Julie Gerberding, Director of the Centers for Disease Control and Prevention (CDC) regarding formaldehyde in travel trailers. The *Clarion-Ledger*, in Jackson, characterized that letter as saying, "There's little the federal government can do about the possibility that elevated levels of formaldehyde in hurricane trailers are making people sick...." While it is true that the relationship between formaldehyde, indoor air quality, and illness has been vexing health and environmental professionals for over thirty years, the fact remains that the Federal Emergency Management Agency (FEMA) and the entire Department of Homeland Security (DHS) are committed to ensuring that victims of disasters have a safe and healthy place to live during the recovery period. In fact, we had initiated discussions to address this very issue with CDC prior to Dr. Gerberding's letter to you.

In response to a series of concerns regarding formaldehyde in 2006, FEMA asked CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) to investigate formaldehyde levels in federally provided travel trailers used as emergency portable housing after disasters. As you may know, formaldehyde is a substance that is ubiquitous in today's environment, and is even, in small levels, a normal by-product of biological processes in the human body. At higher levels, especially indoors, formaldehyde can be irritating to the respiratory system, and chronic exposure to high levels has suspected, but unproven, long term health effects. The subject is complicated by the fact that, despite over 30 years of research, no agency has ever been able to determine a safe or unsafe level in residential indoor air. Even in "occupational" settings, estimates of "safe" levels are widely divergent. This remains a complex issue.

Formaldehyde, an important component of many manufacturing processes, is present in many building components used in trailers and other housing. It is also present in many items that residents often bring into the trailers and is a by-product of many activities of daily living, including cooking and smoking. Consequently, last summer, ATSDR used trailers in storage to attempt to determine levels that the trailers, themselves, are responsible for, as opposed to formaldehyde that may be coming from other sources. The results of the study showed that adequate ventilation could reduce the formaldehyde to levels that seemed reasonable based on the best available published studies and standards (again, these were not studies or standards regarding residential air quality as that data does not exist). Information on the results and guidance for ventilation was provided to the residents of the trailers. Additionally, for those residents who still suffered from sensitivity despite the recommendations, FEMA put in place a program to "swap out" newer units, which are known to "off-gas" higher amounts of formaldehyde, for older units which will have lower levels.

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Subsequent anecdotal experience, especially from physicians caring for residents of trailers, has raised further questions about the formaldehyde levels and questions the practicality of the ventilation advice, especially in the Gulf Coast region in the summer. Based on this, FEMA asked the DHS Office of the Chief Medical Officer to assist in working with CDC to determine the best scientifically valid approach to get to the root of the problem as rapidly as possible, with the primary goal being the health and safety of those who are still in travel trailers as temporary housing.

Earlier this month, DHS officials, including FEMA, met at CDC in Atlanta with representatives of the National Center for Environmental Health, the Agency for Toxic Substances and Disease Registry, and the National Institute for Occupational Safety and Health. Subsequent phone conferences have included representatives from the National Institute for Standards and Technology. The goals of these discussions have been to develop a strategy to rapidly determine actual indoor air quality conditions in occupied units, to determine a scientifically valid target for air quality improvement, and to assess engineering solutions that can achieve those levels.

DHS, including FEMA, fully agree with Members of Congress and the public that there should be a thorough investigation in the relationship between indoor air quality in the trailers and any health effects. CDC estimates that an investigation of that type would take at least a year. Neither DHS nor the residents can wait that long for those results before taking action.

Consequently, the investigation will take a two-phased approach, with an initial rapid study as outlined above, and a more in-depth prolonged study to give us a better understanding of the complete issue. This work will be initiated using multiple Federal partners working together to provide decision makers and the trailers residents with a good plan, as soon as possible.

We will continue to provide you and your staff with the latest updates on our group's findings. Please do not hesitate to contact us if you have any further questions.

R. David Paulison Administrator

Federal Emergency Management Agency

Jeff Runge, MD Assistant Secretary for Health Affairs

(Acting)

and Chief Medical Officer