

March 24, 2008

Representative Brad Miller
Chair, Subcommittee on Investigations & Oversight
House Science & Technology Committee
B-374 Rayburn House Office Building
Washington, DC 20515

Re: Formaldehyde & FEMA provided mobile home trailers

Dear Chairman Miller:

First of all let me applaud you and members of the committee for your efforts in behalf of the people of our national community.

By way of introduction, let me present some of my credentials. I am Professor emeritus University of Minnesota Medical School and a member of the board of directors' of the American Board of Toxicology. In my role as director of the environmental pathology program my team and I conducted several of the early investigations of the human effects of formaldehyde present in the ambient air of mobile homes. We also conducted some of early studies on the human and in vitro genotoxic effects of formaldehyde. Later, I was one of three peer reviewer's who evaluated ATSDR's 1999 Toxicologic Profile on Formaldehyde.

Recently, I was asked by your technical staff to review and comment on some recent ATSDR documents arising from agency response to FEMA needs and queries regarding formaldehyde in air levels in the mobile home/trailers. There are two ATSDR reports, an initial one dated February 1, 2007 and a more comprehensive report dated October 2007. There is also a medical advisory guidance document titled "Formaldehyde (HCHO) CAS 50-00-0; UN 1198, UN 2209 (formalin)

The initial report sets a "level of concern" at 0.3ppm based on a study noting that wheezing occurred among "sensitive" persons at that formaldehyde level. In the occupational setting where exposure to formaldehyde is for the most part short term or incidental the ambient air formaldehyde level suggested in appropriate. The level of They leave no margin of safety for long term effects nor do they take into account that unlike occupational exposures this is a 24 hr per day 7 days per week exposure for children and the old who are sensitive to the chemical for different reasons. For example, children under age 2 have a short trachea and breathe faster than adults(30-40 breaths per minute), therefore, process more formaldehyde into the body and are probably less efficient in the metabolism of the chemical. For these reasons the chemical is more toxic in young children. In their measurement data there was little or no mention of factors like temperature and humidity critical to the level of offgassing of the chemical into the air. More appropriate is the ATSDR minimal risk level for 1 year of 0.03 ppm. This level of exposure takes into account daily and seasonal variation in offgassing of formaldehyde from chipboard and other products used in fabrication of mobile homes.

Release of formaldehyde from these products is temperature humidity dependent. More importantly for potential residents; as the mobile home/trailers age less of the gas is given off due to decreasing levels of the residue in the product.

The second report dated October 2007 was what I had come to expect from an ATSDR work effort. Page 10 of that report gives the appropriate safety factors and levels of exposure vs duration allowable for formaldehyde particularly in the context of residential (chronic) formaldehyde exposure. The field exposure assessments conducted and reported are appropriate tests of the levels to be expected in these newly fabricated residential trailers.

Finally, the medical advisory guidance provided was designed for emergency response in an occupational or formaldehyde spill incident exposure. The signatories of the first report were junior individuals who were part of an emergency response team. Their report and the guidance provided reflects that perspective. Unfortunately, residential exposure does not fit this context. EPA is quite familiar with residential exposure to a wide variety of indoor air pollutants as are more senior individuals within ATSDR. Lack of communication and peer review contributed to this inappropriate ATSDR response.

Sincerely,

Vincent F. Garry.,MD.,MS.,DABT

PS: CV attached