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Toxic Trailers

TESTS REVEAL HIGH FORMALDEHYDE LEVELS IN FEMA TRAILERS

MORE THAN 120,000 FAMILIES who lost their homes in Hurricane Katrina on August 29, 2005 were housed in Federal Emergency Management Agency (FEMA) trailers in Mississippi and Louisiana at one point. After receiving reports from residents of serious indoor air quality problems that were causing conditions such as burning eyes, throat irritation, headaches and bloody noses, Sierra Club began testing for formaldehyde in April 2006.

Sierra Club testing of the trailers in 2006 and again in 2007 showed high levels of formaldehyde in about 88 percent of the RVs and mobile homes being used to house disaster victims. Subsequent testing by the Environmental Protection Agency (EPA) in October 2006 and then by the Centers for Disease Control and Prevention (CDC) in late 2007 confirmed the high levels of formaldehyde (Source: www.cdc.gov/nceh/ehhe/trailerstudy). In early 2008 FEMA and the CDC announced that levels of the toxic gas were high enough to warrant moving all residents out of the trailers before the hot summer period when formaldehyde out-gassing is worst due to high temperatures and humidity.

Formaldehyde is a gas found in particleboard, flooring materials, glues and adhesives in the cabinetry, bunk beds and bench seats of

camper trailers. Formaldehyde is listed as a carcinogen by the U.S. government and exposure at high levels over a prolonged period of time may cause cancer.

SIGNS/SYMPTOMS OF FORMALDEHYDE POISONING

The signs and symptoms of formaldehyde exposure, and subsequent toxicity, range from watery eyes, burning sensations of the eyes, nose, and throat to coughing, wheezing, nausea and rashes. Additionally, adverse effects on the central nervous system have been reported by individuals with long-term exposure to formaldehyde. These symptoms include headaches, depression, fatigue, and impairment of memory (Source: www.atsdr.cdc.gov/MHMI/mmg111.html - Note: ATSDR=Agency for Toxic Substances and Disease Registry).

People with existing respiratory conditions such as asthma, chronic obstructive pulmonary disease (COPD) and emphysema may be at increased risk of reacting to formaldehyde. Formaldehyde is highly toxic to fetuses and can cause birth defects. Adults exposed to formaldehyde can develop chronic fatigue and a lupus-like illness. Mold and bacteria associated with water leaks and increased humidity can also cause serious health problems for trailer residents (Source: www.drthrasher.org/research.htm).



LARGE NUMBERS OF SURPLUS FEMA TRAILERS have been stored at locations like the airport in Hope, Arkansas. Yet, because of formaldehyde problems, FEMA has little in the way of safe emergency housing to offer to victims of natural disasters.



A SIERRA CLUB VOLUNTEER demonstrates the use of a badge to test formaldehyde levels in her FEMA trailer.

HOW WIDESPREAD IS THE PROBLEM?

The FEMA trailers created a “perfect storm” for formaldehyde. Hot, humid weather increased the off-gassing. Bad ventilation concentrated the exposure. And an irresponsible federal government ignored pleas for help. Now FEMA trailers have been spread across the country, sold at deeply discounted prices or donated to local governmental bodies.

But the problem is not restricted to FEMA housing; FEMA has said it only purchased what was available for sale to the general public. Manufacturers claim they used the same processes to make FEMA trailers as they did to make units for sale to the general public. The FEMA trailers merely exposed a problem that has gone largely unnoticed in the U.S. for decades. Many people who have tested their private RV’s have found high levels of formaldehyde (see blogs at www.toxictrailers.com). And a number of people have been poisoned by formaldehyde in their offices and in temporary classrooms.

Sierra Club believes that all people should be protected from excess levels of formaldehyde. So the Sierra Club has joined with more than 5,000 individuals in all 50 states to petition the EPA to adopt nationwide standards for formaldehyde similar to the California Air Resources Board formaldehyde standards that went into effect in April 2008 (see www.sierraclub.org/toxics).

WHAT SHOULD BE DONE TO AN AREA WITH ELEVATED LEVELS OF FORMALDEHYDE

Formaldehyde levels can be reduced in existing trailers and homes by:

- Bringing fresh, clean air into the trailer. If you exhaust the air without providing a steady supply of fresh air, you could make

the problem worse by pulling in contaminated air from the walls, attic space or crawlspace. Install a fan to bring fresh air into the trailer. If your air handler or furnace has this option built in, set it for maximum outside air.

- Reducing humidity levels through the use of air conditioners and dehumidifiers (Source: www.cancer.gov/cancertopics/factsheet/Risk/formaldehyde).

And, exposure can be reduced by staying out of the contaminated building as much as possible.

WHAT CAN HEALTH CARE PROVIDERS DO?

Health care providers can provide supportive measures to those who have been exposed to elevated levels of formaldehyde. These include decontamination (flushing of the skin and eyes with water), administration of oxygen, and even intravenous sodium bicarbonate and/or isotonic fluid depending upon level of exposure and symptoms (Source: www.atsdr.cdc.gov/MHMI/mmg111.html). Additional advice for health care professionals can be found at <http://www.cdc.gov/nceh/ehhe/trailerstudy/#7>.

WHAT SHOULD BE DONE IF YOU SUSPECT FORMALDEHYDE IN YOUR HOME, OFFICE OR SCHOOL?

Consider ordering a test kit to determine if you have high formaldehyde levels. If you are in a FEMA trailer, request assistance to find alternative housing. FEMA is buying back trailers sold to residents. To request a buyback of a FEMA trailer, call 1-866-562-2381.

TESTING KIT

Cost and Ordering Information

Formaldehyde testing kits may be ordered from various vendors, including:

Advanced Chemical Sensors, Inc.
3201 N. Dixie Highway
Boca Raton, FL 33431-6056
Phone: (561) 338-3116
Fax: (561) 338-5737
www.acsbadge.com

Cost: \$39/kit

Once you collect the sample, send it back to Advanced Chemical Sensors in the envelope provided. Analysis is included in the cost of the kit. You will receive results in 48-72 hours. Results will be either faxed or mailed to you depending upon your preference.