

**Testimony before the House Committee
on
Oversight and Government Reform**

**Statement of Jim Shea
Chairman, Gulf Stream Coach, Inc.**

July 9, 2008

Good Morning Chairman Waxman, Ranking Member Davis, and Members of the Committee. My name is Jim Shea, and I am Chairman of Gulf Stream Coach, Inc. I appreciate the opportunity to be here today to provide testimony and to respond to the Committee's questions regarding travel trailers that our company produced and sold to the government following the Gulf Coast hurricane of 2005.

Gulf Stream is a small town American manufacturer committed to manufacturing safe and quality products for its customers. Our family has built Gulf Stream's reputation over 25 years by serving its customers, and safety is a key component to our success. The Gulf Stream travel trailers sold to FEMA were no exception. In a time of national crisis, we engaged our resources and made additional investments, and our employees worked as hard as possible on a very tight schedule so that Hurricane Katrina victims could return to their family, friends, and neighborhoods to begin rebuilding their lives.

At Gulf Stream, we build quality products because of who we are and what we stand for as a company. Members of the Committee, we all share

the same concern today, as we did before and after Hurricane Katrina, for the families of the Gulf Coast.

As you requested, this morning I will address the issue of FEMA travel trailers, including Gulf Stream's role in providing emergency shelter for hurricane victims and what the company has done to address the reported concerns about formaldehyde emissions. But first, I would like to tell you a little bit more about our company.

Gulf Stream is a family owned manufacturer of recreational vehicles. In just 25 years, Gulf Stream has become one of the leading recreational vehicle (RV) manufacturers in the country and a top employer in Northern Indiana. In its manufacturing plants, Gulf Stream now makes more than 100 models and 26 brands of motor homes and towable RVs. All of us at Gulf Stream take great pride in the fact that our travel trailers are built by a group of hard working, dedicated Americans in the heartland of our nation.

This success would not have been possible had it not been for the vision and hard work of my father, James F. Shea, Sr. After serving his country in the Air Force, working for the U.S. Treasury Department, and running a law practice in Detroit, my father moved our family to northern Indiana.

It was out of an old, abandoned sauerkraut factory in the small Amish community of Nappanee, Indiana, that my father embraced his entrepreneurial spirit when he started to produce factory built homes.

Twelve years later my father began manufacturing RVs. Gulf Stream has always been a family affair, and my brothers Brian and Dan have worked with me to build Gulf Stream into what it is today. Although my father has since passed away, my brothers and I have done our best to ensure

that the quality products manufactured by Gulf Stream represent the hard work and ideals of our family and our Midwestern roots.

Gulf Stream has achieved a lot over the past 25 years, but we never foresaw the role we would eventually play in our government's response to the largest natural disaster in our nation's history.

I have traveled to the U.S. Gulf Coast and witnessed the struggles of those left homeless by the flooding that followed the storm. Like all Americans, we were concerned and frustrated by the apparent difficulty in responding to our nation's largest national disaster. While the first wave of government aid and relief was only beginning to trickle into New Orleans, many Americans were finding ways to mobilize their own resources to help. At Gulf Stream, we were already hard at work doing our part in the national relief effort by manufacturing travel trailers even before we signed the contract with FEMA. Further, because the community wanted to help those affected by the hurricane, care packages were provided with some of the travel trailers.

Just two days before Katrina hit the U.S. Gulf Coast, Gulf Stream received an urgent call from FEMA to provide 25,000 emergency travel trailers to house probable hurricane victims.

At the time Gulf Stream received FEMA's call, my brothers and I were traveling and thus unaware of FEMA's request. In our absence, our Vice President agreed to supply 25,000 units. Later that week, Gulf Stream was asked by FEMA to put in a bid, which FEMA also accepted, for an additional 25,000 units.

We believe that the fact that Gulf Stream's travel trailers are of such high quality that they can withstand delivery by rail was critical to FEMA

selecting our company to assist with its relief operations. Rail travel is the best delivery method in most disaster scenarios, since it poses the fewest infrastructure delays. We met FEMA's critical needs because at the time we were the only RV manufacturer with the ability to ship by rail. Unlike other manufacturers, Gulf Stream had already made the structural improvements necessary to enable our units to withstand the rigors of bolt down rail transport, making our product easier to transport to the devastated Gulf Coast region.

FEMA was also familiar with Gulf Stream's long history of indirectly supplying emergency travel trailers to the Agency through various independent dealers. In 1992, FEMA used Gulf Stream products as temporary housing for the victims of Hurricane Andrew. Almost every year since, Gulf Stream has responded to similar disasters, cementing its reputation for a quality product. In 2004, when hurricanes ravaged the coasts of Florida and Mississippi, Gulf Stream was able to manufacture more than 7,000 travel trailers in less than the regular manufacturing time. Because we were manufacturing the same type of trailer, we were able to produce trailers efficiently and timely, while maintaining our quality standards. The difference in response to Hurricane Katrina was that FEMA contacted Gulf Stream directly.

FEMA's travel trailer specifications for the Gulf Coast 2005 hurricane relief were the same specifications FEMA used in 2004 disaster relief but required the ability to be moved by rail. The specifications did not include any requirements with respect to formaldehyde emission levels, wood products, HUD standards, etc. In addition to the travel trailers sold directly to FEMA under these contracts, FEMA purchased some Gulf Stream travel

trailers from independent dealers' existing inventory. Those units, plus many additional units from various other manufacturers that were purchased from dealer lots, had been previously manufactured and were available for purchase by the general public prior to Hurricane Katrina.

Gulf Stream began ramping up production capacity and realigning our plant operations immediately. After securing the first contract, we hired more than 300 additional workers in the first month at our Indiana plants and dedicated nine facilities to meet the demand.

At this point, let me recognize the extraordinary efforts of our dedicated employees: they deserve a great deal of credit for their role in producing up to 200 units per day and nearly 3,000 travel trailers in the first four weeks alone. They worked long, hard hours, often taking time from their families, and foregoing scheduled vacations so that they could complete all of the units within a very short timetable.

Gulf Stream took particular care to provide a safe and quality product for the hurricane victims who would be residing in our travel trailers while they were rebuilding their homes.

The travel trailers were built on a wooden frame covered in white aluminum siding. Inside was an eating area, including a gas stove, kitchen table, refrigerator and double-sink. Each travel trailer also had basic sleeping quarters, including an adult-sized bed and a set of bunk beds. Additional amenities included sewer, water and electric hook-ups, a toilet and shower, and an air conditioning unit.

Gulf Stream is proud of our quality and safety record. The travel trailers sold to FEMA were no exception. We designed our FEMA units with four egress windows instead of the required minimum of two. The

extra egress windows, among other things provided more ventilation and well-located exits in case of emergency.

Each FEMA unit underwent a special series of factory inspections of all life safety systems. The systems tested included electrical, gas supply, smoke detection, and carbon monoxide detection.

It is important for the Committee to understand that FEMA inspectors were on site at our Indiana plants during the manufacturing process. Before FEMA took possession of the units, additional inspections were performed by Gulf Stream representatives and FEMA inspectors at the hurricane-zone staging areas.

In all, Gulf Stream manufactured 50,000 units to provide much needed emergency housing for Hurricane Katrina victims. My brothers and I are very proud that our company was able to play such a critically important role in the post-Katrina relief effort, while also meeting the tough challenge of producing such a large number of quality emergency travel trailer units in such a short period of time.

While Gulf Stream is proud of our travel trailers' outstanding safety record, we remain concerned about health issues of the Hurricane Katrina victims.

It is important to understand that formaldehyde is not purchased or used directly by Gulf Stream for the production of travel trailers. The same is true with respect to the travel trailers produced and sold to FEMA following the Gulf Coast hurricanes of 2005, i.e., formaldehyde was not applied or otherwise used, in either its liquid or gaseous form, by Gulf Stream during the production of any travel trailers.

Formaldehyde is usually present in small amounts in materials used in the production of travel trailers for FEMA, as well as in the ordinary production of units for the general public. In fact, formaldehyde is present to some degree in many wood and other consumer products used in travel trailer construction and in other industries such as home building, home remodeling, cabinet making, and furniture making. Reportedly, formaldehyde has apparently been in widespread commercial use for almost a century and is considered to be one of the most common binding agents used in manufacturing. In addition to manufacturing, we understand that formaldehyde is also present in common, everyday products used in the home, ranging from toothpaste to coffee and from shampoos to food products.

According to numerous published reports, formaldehyde is an organic, naturally occurring substance that is produced by all living organisms, including humans, is naturally present in the bloodstream, and is exhaled in human breath.

Gulf Stream has continually sought ways to provide quality products for its government, corporate, and individual customers. These efforts included specifying to suppliers that we receive low formaldehyde emitting products. It is important to note that, even as of this writing, there are no federal standards governing formaldehyde emissions in travel trailers. I raised this point just recently with a representative of the Center for Disease Control and Prevention (CDC) during an April 2008 meeting with manufacturers. He confirmed that fact, emphasizing that there is no U.S. Government standard for formaldehyde for indoor air in residences. The lack of such a standard leaves manufacturers like Gulf Stream, which

understandably have no special training or expertise regarding formaldehyde levels and their effects, with no clear and definitive guidance on this issue.

Despite the lack of any government requirement, Gulf Stream, on its own initiative, has done its best to address this issue. Our company has a long-standing policy to purchase wood products that satisfy the HUD low formaldehyde emission (LFE) levels for manufactured housing, even though compliance with the HUD standards is not required in the manufacture of travel trailers. Several aspects of Gulf Stream's design and manufacturing processes improve travel trailers' ventilation, which is important in lowering formaldehyde levels. According to government reports, properly ventilating a travel trailer during its initial months of habitation can reduce levels of formaldehyde in the building products.

There were at least two significant aspects of Gulf Stream's travel trailer design that increased ventilation beyond what was required by the FEMA specifications:

- Gulf Stream's travel trailers included four full-tilt windows meeting egress requirements. In addition to qualifying as points of egress, the windows in Gulf Stream's units open more widely than many other types of windows and allow maximum ventilation of units even during inclement weather; and
- The company provided a power range vent in the kitchen and a power vent fan in the bathroom of its units.

In short, we believe Gulf Stream took advanced steps to ensure improved indoor air quality in its products, including the travel trailers sold to FEMA. Despite those efforts, other factors may have affected formaldehyde emissions in post-Katrina emergency housing. The urgency

of FEMA's post-Katrina requirements may have been a factor. At FEMA's request, most of these travel trailers were produced and delivered to hurricane victims in unusually short periods of time, in which FEMA may not have allowed time for airing out prior to occupancy.

Emergency travel trailers were neither designed nor intended for permanent or long-term housing. In the wake of Hurricane Katrina, however, these short-term shelters for hurricane victims became long-term residences.

Gulf Stream received its first complaint regarding formaldehyde emissions in a FEMA travel trailer in March, 2006. We did our best to address the complaints and investigate and resolve the concerns of FEMA and its occupants. We are diligent and are known for our customer service; as such, we were as proactive as possible in our response. Gulf Stream took the following steps:

First, we sought information regarding complaints received by FEMA. We spoke to the FEMA employees with whom we were working in the affected areas, as well as in Washington, D.C.;

Second, we directed Gulf Stream employees to attempt to address the few complaints Gulf Stream received regarding its travel trailers, but were ultimately instructed by FEMA that Gulf Stream should not communicate directly with occupants of travel trailers it manufactured;

Third, we gathered information on ways to identify and reduce levels of ambient formaldehyde in travel trailers;

Fourth, we provided FEMA representatives with information related to ventilation of travel trailers and other measures to increase ventilation;

Fifth, we offered to participate with FEMA in joint testing of the travel trailers with FEMA. FEMA never accepted that offer; and

Sixth, we offered to share with FEMA the results of some informal formaldehyde screenings of occupied travel trailers that one of our employees had performed in March and April 2006 in anticipation of litigation that would follow the stories of formaldehyde reports in the press. Gulf Stream rented a formaldehyde screening device and the employee brought it with him on a customer service trip to St. Bernard Parish, where he located and spoke to several residents about warranty issues and if they experienced or had concerns about odors, and took readings in their trailers. It is important to understand that the Gulf Stream employee who conducted these screenings is not a scientist and had no training or prior experience on the use of the screening device or any others. He reported that the results he was obtaining at times varied dramatically and were erratic, even within the same unit. After his trip, the employee determined that he had failed to follow the operating instructions for the device. That said, although the screening results were not scientific and not reliable, we offered to share these informal screening results with FEMA in May 2006. That offer was never accepted by FEMA.

On May 17, 2006, FEMA specifically advised us NOT to directly contact occupants. The agency told us it had the means to address occupant concerns and that it would let us know if it wanted our assistance. In

addition, FEMA said that it had field staff and contractors on the ground who could handle the situation. Although we were limited in terms of direct contact with occupants, we continued to advise FEMA local staff on technical issues and informed upper-level FEMA staff of developments and of our continued willingness to work with them in addressing ventilation in our units.

For example, Gulf Stream wrote to FEMA during 2006 to inform FEMA about the Fan-Tastic vent, which could be installed in travel trailers and would increase ventilation rates, even beyond the already substantial ventilation already available in the unit. An internal email from a FEMA employee, which is posted on this Committee's website, reports that Gulf Stream was "working closely with FEMA to resolve the formaldehyde problem" and had "offered to install an exhaust fan" in units for sensitive individuals who had complaints that related to formaldehyde. Despite Gulf Stream's offers to assist, throughout the Summer of 2007, FEMA advised Gulf Stream that FEMA had a procedure in place to address occupant complaints by relocating the occupant to a different travel trailer. FEMA also advised Gulf Stream that it had received very few occupant complaints regarding formaldehyde. To our knowledge, our suggestions regarding use of such mitigation measures as additional ventilation fans, air purifiers, and air exchangers, for the benefit of particularly sensitive individual occupants, were not implemented by FEMA.

As I mentioned, there are still no federal formaldehyde standards applicable to travel trailers. Since there is no current standard, we at Gulf Stream have taken it upon ourselves to adopt a more stringent standard for product formaldehyde emissions in all RVs that we manufacture. In the

2007, we voluntarily adopted the standard for formaldehyde emission levels proposed by the California Air Resources Board, also known as CARB. The Recreation Vehicle Industry Association (RVIA) has followed our lead and has recently set this standard for all of its members effective, January 1, 2009.

Gulf Stream is the first RV company to receive a third-party certification of our applicable wood materials control processes and related verification testing by PFS Corporation. Gulf Stream has been converting to the use of CARB emission wood products since May 2007. By the end of the year, this conversion was substantially complete. In March of 2008, we received a third-party certification attesting to the effectiveness of our material acquisition systems for these types of products, including work processes, documentation, and verification.

Finally, the Committee requested that we address the results, published in February, 2008, of travel trailer testing conducted by CDC. Just last week, CDC released two additional studies. As the Committee is aware, our business is manufacturing. We are neither scientists nor experts in the analysis of formaldehyde levels and their potential effect on human health. By necessity, our comments regarding the work of CDC in this area are limited to our reading of the data and conclusions put forth by CDC and in other available public materials.

Gulf Stream is, of course, concerned by CDC's report that formaldehyde levels in a small sample of FEMA-supplied occupied travel trailers were "elevated relative to typical levels of U.S. indoor exposure." As I indicated, Gulf Stream is voluntarily taking steps, including adoption of

the CARB standards. Gulf Stream believes, however, that it is important to consider CDC's report carefully, and within a broader context.

The average ambient formaldehyde level for Gulf Stream travel trailers, as reported by the CDC, is in fact far below the only federal regulatory targets for ambient formaldehyde that are applicable in the housing context, though as noted above, they do not directly apply to travel trailers. The Gulf Stream average ambient formaldehyde level reported by the CDC is approximately 1/4 the only regulatory target level the Government has provided for ambient formaldehyde in residential housing, i.e., HUD's determination that "an indoor ambient formaldehyde level of 0.4 ppm [400 ppb] provides reasonable protection to manufactured home occupants."¹ The CDC's reported test results for Gulf Stream travel trailers are even further below the 0.75 ppm (750 ppb) time-weighted average exposure limit for a full work day set forth by Occupational Health and Safety Administration (OSHA). OSHA's short-term permissible exposure limit is 2.0 ppm (2,000 ppb).² According to the CDC, the average ambient formaldehyde level in Gulf Stream units purchased by FEMA was less than 1/7 OSHA's permissible exposure limit.

To analyze ambient formaldehyde levels found in travel trailers purchased by FEMA, the CDC focused on "typical U.S. background levels (e.g., approximately 10-30 ppb in indoor air)" of formaldehyde. But typical ambient formaldehyde levels in housing in the relevant area, South Louisiana, were apparently not considered. According to a pre-Katrina analysis conducted by researchers at Tulane University, the average

¹ 49 Fed. Reg. 31996, 31998-99 (Aug. 9, 1984).

² 29 C.F.R. 1910.1048(c)(1).

formaldehyde level in site-built homes across South Louisiana was more than three times greater than the average level in the Gulf Stream travel trailers that were analyzed by the CDC.³ Of the 419 samples taken from 53 houses across South Louisiana as part of the Tulane Study, “the Southern Louisiana formaldehyde mean was 0.46 mg/m³,” which is the equivalent of 0.37 ppm (370 ppb).⁴ Only 29% of the homes tested below 0.1 ppm (100 ppb), and during the autumn and winter months, none of the homes tested below that level.

Even the final CDC report acknowledges that other factors such as smoking can affect the ambient formaldehyde level. However, the CDC apparently spent little time addressing these other potential sources of ambient formaldehyde that are relevant to South Louisiana. For instance, according to the Agency for Toxic Substances and Disease Registry (ATSDR), cooking fish is a substantial source of formaldehyde in indoor air, producing levels of more than 5.3 ppm (5,300 ppb).⁵ That level of formaldehyde is more than 51 times the average ambient formaldehyde level found by the CDC in Gulf Stream travel trailers, and it is 331 times the guideline by National Institute for Occupational Safety and Health (NIOSH) for workplace exposure in an 8-hour day that has been referenced in some sources discussing formaldehyde in travel trailers. Moreover, although CDC’s Interim Findings indicate that some “adjust[ments]” were made “for smoking, windows being open, temperature, and humidity,” it is not clear

³ Lemus, et al., *Potential Health Risks From Exposure To Indoor Formaldehyde*, 13 Rev. Environmental Health 91-98 (1998) (“Tulane Study,” which was funded by the Louisiana State Department of Natural Resources, see p.97).

⁴ Id. at 93.

⁵ ATSDR, *An Update and Revision of ATSDR’s February 2007 Health Consultation: Formaldehyde Sampling of FEMA Temporary-Housing Trailers Baton Rouge, Louisiana*, at p.8, Table 2, available at www.atsdr.cdc.gov/substances/formaldehyde/pdfs/revise_formaldehyde_report_1007.pdf.

how those adjustments were made. Gulf Stream will continue its efforts to responsibly and effectively address this issue by identifying and implementing ways to further reduce ambient formaldehyde in its travel trailers.

Regarding the CDC study released last week on trailer components, we are still reviewing the study and trying to more fully understand the methodology it employed. As we understand it, the CDC and the Lawrence Berkley National Laboratories (LBNL) tested only four trailers – all of which were unoccupied. We believe that the use of such a small number of trailers may not provide a representative sample. Further, conducting tests on unoccupied trailers may not best represent the actual living conditions of those who actually reside in trailers. We understand that the trailers were moved to the testing area on November 7, 2007 and apparently sat for seven days, completely closed, prior to testing – restricting normal ventilation. Until we are better able to understand the testing method, we are unable to directly address the results of this report. We look forward to seeing the final report in order to completely understand the protocols used by the CDC.

Mr. Chairman, and Members of the committee, on behalf of my family, Gulf Stream and our employees, thank you again for inviting me here today to testify about what we are doing in terms of quality and safety of the travel trailers we produce.

I'd be happy to answer any questions you may have for me today.