

U.S. Department of  
Homeland Security

United States  
Coast Guard



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Office of Air & Radiation  
U.S. Environmental Protection Agency  
Attn: Elizabeth Craig  
6102T 1200 Pennsylvania Avenue NW  
Washington DC 20460

Dear Elizabeth Craig:

The U.S. Coast Guard has reviewed the waiver request cited in your "Notice of Receipt of a Clean Air Act Waiver Application to Increase the Allowable Ethanol Content of Gasoline to 15 Percent." (74 Federal Register 18,228 of April 21, 2009). Our review of this request has raised concerns related to a possible reduction in the level of safety for recreational boaters should the waiver be granted.

We have anecdotal evidence that ethanol may contribute to accelerated deterioration and failure of various components in the fuel system of recreational boats. Silverton Marine Corporation has reported leaky fuel tanks in several older model inboard, gasoline powered boats. Laboratory testing of the fuel tanks attributed the problems to "additives in the fuel" such as Ethanol. Additionally, it was well noted within the marine industry that the introduction of E-10 blends to some fiberglass tanks in older model recreational boats caused deterioration of these tanks. Also, we have received a consumer report regarding the deterioration of a seal in the fuel system of his boat, suspected to be caused by E-10, which resulted in a fuel leak.

In newer vessels, manufacturers are adding catalytic converters, carbon canisters, and other devices to comply with EPA enhanced requirements for minimizing air pollutants in engine exhaust and diurnal emissions from fuel systems. The effects of ethanol blended fuels on these components have yet to be determined. Many engine manufacturers are sufficiently concerned about the effects of ethanol on their products to restrict, or prohibit the use of ethanol blended fuels in their engines at the cost of voiding the warranty.

It is commonly accepted that the majority of the recreational boat fleet is more than ten years old. These vessels were not designed with ethanol blended fuels in mind. Increasing the blend to E-15 can be expected to exacerbate any fuel system deterioration now being reported with E-10 blended gasoline. Fuel leaks such as those addressed above are a serious safety consideration because the possibility of fuel accumulation in the bilges of these vessels causes an unacceptable level of risk for fire and explosion.

We support the efforts of the EPA relative to renewable fuels and reduction of petroleum based air pollutants. However, the Coast Guard Boating Safety Program cannot support approval of the proposed waiver at this time. Only very limited testing on ethanol blended fuels has been conducted relative to long-term safety and durability issues. We feel strongly that, to ensure the continued safety of recreational boaters, an in-depth technical evaluation must be conducted on the effects of various ethanol blends on fuel system components of recreational boats. Such a study is proposed in the Maritime Safety Act of 2009, HR 2652, recently introduced in the U.S. House of Representatives. Only after a comprehensive study, including accelerated aging tests, is complete, will sufficient data be available to determine whether or not specific ethanol fuel blends pose an increased risk of injury to the boating public.

Sincerely,



KEVIN S. COOK  
Rear Admiral, U.S. Coast Guard  
Director of Prevention Policy