Office of Transportation and Air Quality



Regulatory Announcement

Frequently Asked Questions from Owners of Recreational Boats with Diesel Engines

The U.S. Environmental Protection Agency (EPA) has adopted new emission standards for recreational marine diesel engines. This information sheet addresses questions we have heard from boat owners.

Which boats and engines do the new emission standards affect?

This rule applies to diesel engines over 37 kilowatts (kW) (50 horse-power) used for propulsion on recreational boats. In general, this includes all vessels used "primarily for pleasure," consistent with Coast Guard policy, including yachts and cruisers.

Why is EPA requiring new emission controls for Recreational Marine Diesel Engines?

Recreational marine diesel engines currently emit about 40,000 tons of hydrocarbons plus nitrogen oxides (HC+NOx) each year across the United States. These emissions help form smog and contain toxic compounds such as benzene, so reducing them will benefit our health and environment. In the Clean Air Act, Congress requires us to set emission standards that address these problems. These environmental impacts are described in more detail in the fact sheet referenced below.

Does my current engine need to meet these regulations?

No. Engine manufacturers must ensure that each **new** recreational marine diesel engine sold meets the new emission standards. The standards apply only to new engines produced after a specified model year (from 2006 to 2009, depending on engine size). Anything manufactured before that model year is not affected. We are giving several years of lead time between publication of a final rule and the effective date of new standards. New emission standards for recreational marine diesel engines therefore won't affect the engine you own now or any engine you buy for the next several years.

As an owner of a recreational marine diesel engine, how does this affect me?

You may **not** disable any emission controls installed on your engine. Manufacturers explain in their owner's manual what type of emission controls exist for each model. Manufacturers may also specify some minor maintenance you must do to keep emission controls working properly over the life of the engine.

What kind of emission controls is EPA requiring?

We don't tell manufacturers how to comply with the regulations, but we anticipate many manufacturers will choose to meet them through engine calibration, fuel injection improvements, and in-cylinder modifications. We already require emission controls for commercial marine diesel engines and expect the recreational engines to have similar emission-control technologies and calibrations.

How much will these controls cost?

The manufacturers' costs for adding emission controls depend on the kind of technology involved, the manufacturing processes, the size of the company, and several other issues. We estimate that these costs will on average be less than \$400 per engine.

How will these controls affect performance and safety?

The expected emission-control technologies not only reduce emissions, but generally improve the engine's ability to manage air intake, fuel

injection, and overall combustion. As a result, we expect engine performance to improve as manufacturers add new technology. None of these emission-control technologies affect safety.

Do these regulations apply in California?

Yes. These regulations apply throughout the United States.

Will these regulations affect where I can use my boat?

No. These regulations do not include any specific restrictions about where you can use your boat.

Where can I get more information?

You can access documents on marine diesel engines on the Office of Transportation and Air Quality Web site at:

www.epa.gov/otaq/marine.htm

You can also contact us at:

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See additional fact sheets:

- Emission Standards for New Nonroad Engines— Large Industrial Spark-ignition Engines, Recreational Marine Diesel Engines, and Recreational Vehicles (EPA420-F-02-037)
- Environmental Impacts of Newly Regulated Nonroad Engines (EPA420-F-02-033)
- Emission Factors for Recreational Marine Diesel Engines (EPA420-F-02-044)
- How to Maintain or Rebuild Engines Certified to EPA Standards (EPA420-F-02-035)
- Blue Sky Series Engines (EPA420-F-02-036)