



Technical Highlights

Blue Sky Series Engines

At the U.S. Environmental Protection Agency (EPA), we have finalized emission standards for nonroad and marine diesel engines. Each program has voluntary emission standards for certifying engines—which we call Blue Sky Series engines—that operate much cleaner than the regulations require.

What are Blue Sky Series engines?

They're engines having lower emission levels than our mandatory standards—usually at least 40 percent cleaner. Meeting this voluntary standard earns manufacturers a Blue Sky Series designation for these engines. Manufacturers who choose to get this certification agree to keep these engines at Blue Sky levels throughout their useful life.

Why is EPA setting up this voluntary program?

We want to encourage manufacturers to introduce innovative technologies that can reduce emissions below the mandatory levels. Current programs have a single qualifying threshold and don't try to differentiate engines that operate cleaner to meet voluntary standards. In many cases, technologies are promising, but companies haven't developed them enough so we can require a higher degree of control for all engines.

Creating a program of voluntary standards for low-emitting engines, including provisions to make sure emissions remain low in the field, will strongly advance the next generation of emission-control technologies. At

the same time, our certification will protect the public against false claims of environmentally beneficial products.

What technologies can produce engines than meet Blue Sky standards?

The most likely technologies include adding various devices that treat exhaust gases or converting the engine to operate on an alternative fuel, such as natural gas. Engines with these technologies have been operating in pilot programs and other limited applications for several years.

Are Blue Sky engines available for sale?

Not yet. Although some manufacturers are close to being able to produce them, as of this printing none has certified one. Mostly, that's because isolated requests for especially clean-burning engines don't justify the expense of developing them. As an operator, manufacturer, or government representative, you can advance this program by cooperating as much as possible to identify common needs and interests. Collectively identifying product needs across the country may at some point help a manufacturer to justify offering the low-emission engines (and associated vehicles, equipment, or vessels).

What does the Blue Sky name mean for the marketplace?

Once engines become available, states and potential buyers can judge the costs and benefits of buying low-emission engines. State and local governments are developing ways to add incentives for producing and buying these engines. For example, State governments have started to specify that companies should use equipment with Blue Sky Series engines to gain an advantage in bidding on construction contracts. State and local governments have also started asking companies that need permits and environmental impact statements for new construction to use Blue Sky Series engines, if possible.

The emission standards for marine diesel engines don't start for a few years, so manufacturers may take longer to make these engines available. Once they do, port authorities may create incentives or requirements for operators to buy them. For example, a port authority could require a company wanting more presence in a port to use vessels with low-emitting engines.

The Blue Sky Series programs are still very new. Several industry and government representatives are exploring ideas to increase the effectiveness of the voluntary emission standards. To find out more about what is happening and who is active in this field, see “Where can I get more information” below.

How will EPA help make Blue Sky Series engines marketable?

We’re eager to offer information and help people in industry and government communicate so Blue Sky Series engines can reach the marketplace. Of course, we’re limited in our ability or authority to add requirements or incentives that will encourage companies to buy and sell them.

Where can I get more information?

You can get electronic documents on nonroad and marine diesel engines from the Office of Transportation and Air Quality’s web site at:

www.epa.gov/otaq/

For other information, please contact Alan Stout at:

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