

Regulatory Announcement

EPA Proposes Effective Date for Diesel Fuel Sulfur Control Requirements in Rural Alaska

The U.S. Environmental Protection Agency (EPA) is proposing to modify the diesel fuel regulations to apply an effective date of June 1, 2010, for the sulfur, cetane and aromatics requirements for highway, nonroad, locomotive and marine diesel fuel produced or imported for, distributed to, or used in the rural areas of Alaska. On that date, rural Alaska would catch up with the implementation schedule of the rules that are applicable in the rest of the United States, providing the full environmental benefits of these programs to rural Alaska. On June 1, 2010, all diesel fuels would have to meet a 15 parts per million (ppm) (maximum) sulfur content standard. This rulemaking would allow implementation of the nationwide programs for highway and nonroad diesel fuels in Alaska to be consistent with an alternative transition program requested by the State.

Background

The pollution emitted by diesel engines contributes greatly to our nation's continuing air quality problems. Even with more stringent heavy-duty highway engine standards that became effective in 2004, diesel engines will continue to emit large amounts of nitrogen oxides (NO_x) and particulate matter (PM), both of which contribute to serious public health problems in the United States. Exposure is widespread, particularly in urban areas.

Clean Diesel Truck and Bus Program

In 2001, we established a comprehensive national control program that will regulate heavy-duty highway vehicles and their fuel as a single system. New emission standards will begin to take effect with model year 2007 and will apply to heavy-duty highway engines and vehicles.

These standards are based on the use of high-efficiency catalytic exhaust emission control devices or comparably effective advanced technologies. Because these devices are damaged by sulfur, we also reduced the allowable level of sulfur in highway diesel fuel by 97 percent. This reduction to 15 ppm sulfur is required for at least 80 percent of the highway diesel fuel beginning June 1, 2006, and the remaining diesel fuel meeting the 500 ppm sulfur standard must be segregated from the 15 ppm sulfur fuel and used only in 2006 and earlier model year highway diesel vehicles. Beginning June 1, 2010, all highway diesel fuel must meet the 15 ppm sulfur standard.

Clean Air Nonroad Diesel Rule

Similarly, in 2004 we established a comprehensive national program to reduce emissions from nonroad diesel engines, locomotives, and marine vessels. Engine manufacturers will produce engines with advanced emission-control technologies similar to those upcoming for highway trucks and buses. Closely linked to these engine provisions are new fuel requirements that will decrease the allowable levels of sulfur in fuel used in nonroad diesel engines, locomotives, and marine vessels by more than 99 percent.

A reduction from uncontrolled sulfur levels to 500 ppm sulfur begins June 1, 2007, and the final reduction to 15 ppm sulfur begins June 1, 2010, for nonroad diesel fuel, and June 1, 2012, for locomotive and marine vessel diesel fuel. However, nonroad, locomotive, or marine diesel fuel with uncontrolled sulfur content (and uncontrolled aromatics content and cetane index) is allowed for EPA-approved small refiners and importers. Diesel fuel that is used for other types of application, such as heating oil, must be segregated and identified with a yellow marker and red dye.

Alaska under the 2001 Highway Diesel Rule

Since the beginning of the 500 ppm highway diesel fuel program in 1993, we have granted Alaska exemptions from both the sulfur standard and dye provisions because of its unique geographical, meteorological, air quality, and economic factors.

Under the 2001 highway diesel rule, the sulfur exemption for Alaska terminated and required the State to meet the new low sulfur standards taking effect in June 2006 (80% of diesel fuel meeting the 15 ppm requirement). However, based on factors unique to Alaska, we provided the State with: (1) an extension of the temporary exemption from the 500 ppm sulfur standard in the urban areas until the effective date of the new 15 ppm sulfur standard; (2) an opportunity to request an alternative implementation plan for the 15 ppm sulfur diesel fuel program; and (3) a permanent exemption from the diesel fuel dye provisions.

Alaska under the 2004 Nonroad Diesel Rule

Under the Agency's Nonroad Rule, engines in Alaska must meet all emission requirements. In regards to the fuel sulfur requirements, full implementation was applied to urban Alaska (rural Alaska would be addressed in a separate rulemaking). In addition, rural areas of Alaska were exempt from the segregation and dye provisions for its heating oil. This was due to the fact that 95% of the distillate fuel (diesel + heating oil) is used for heating oil, and only 5% for highway and nonroad applications due to the largely subsistence economy of remote rural areas of Alaska. While the State cannot obtain early use credits, small refiners may apply for flexibilities if it obtains approval from the EPA for a compliance plan.

To allow coordination between the highway and nonroad diesel sulfur requirements in rural Alaska, the 2004 nonroad final rule deferred final action on the fuel sulfur standards and implementation deadlines. We indicated it would issue a supplemental proposal (i.e., this proposed rule) to address the comments submitted by the State for nonroad diesel fuel in the rural areas, as well as the State's alternative implementation plan for highway diesel fuel in the rural areas. We did, however, finalize requirements prohibiting the use of high sulfur diesel fuel (greater than 15ppm) in model year 2011 and later nonroad engines.

Rural Alaska is Unique

Alaska requested that the nationwide diesel fuel requirements be applicable to the rural areas, but not until June 1, 2010, to allow those areas more time to develop cost effective methods to distribute and store the low sulfur diesel fuel. Rural Alaska represents a rather unique situation. The State estimates that highway vehicles consume only about one percent of the distillate fuel in the rural areas, while marine en-

gines consume about four percent. “Heating oil” consumes the remaining 95 percent. There is no significant consumption of nonroad or locomotive diesel fuel in rural Alaska. Thus, there is only a small proportion of the distillate fuel that we are regulating for sulfur content (and aromatics content and/or cetane index).

Our goal is to allow Alaska to transition to the low sulfur fuel programs in a manner that minimizes costs while still ensuring that the small number of new vehicles and engines with high-efficiency catalytic exhaust emission control devices, or comparably effective advanced technologies, receive the 15 ppm sulfur diesel fuel they need. The State did not ask for an alternative transition schedule for the urban areas, and indicated those areas should be subject to the national implementation schedules of the diesel fuel programs.

Public Participation Opportunities

We welcome your comments on this proposed rule. For instructions on submitting written comments, please see the *Federal Register* notice, which is available from the EPA Air Docket by calling 202-566-1742; please refer to Docket No. OAR-2004-0229. In addition, you can access the proposed rule and related documents on EPA’s Office of Transportation and Air Quality (OTAQ) Web site at:

www.epa.gov/otaq/regs/fuels/diesel/diesel.htm

A public hearing is not anticipated, but will be scheduled if requested by the public. If a public hearing is requested within 30 days of publication of this proposal, notice of the hearing will subsequently be published in the *Federal Register*.

For More Information

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