



Regulatory Announcement

Agricultural Pump and Irrigation Rule: Amending the Nonroad Engine Definition

The U.S. Environmental Protection Agency (EPA) is issuing a direct final rule revising the definition of “nonroad engines” to include all diesel-powered engines used in agricultural operations in the state of California that are certified by the engine maker to meet the applicable nonroad emission standards. To meet this definition, the diesel engine must be used in the growing of crops or raising of fowl or animal in California and must be part of a certified engine family. The effect of this change is to encourage farmers who want to voluntarily replace older diesel engines to do so with new low-polluting models meeting stringent EPA nonroad standards.

Background

In California, approximately half of the engines that are used on agricultural lands for the purpose of growing crops or raising of fowl or animal are stationary. On a farm, it would not be unusual to have two identical engines, one used to power a pump mounted on a mobile piece of equipment and the other identical engine powering a similar pump but fixed in one space. This rule will consider such engines as “nonroad” without regard to whether these engines are portable or transportable or how long these engines remain in one fixed location at a farm.

This rulemaking is supported by the U.S. Department of Agriculture (USDA), an agency working with EPA to explore potential cost share incentives for replacement of the older engines under the USDA Environmental Quality Incentives Program (EQIP). EPA will model the engine replacements after California's successful Carl Moyer Program, a state funded program which helps farmers convert older agricultural engines to cleaner emitting engines.

Between 1999 and 2001, under the Carl Moyer Program, existing stationary diesel engines were replaced with new engines of similar power and performance that were also certified to meet the nonroad emission standards. It is estimated that this program reduced oxides of nitrogen (NO_x) emissions statewide in California by over 1,750 tons per year.

Highlights of Rule

This rule only applies to the state of California because of its unique air quality problems (California is the only state with severe and extreme ozone nonattainment areas where agricultural operations are significant contributors) and the demonstrated success of the Carl Moyer Program. Additionally, this rule will not interfere with California's ability to further regulate nonroad engines if the state chooses to do so to meet their attainment needs.

Historically, California programs have not required emissions from engines used in agricultural applications to be controlled. Therefore, replacing these engines with cleaner nonroad engines will improve emissions performance more quickly than standard traditional regulatory programs. EPA believes the strong voluntary economic incentives made available through cost-sharing programs with USDA, and the opportunity to qualify for an appropriate environmental review will result in owners voluntarily upgrading their engines.

EPA estimates that approximately 3,700 stationary diesel engines are used in agricultural applications in California, primarily for powering irrigation pumps such as those used for crop irrigation and for tending livestock. In major agricultural areas like the San Joaquin Valley, NO_x emissions from stationary diesel engines represent approximately 5 percent of the total NO_x emissions inventory, thus significantly contributing to the ozone and PM-10 nonattainment status of the area.

EPA estimates that approximately 2,200 older engines remain in use in California. Replacement of these engines over the next two years would result in a reduction of up to 4,400 tons of NOx annually from agricultural operations, resulting in nearly a 20 percent reduction.

This rule is intended to encourage farmers in California to reduce emissions from their existing stationary diesel-powered engines. EPA believes farmers will replace existing non-certified engines with engines certified to meet the emission standards for nonroad engines, or switch to a cleaner burning fuel, or replace with electric powered engines, thereby greatly reducing NOx emissions from these engines.

For More Information

You can access documents on the reclassification of nonroad engines used in the state of California on the Office of Transportation and Air Quality Web site at:

www.epa.gov/otaq/equip-hd.htm

You can also contact us at:

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