

FINDING OF EMERGENCY

EMERGENCY REGULATORY AMENDMENT OF THE EMISSIONS STANDARDS FOR NEW STATIONARY DIESEL-FUELED COMPRESSION IGNITED ENGINES

INFORMATIVE DIGEST OF EMERGENCY REGULATORY AMENDMENT

Section Affected: Amendment to title 17 California Code of Regulations (CCR) section 93115(e)(2)(E).

Background:

The Air Resources Board (ARB or Board) is charged with the responsibility of identifying and regulating toxic air contaminants (Health and Safety Code (HSC) 39650 et seq.). The Board adopted the Stationary Diesel Engine Airborne Toxic Control Measure (ATCM) on February 26, 2004. As pertinent here, the implementation of the regulation began on January 1, 2005. Among other things, the ATCM establishes particulate matter (PM) standards of 0.15 grams per brake horsepower-hour (g/bhp-hr) for new stationary agriculture diesel pump engines. The PM standards adopted by the Board for new diesel stationary agriculture pumps were more stringent than the Tier 2 ARB/U.S. EPA off-road engine standards. At the time the regulation was adopted, ARB believed, based on information available at the time, that new agriculture engines could meet the more stringent PM standards.

California agriculture equipment dealers, distributors, and engine manufacturers just prior to the January 1, 2005 implementation of the ATCM contacted the ARB. The major concern expressed by the California dealers and distributors, and the engine manufacturers was that diesel engines in the 50 hp to less than 175 hp size range that meet the ATCM PM emission standards, and are suitable for stationary agriculture pump operations, were not available or were available in very limited quantities.

ARB initiated an extensive investigation into this issue. Meetings and discussions were held with the appropriate engine manufacturers, engine distributors and dealers, and representatives of the agriculture community. These discussions led ARB to the conclusion that there is a very limited availability of diesel engines that meet the 0.15 g/bhp-hr PM standard in the 50 to 99 hp ranges. In the 100 to less than 175 hp size range, ARB found availability of engines was limited to one or two manufacturers, reducing the choices of manufacturer significantly in the stationary agriculture pump market. ARB was further advised that replacing an engine built by one manufacturer with one built by another manufacturer also requires replacement of pump system components as well, causing additional cost and logistical issues.

The Emergency Regulatory Amendment

At its regularly scheduled March 17, 2005 meeting, the Board took emergency action for new stationary agriculture compression ignited engines less than 175 hp used in agricultural operations. During the meeting, the Board heard testimony from stakeholders within the agriculture industry, agriculture equipment distributors and dealers, engine manufacturers, and the Engine Manufacturers Association. The testimony confirmed the fact that the number of engines available for agriculture stationary pumps meeting the ATCM PM standard are very limited. The Board took emergency action amending the regulation by removing the requirement that new stationary agriculture pump engines to meet the 0.15 g/bhp-hr PM standard. Instead, such engines must meet the appropriate Tier 2 emissions standard. This action was based on the limited availability of engines in the 50 hp to 99 hp range and limited number of manufacturers with engines in the 100 hp to less than 175 hp range. The limited availability of complying engines, coupled with the limited number of manufacturers able to offer complying engines, reduces the agriculture community's ability to replace dirtier, older, uncontrolled diesel engines with cleaner diesel engines, therefore reducing the ATCM's ability to protect public health from diesel PM, an identified toxic air contaminant. Further emergency action was required, as presented below, to avoid serious economic hardship to California businesses and to the agricultural community.

NEED FOR IMMEDIATE ACTION

Under the California Administrative Procedure Act and state regulations, state agencies are normally required to submit a hearing notice to the Office of Administrative Law (OAL) at least 55 days before a hearing to amend a regulation, so that it can be published in the California Notice Register at least 45 days before the hearing. However, an agency is authorized to amend a regulation on an emergency basis upon a finding that the amendment "is necessary for the immediate preservation of the public health and safety or general welfare." OAL has an abbreviated 10-day period to review the amendment after it is submitted by the adopting agency, and the amendment may go into effect immediately after it is approved by OAL and filed with the Secretary of State. An amendment adopted on an emergency basis may remain in effect for no more than 120 days unless the adopting agency complies with the procedural requirements for a normal amendment. (Government Code section 11346.1.)

Information provided by the major agriculture stationary diesel engine pump providers confirmed that a very limited number of engines in the 50 to 99 hp range met the 0.15 g/bhp-hr PM standard specified in the ATCM. ARB reviewed the off-road engine Executive Orders issued to engine manufacturers, and confirmed the limited availability of diesel engines for agriculture pump applications meeting the 0.15 PM standard. Meeting with the stakeholders also confirmed that in the 100 hp to less than 175 hp range, manufacturer availability was very limited in meeting the 0.15 g/bhp-hr PM standard. Of the available engines in the 100 hp to less than 175 hp range that met the 0.15 PM standard, one engine manufacturer offered engines; however, these engines are not typically used in agriculture pump applications.

Information provided by two California stationary agriculture distributors, working closely with the engine manufacturers, showed that orders for engines were processed in late 2004, and in some cases, distributors have on hand 3 to 7 million dollars in inventory of diesel engines that do not comply with the ATCM, and without relief, could not be sold in California. Engine manufacturers typically do not produce a California specific engine. Since 2003, engines in the 50 hp to less than 175 hp range are typically certified to the U.S. EPA and ARB new off-road engine standards that meet the Tier 2 PM standard.

Based on the current availability of stationary diesel agriculture pump engines meeting the 0.15 g/bhp-hr PM standard, a delay will occur in replacing older, dirtier, engines causing a delay in achieving statewide diesel PM emission reductions, and further subjecting the public to greater health risks. Certain manufacturers and their independent California dealers will lose business and stated that without relief will need to layoff employees. Any non-complying diesel stationary agriculture pump engine currently in inventory will need to be sold outside California, causing significant losses to some California equipment dealers and/or distributors. In addition, growers may not be able to obtain complying engines for the current spring growing season. This creates a financial strain on growers that obtained funding to replace engines this year, and dirtier agriculture pump engines will continue to operate producing increased PM emissions and ozone precursors during the peak ozone season, resulting in ongoing public exposure.

A continuation with the current 0.15 g/bhp-hr PM requirement in the ATCM will not allow farmers to replace engines that break down, or allow them to install new engines to pump water for irrigating crops. This would result in negative economic impacts to the farmer, as well as to the agriculture equipment dealers and distributors. Impacts on farmers in California would be severe if they must wait until the ARB completes the normal rulemaking process. By doing this, farmers will not be able to pump irrigation water for their spring crops.

Comments received by the public at the March 17, 2005 Board meeting indicated that agriculture customers only purchase equipment they are familiar with and do not change between dealers or engine manufacturers due to service and parts support. California customers of stationary diesel agriculture pumps purchase products that best meet their needs and a choice of equipment is needed in their decision making. Should the agriculture industry not have ample products to choose from, many will continue to operate their older, dirtier diesel pump engine, further subjecting the public to greater health risks.

Comments received by Glenn County Air Pollution Control District indicate that farmers and growers in Glenn County have already worked up the soil and are planting their crops now. Glenn County is ready to complete their incentive funding contracts for new cleaner agriculture stationary diesel pumps, but the local engine dealers will not release engines because many engines currently offered do not meet the 0.15 g/bhp-hr PM standard.

Comments received from the Engine Manufacturers Association indicate that the PM emissions from currently available agriculture stationary diesel engines that meet the 0.15 g/bhp-hr will change in the future. When U.S. EPA /ARB interim Tier 4 standards begin in 2007/08 for the 50 hp to less than 175 hp range, the PM standard is unchanged, but the NOx levels drop by about 40 percent. Since PM and NOx emissions are related, when manufacturers adjust and calibrate engines to meet lower NOx levels, PM emissions will likely increase above 0.15 g/bhp-hr, but be well within the Tier 2 PM levels. This change in NOx emission standard leaves stakeholders with very few engines to choose from.

Based on the foregoing, the Board unanimously voted to take emergency action for new agriculture diesel stationary engines between 50 hp and less than 175 hp range. Such emergency action is necessary and warranted for the immediate preservation of the public health and safety or general welfare. Failure to take emergency action will lead to disruptions in providing agriculture stationary diesel engines in California, economic hardships, and further subject the public to greater emissions and health risks. Staff will return to the Board with a complete rulemaking package to make the emergency regulatory changes permanent.

FISCAL IMPACTS ON STATE AND LOCAL AGENCIES AND SCHOOL DISTRICTS

The Executive Officer has determined that the proposed regulatory action will not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to state or local agencies.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under that authority granted in sections 39600 and 39601 of the Health and Safety Code. This regulatory action is proposed to implement, interpret, and make specific sections 39000, 39001, 39002, 39003, 39500, 39515, 39516, 41511, Health and Safety Code.

Executed this _____ day of March, 2005, at Sacramento, California.

Catherine Witherspoon
Executive Officer