

Diesel Retrofits a Big Deal

Your recent editorial, "Without Clean Fuel, Builders Will Be Running on Empty," opines that retrofitting construction equipment is "not a big deal," and the old phrase, "money talks," will dictate how the construction industry deals with the millions of legacy diesels that will not get scrapped for many years (ENR 8/15 p. 52).

The California Air Resources Board (CARB) staff is working with the Construction Industry Air Quality Coalition (CIAQC) and other stakeholders to develop a control measure that will reduce particulate matter emissions from in-use off-road diesel engines. The proposed measure could include purchasing new equipment, repowering existing machines with Tier 2 and higher engines and retrofitting with particulate filters and other verified control devices. Its goal is to reduce particulate emissions by 75% by 2010 and 85% by 2020. The control measure is scheduled to go to CARB for adoption late next year.

Let me assure you that repowering or retrofitting most of the estimated 180,000 heavy-duty diesel engines in California by 2010 or earlier is a big deal both from the standpoint of availability and economic impact on the buyer. The industry may not be able to produce the necessary number of off-road engines due to the introduction of the on-highway engines in 2007. Also, CARB has not verified any diesel particulate filter and only one other emission control device for heavy-duty off-road engines—the Lubrizol Unikat. We cannot imagine how long it would take that company to produce the 100,000 or more devices to meet CARB emission reduction goals.

Then there is the matter of affordability. The typical construction contractor uses its existing equipment as a bond for bids and collateral for rebuilding and repowering equipment. If required by a CARB regulation to replace all of it by 2010, he would have no option but to operate illegally or shut down.

CIAQC has proposed that CARB adopt a control measure that would require off-road vehicles used in construction projects of steadily decreasing size achieve a project-wide fleet average of 20% nitrogen oxide reduction and 45% particulate reduction compared to the most recent CARB fleet average at time of construction. By 2020 the measure would require all off-road vehicles to be powered by Tier 4 engines or be retrofitted with a Level 3 (85% emission reduction) verified device.

We believe that a project-based measure would result in greater overall emission reductions than one that would require every owner to meet an emission standard by 2010. It would also give many contractors in California a chance to stay in business.

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