

### All-Terrain Vehicles

EPA's initial round of exhaust emission standards was fully implemented starting with the 2007 model year. The regulations for all-terrain vehicles (ATV) specify testing based on a chassis-based transient procedure. However, we permit manufacturers on an interim basis to optionally use a steady-state engine-based procedure. We recently completed a change in the regulations to extend this allowance from 2009 through 2014, after which manufacturers must certify all their ATVs based on the chassis-based transient test procedure that applies for off-highway motorcycles (72 FR 20730, April 26, 2007). This change does not represent an increase in stringency, but manufacturers will be taking time to make the transition to the different test procedure. We expect that there will be a good potential to apply further emission controls on these engines. However, we do not have information at this time on possible advances in technology beyond what is required for the current standards.

### Off-Highway Motorcycles

For off-highway motorcycles, manufacturers are in many cases making a substantial transition to move away from two-stroke engines in favor of four-stroke engines. This transition is now underway. While it may eventually be appropriate to apply aftertreatment or other additional emission control technologies to off-highway motorcycles, we need more time for this transition to be completed and to assess the success of aftertreatment technologies such as catalysts on similar applications such as highway motorcycles. As EPA and manufacturers learn more in implementing emission standards, we expect to be able to better judge the potential for broadly applying new technology to achieve further emission reductions from off-highway motorcycles.

### Snowmobiles

In our November 8, 2002 final rule we set three phases of exhaust emission standards for snowmobiles (67 FR 68242). Environmental and industry groups challenged the third phase of these standards. The court decision upheld much of EPA's reasoning for the standards, but vacated the NO<sub>x</sub> standard and remanded the CO and HC standards to clarify the analysis and evidence upon which the standards are based. See *Bluewater Network, et al. v. EPA*, 370 F 3d 1 (D.C. Cir. 2004). A large majority of snowmobile engines are

rated above 50 hp and there is still a fundamental need for time to pass to allow us to assess the success of four-stroke engine technology in the marketplace.<sup>7</sup> This is an important aspect of the assessment we need to conduct with regard to the Phase 3 emission standards. We believe it is best to address this in a separate rulemaking and we have initiated that effort to evaluate the appropriate long-term emission standards for snowmobiles.

### Nonroad Diesel Engines

The 2004 Consolidated Appropriations Act providing the specific statutory direction for this rulemaking focuses on nonroad spark-ignition engines. Nonroad diesel engines are therefore not included within the scope of that Congressional mandate. However, we have gone through several rulemakings to set standards for these engines under the broader authority of Clean Air Act section 213. In particular, we have divided nonroad diesel engines into three groups for setting emission standards. We adopted a series of standards for locomotives on April 16, 1998, including requirements to certify engines to emission standards when they are rebuilt (63 FR 18978). We also adopted emission standards for marine diesel engines over several different rulemakings, as described in Table I-2. These included separate actions for engines below 37 kW, engines installed in oceangoing vessels, engines installed in commercial vessels involved in inland and coastal waterways, and engines installed in recreational vessels. We recently adopted a new round of more stringent emission standards for both locomotives and marine diesel engines that will require widespread use of aftertreatment technology (73 FR 37096, June 30, 2008).

Finally, all other nonroad diesel engines are grouped together for EPA's emission standards. We have adopted multiple tiers of increasingly stringent standards in three separate rulemakings, as described in Table I-2. We most recently adopted Tier 4 standards based on the use of ultra low-sulfur diesel fuel and the application of exhaust aftertreatment technology (69 FR 38958, June 29, 2004).

### D. Putting This Rule into Perspective

Most manufacturers that will be subject to this rulemaking are also affected by regulatory developments in California and in other countries. Each

<sup>7</sup> Only about 3 percent of snowmobiles are rated below 50 horsepower.

of these is described in more detail below.

### State Initiatives

Clean Air Act section 209 prohibits California and other states from setting emission standards for new motor vehicles and new motor vehicle engines, but authorizes EPA to waive this prohibition for California, in which case other states may adopt California's standards. Similar preemption and waiver provisions apply for emission standards for nonroad engines and vehicles, whether new or in-use. However for new locomotives, new engines used in locomotives, and new engines used in farm or construction equipment with maximum power below 130 kW, California and other states are preempted and there is no provision for a waiver of preemption. In addition, in section 428 of the 2004 Consolidated Appropriations Act, Congress further precluded other states from adopting new California standards for nonroad spark-ignition engines below 50 horsepower. In addition, the amendment required that we specifically address the safety implications of any California standards for these engines before approving a waiver of federal preemption. We are codifying these preemption changes in this rule.

The California Air Resources Board (California ARB) has adopted requirements for five groups of nonroad engines: (1) Diesel- and Otto-cycle small off-road engines rated under 19 kW; (2) spark-ignition engines used for marine propulsion; (3) land-based nonroad recreational engines, including those used in all-terrain vehicles, off-highway motorcycles, go-carts, and other similar vehicles; (4) new nonroad spark-ignition engines rated over 19 kW not used in recreational applications; and (5) new land-based nonroad diesel engines rated over 130 kW. They have also approved a voluntary registration and control program for existing portable equipment.

In the 1990s California ARB adopted Tier 1 and Tier 2 standards for Small SI engines consistent with the federal requirements. In 2003, they moved beyond the federal program by adopting exhaust HC+NO<sub>x</sub> emission standards of 10 g/kW-hr for Class I engines starting in the 2007 model year and 8 g/kW-hr for Class II engines starting in the 2008 model year. In the same rule they adopted evaporative emission standards for nonhandheld equipment, requiring control of fuel tank permeation, fuel line permeation, diurnal emissions, and running losses.