



# Frequently Asked Questions

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## Information for Motorcycle Owners on EPA's New Emission Standards for Highway Motorcycles

*In December 2003, the U.S. Environmental Protection Agency (EPA) published a Final Rulemaking (FRM) establishing more stringent emission standards for highway motorcycles. This information sheet addresses questions raised by concerned motorcycle owners.*

### **Why is EPA adopting new emission standards for highway motorcycles?**

Today's motorcycles produce more harmful emissions per mile than driving a car or even a large sport utility vehicle (SUV). The new standards, the first in 25 years, will reduce these emissions significantly, and will assist many states in meeting their air quality goals by reducing ozone and its harmful effects. The new standards will also reduce the exposure of motorcycle riders to air toxics and particulate matter.

### **What kind of emission controls may be used by manufacturers?**

We are adopting standards that manufacturers can meet on an average basis, which may encourage manufacturers to use a broader array of technologies across their product line. EPA does not specify what emission controls manufacturers must use to comply with the regulations, but

anticipate many manufacturers will choose to meet them by increasing their use of secondary air injection, electronic fuel injection, and some catalytic converters. These technologies are used to varying degrees on current highway motorcycles.

### **Will catalytic converters be required on all highway motorcycles?**

No, EPA does not require the use of any specific technology. About 20 percent of current motorcycles use catalytic converters, and we project this to increase to about 50 percent when the second phase of standards takes effect in 2010. Ultimately the manufacturers will be responsible for selecting how to distribute the use of various technologies among their motorcycle models.

### **Will new highway motorcycle emission standards affect motorcycles on the road today?**

The new regulations will only affect *new* motorcycles produced for the 2006 and later model years. Anything manufactured prior to the 2006 model year will not be affected.

### **What does the term “useful life” mean?**

EPA uses the term “useful life” to describe the period (usually years and/or miles) over which the manufacturer must demonstrate the effectiveness of the emission control system. The current useful life for motorcycles with engines over 279cc is 5 years or 30,000 kilometers (about 18,640 miles), whichever first occurs.

### **Are motorcycles a less-polluting alternative to cars?**

No, in fact, motorcycles produce more harmful emissions per mile than a car or even a large SUV. The current federal motorcycle standard for hydrocarbon emissions is about 90 times the hydrocarbon standard for today’s passenger cars. And when new emission standards go into effect, SUVs will be about 95 percent cleaner than today’s motorcycle.

### **Would new emission standards make it illegal to customize my motorcycle?**

No, the standards will not make it illegal for owners to customize their motorcycles. However, as established under the Clean Air Act in 1977,

motorcycle owners cannot legally make modifications that would cause the emissions to exceed the applicable standards, and they cannot remove or disable emission control devices installed by the manufacturer.

### **How much will new emission controls cost?**

We estimate increased costs on average of about \$30 per motorcycle for the 2006-2009 model year standards, then an incremental \$45 for the 2010 model year standards. Actual costs are likely to vary depending upon the specific motorcycle model and the actual technological improvements required to meet the standards.

### **How will the new emission controls affect performance?**

Advancements in engine technologies in recent years should allow the use of new emission control technologies with little to no impact on performance. Motorcycle manufacturers have been unanimous in telling us that the performance of future motorcycles will be equal to or better than current motorcycles.

### **How will these controls, especially catalytic converters, affect safety?**

These controls, including catalytic converters, are being used on many motorcycles today, both in the United States and worldwide, and have shown no adverse impact on vehicle safety. Motorcycle manufacturers agree with this assessment and have said that the safety of motorcycles will not be compromised by new emission controls.

### **How will the rule affect the motorcycle aftermarket industry?**

New emission standards are not expected to have any adverse affect on the aftermarket industry. The aftermarket parts industry is a substantial part of the motorcycle industry and can readily and successfully adapt to any changes that might result from this rule. In addition, the vast majority of aftermarket items have nothing to do with emissions, and will thus be unaffected.

## **How closely do the new rules follow the California rules?**

The new rules mainly parallel the California model with some exceptions:

- California has more stringent evaporative emissions regulations.
- California does not regulate scooters and mopeds with small (under 50cc) engines.
- California standards will be effective two years before EPA's standards.

## **Where can I get more information?**

More detailed responses regarding these and other questions, as well as a detailed description of the regulatory requirements, can be found in the final rule documents. Visit EPA's Web site at:

[www.epa.gov/otaq/roadbike.htm](http://www.epa.gov/otaq/roadbike.htm)

or contact the Assessment and Standards Division at:

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