



Regulatory Announcement

Frequently Asked Questions from ATV Riders

The U.S. Environmental Protection Agency (EPA) has adopted emission standards for recreational vehicles, including snowmobiles, off-highway motorcycles and ATVs. This information sheet addresses questions we have heard from ATV owners.

Why is EPA adopting emission standards for ATVs?

All-terrain vehicles (ATVs) currently emit about 130,000 tons of hydrocarbons (HC), 550,000 tons of carbon monoxide (CO), and 4,000 tons of oxides of nitrogen (NO_x) each year across the United States. These emissions help form smog and contain toxic compounds such as benzene, so reducing them will benefit our health and environment. In the Clean Air Act, Congress requires us to set emission standards that address these problems. These environmental impacts are described in more detail in the fact sheet referenced below.

Does my current ATV need to meet these regulations?

No. ATV manufacturers must ensure that each **new** ATV sold meets the new emission standards. The new standards apply only to new ATVs produced in 2006 or later. Anything manufactured before that model year would not be affected. We allow several years of lead time between publication of a final rule and the effective date of new standards. New emission standards for ATVs therefore won't affect the ATV you own now or any ATV you buy before 2006.

As an ATV owner, how does this affect me?

You may **not** disable any emission controls installed on your ATV. Manufacturers explain in their owner's manual what type of emission controls exist for each model. Manufacturers may also specify some minor maintenance that must be done to keep emission controls working properly over the life of the ATV.

What kind of emission controls is EPA requiring?

We require manufacturers to meet emission standards on an average basis, which will encourage them to use a broader range of technologies across their product line. We don't tell manufacturers what emission controls to use to comply with the regulations, but we anticipate many manufacturers will choose to meet them by using four-stroke engines, which are already common in ATV models. Manufacturers may also optimize the air-fuel mixture to control emissions or add air to the exhaust stream to further reduce emissions. Manufacturers could also develop fuel-injection systems or add catalytic converters to control emissions.

We are also adopting requirements to control permeation emissions from ATV fuel systems. We expect these requirements to lead to the use of improved materials that reduce the permeation of fuel through fuel tanks and hoses and into the atmosphere. This should noticeably reduce the smell of gasoline from your ATV.

How much will these controls cost?

The cost for emission controls depends on the technology used, the manufacturing processes, the size of the manufacturer, and other issues. Most ATV models are already equipped with four-stroke engines, and we expect the manufacturers' cost for these models to range from less than \$20 to about \$50. We estimate the cost of replacing a two-stroke engine with a four-stroke engine to be about \$200 to \$400, depending on engine size. But, with a four-stroke engine, these costs will be offset somewhat, because a four-stroke engine uses about 25 percent less fuel and less oil than a two-stroke engine. The permeation requirements are expected to cost less than \$10 per vehicle, which is also offset by fuel savings.

How will these controls affect performance and safety?

We don't expect the controls to harm performance or safety. Manufacturers have improved ATV designs over the last few years, so four-stroke engines now perform as well as—and possibly better than—two-stroke engines. Also, manufacturers will have several years of lead time to perfect designs. None of the emission controls manufacturers are expected to use affect safety.

How much pollution do ATVs emit?

We estimated the amount of pollution coming from ATVs based on testing of currently unregulated recreational vehicles. Because there are both two-stroke and four-stroke engines currently used in ATVs and these engines have significantly different emission characteristics, we estimated separate baseline emission rates for each type of engine. Our estimates of baseline and future emission rates for ATVs are shown in the following table.

Engine Category	ATV Emission Rates (grams per mile)*			
	HC	CO	NOx	PM
Baseline two-stroke	53.9	54.1	0.2	2.1
Baseline four-stroke	2.4	48.5	0.4	0.1
ATVs meeting EPA standards	1.6	42.9	0.3	0.1

*Manufacturers meet standards based on emission rates in grams per kilometer; emission estimates are presented here in grams per mile for convenience in comparing with other programs.

Will these regulations affect where I can ride my ATV?

No. These regulations do not include any specific restrictions about where you can ride ATVs. They cover only the exhaust and fuel system permeation emissions from your new ATV.

Will EPA issue noise regulations?

We are not including any new noise regulations. Most manufacturers produce ATVs that already meet EPA noise standards for off-highway motorcycles and we expect this practice to continue.

Do these regulations apply in California?

California already has emission standards for ATVs. Their program has been in place since 1997. Our regulations will not affect the California program, although California may decide to adopt our program in the future, especially since they do not have requirements for controlling permeation emissions.

How do these regulations affect youth ATVs?

Youth ATVs are included in these regulations, although manufacturers have the option to meet slightly less stringent standards for youth models than for adult ATVs.

Where can I get more information?

You can access documents on recreational vehicles on the Office of Transportation and Air Quality Web site at:

www.epa.gov/otaq/recveh.htm

You can also contact us at:

U.S. Environmental Protection Agency
Office of Transportation and Air Quality
Assessment and Standards Division
2000 Traverwood Drive
Ann Arbor, MI 48105
Voice-mail: (734) 214-4636
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See other fact sheets:

- Emission Standards for New Nonroad Engines— Large Industrial Spark-ignition Engines, Recreational Marine Diesel Engines, and Recreational Vehicles (EPA420-F-02-037)
- Environmental Impacts of Newly Regulated Nonroad Engines (EPA420-F-02-033)
- Frequently Asked Questions: Emission Exemption for Racing Motorcycles and Other Competition Vehicles (EPA420-F-02-045)
- How to Maintain or Rebuild Engines Certified to EPA Standards (EPA420-F-02-035)