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Off-Highway Recreational Vehicle Regulation

Sand Cars: Fact Sheet of Frequently Asked Questions

At the July 20, 2006 Public Hearing, the Air Resources Board (ARB or the Board) approved amendments that make sand cars subject to California's off-highway recreational vehicle (OHRV) regulation. The intent of this Fact Sheet is to provide answers to questions that industry may have, in order to facilitate prompt compliance with the regulation.

Regulatory Questions:

1. Which engines or types of vehicles are affected?

New sand cars are now subject to the requirements found in California's OHRV regulation. Sand cars are defined as follows:

"Sand Car" means any off-highway motor vehicle that has all of the following features and characteristics: designed to travel on four wheels, having bench or bucket seating for one or more persons, having a steering wheel for steering control, designed primarily for operation over sand dunes, and is powered by an internal combustion engine with a displacement greater than one liter. Vehicles otherwise meeting the above criteria but with engines equal to or less than one liter are considered off-road sport vehicles.

Off-road sport vehicles are defined as follows:

"Off-Road Sport Vehicle" means any off-highway motor vehicle that has all of the following features and characteristics: designed to travel on four wheels, having bench or bucket seating for one or more persons, having a steering wheel for steering control, designed for operation over rough terrain, having a rear payload of less than 350 pounds, having an internal combustion engine with a displacement less than or equal to one liter, and is capable of speeds 25 miles per hour or more. Vehicles otherwise meeting the definition for "Sand Cars" but powered by an engine with a displacement less than or equal to one liter are considered off-road sport vehicles.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

2. What are the requirements and when do they become effective?

There are exhaust emission standards for 2007 and evaporative emission standards for 2008. For exhaust emissions, there are two types of exhaust emission testing that can be used to demonstrate compliance:

- Chassis-based dynamometer testing
- Engine-only dynamometer testing

Depending on the test method chosen by the manufacturer, the exhaust standards are:

Exhaust Standards: Chassis-Based Testing
(measured in *grams per kilometer*)

Vehicle & Model Year	<i>Hydro-carbon (HC)</i>	<i>Oxides of Nitrogen (NO_x)</i>	<i>Carbon Monoxide (CO)</i>
Off-Road Sport Vehicles (<i>including Sand Cars with engine displacements less than or equal to 1 Liter</i>) 2007 and Later	1.2	—	15.0
Sand Cars (<i>with engine displacements greater than 1 liter</i>) 2007 and Later	1.2	—	15.0

Exhaust Standards: Optional Engine-Only Testing
(measured in *grams per kilowatt-hour*)

Vehicle & Model Year	<i>Hydrocarbon plus Oxides of Nitrogen (HC+NO_x)</i>	<i>Carbon Monoxide (CO)</i>
Off-Road Sport Vehicles (<i>including Sand Cars with engine displacements less than or equal to 1 Liter</i>) 2007 and Later	12.0	400
Sand Cars (<i>with engine displacements greater than 1 liter</i>) 2007 and Later	13.4	400

The evaporative emission standards become effective with the 2008 model year and control permeation from fuel tanks and hoses. The standards are:

Evaporative Emissions
(measured in grams per squared-meter per day)

<i>Vehicle & Model Year</i>	<i>Emission Component</i>	<i>Permeation Standard</i>	<i>Test Temperature</i>
Off-Road Motorcycles and All-Terrain Vehicles 2008 and Later	Fuel Tank Permeation	1.5	28 °C (82 °F)
	Hose Permeation	15.0	23 °C (73 °F)

The evaporative requirements can also be met by using metal fuel tanks and by installing low-permeation fuel hoses, which are readily available because of existing evaporative requirements for other applications.

3. How do California’s requirements compare to U.S. EPA’s requirements?

ARB’s initial understanding was that all “sand car” type vehicles were subject to the federal nonroad recreational vehicle rule. However, U.S. EPA may still be considering its position on this matter at this time.

4. Why are the exhaust standards more stringent for the 1 liter and smaller engines?

The slightly more stringent standards for engines certified under the “engine-only” test cycle are due to the fact that there were other OHRV engines in this displacement range already certifying to the 12.0 grams HC+NO_x standard. The Board did not approve any relaxations of existing exhaust emission standards.

5. Aren’t all sand cars “special permit” vehicles that are exempt?

No, all commercially-manufactured vehicles are subject to the OHRV regulation.

6. Is there a small volume exemption?

No, there is not a small volume exemption. Previously, when sand cars were regulated under California’s large spark-ignition engine (LSI) regulation, there was a small volume exemption from 2001-2003. This exemption is no longer in effect.

7. Are there any special requirements in California's OHRV regulation that apply to the vehicle identification number (VIN)?

Yes. The eighth digit of the VIN may contain any alphanumeric the manufacturer wishes to use, except the letter "C" or the number "3." All other standard VIN requirements still apply.

8. Why are "C" and "3" not available to sand car manufacturers?

The "C" and "3" are reserved solely for noncomplying off-road motorcycles and all-terrain vehicles that have been issued an Executive Order, but are subject to usage restrictions. These noncomplying vehicles are the only ones eligible for Red Sticker registration in California.

9. Where can I find ARB's Webpage for OHRVs?

The OHRV Webpage has a list of links to regulatory information and other related topics and can be viewed on the Internet at:

<http://www.arb.ca.gov/msprog/offroad/orrec/orrec.htm>

Certification Questions:

1. Am I required to certify before selling in California?

California requires manufacturers submit a certification application. Once the application has been approved, an “Executive Order” will be issued to the manufacturer from ARB, which authorizes the sale of the vehicle in California.

2. What are the first steps to certifying my engine/vehicle?

After familiarizing themselves with the regulatory requirements, manufacturers should contact the manager of the Certification Section (Mr. Duc Nguyen). After an initial consultation, a staff member will be assigned to assist the manufacturer with certification-related questions and to process the manufacturer’s completed certification application.

The Webpage for the Certification Section contains information about the certification process, test procedures, and contact information. It can be viewed on the Internet at:

<http://www.arb.ca.gov/msprog/onroad/cert/cert.php>

3. Where do I go for emission testing?

Exhaust emission testing can be performed at any laboratory that has the necessary equipment to perform the emission test procedure specified in the OHRV regulation. While ARB does not currently approve laboratories for compliance testing, certain independent commercial laboratories have been accepted, based on information submitted to ARB, as being properly equipped to perform specialized tests, in accordance with applicable federal and California test procedures. A list of these commercial laboratories is available from ARB.

4. I want to certify, but it will take some time. Is there a “grace period” to comply?

A “grace period” is currently in effect. At the July 20, 2006 Public Hearing, the Board directed staff to employ enforcement discretion and work with the sand car industry with the goal of achieving compliance by January 1, 2007. The certification process can take time to complete; therefore, manufacturers should begin the process as soon as possible.

5. Can I buy any certified engine and simply install it in my vehicle?

No. When an engine is certified, it is certified for use in a specific application(s). Using certified engines in applications for which they were not certified and/or designed is tantamount to using uncertified engines.

6. What is the durability testing and how is it to be demonstrated?

The emission standards are “in-use” standards, meaning that the emission standards must be maintained for the vehicle’s useful life. Durability testing involves the accumulation of engine/vehicle operation over a period of time, with periodic emission sampling, to demonstrate that the emission standards will be maintained during the vehicle’s useful life. For the OHRV regulation, the useful life is a period of 5 years or 10,000 kilometers. Durability testing is the method for manufacturers to use for determining appropriate deterioration factors (DF). When applying for an Executive Order, a DF is applied to the emission test results to obtain the engine’s “in use” emission levels.

7. Is a manufacturer allowed to add aftermarket products to a certified vehicle?

Any aftermarket product that can have an affect on the emissions cannot be installed on a certified vehicle, unless that product has been certified along with the vehicle or there is an aftermarket Executive Order for the product’s use on the vehicle in which it is installed.

For more information about aftermarket certification, contact the Ms Rose Castro, Manager of the Aftermarket Parts Section (rcastro@arb.ca.gov or (626) 575-6848) or visit the Webpage:

<http://www.arb.ca.gov/msprog/aftermkt/aftermkt.htm>

Enforcement Questions:

1. What happens if I don't certify?

If you do not obtain an Executive Order, you (or your dealers) cannot legally sell your vehicles in California. If an investigation determines that OHRVs are being offered for sale in California, a "Cease and Desist" letter will be sent. Additional measures will follow, including the immediate removal of the vehicles and possible civil penalties.

2. What triggers an enforcement action against a manufacturer?

Any number of violations can trigger an enforcement action. Even a dealer can receive a "Notice of Violation" letter for selling illegal product. Nevertheless, each enforcement situation is different; therefore they are handled on a case-by-case basis.

3. Where can I find ARB's Webpage for the Enforcement Division?

The Webpage for the Enforcement Division is available on the Internet at:

<http://www.arb.ca.gov/enf/enf.htm>

General Information

Who may I contact if I have more questions?

For more information about certification-related matters, contact your assigned ARB certification staff person or Mr. Duc Nguyen, Manager (dnnguyen@arb.ca.gov or (626) 575-6844).

For more information about possible future regulatory changes, contact Mr. Andrew Spencer (aspencer@arb.ca.gov or (626) 575-6675) or Mr. Scott Rowland, Manager (srowland@arb.ca.gov or (626) 575-6676).

For more information about enforcement issues, contact Ms. Michelle Shultz-Wood (mshultz@arb.ca.gov or (626) 459-4338) or Mr. Gregory Binder, Manager (gbinder@arb.ca.gov or (626).575-8643)