PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE CALIFORNIA REGULATIONS FOR NEW 1997 AND LATER OFF-HIGHWAY RECREATIONAL VEHICLES AND ENGINES

Staff's Suggested Modifications to the Original Proposal

PRESENTED AT THE JULY 20, 2006 HEARING OF THE AIR RESOURCES BOARD

Based on comments received since issuance of the Staff Report: Initial Statement of Reasons, staff recommends the following modifications to the original proposal:

- Consolidate the definitions of Class I and Class II all-terrain vehicles (ATVs) into a single ATV definition.
- Replace the definition of Class III ATV with a definition for "off-road utility vehicles."
- Add a definition of "off-road sport vehicle," which would be a vehicle similar to a utility vehicle, but with less cargo carrying capacity and without the power cap of 30 kilowatts. Both of these categories would be subject to standards of equivalent stringency to the standards that currently apply to the vehicles in the two categories.
- Add a definition of "sand car."
- Sand cars with engines less than or equal to one liter will have exhaust standards equivalent to those for off-road "sport" and "utility" vehicles, and will have the option to certify with either the "chassis test" or the "engine-only test."
- Sand cars with engines greater than one liter will be subject to the same standards and test procedures currently required by U.S. EPA.
- Amend the proposed riding season for Heber Dunes and add the Sirretta OHV Trail.
- Add language to the test procedures to clarify the evaporative requirements.

Staff will continue to meet with industry after the Board Hearing to discuss these amendments and other related matters. The proposed language that follows could be refined if appropriate during these subsequent discussions.

Set forth below are the proposed modified definitions compared to those in original proposal, and suggested substitute exhaust emission standards tables. Comparable modifications would be included in the "California Exhaust Emissions Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines." Modified text reflecting the last two bulleted items is also shown.

Proposed Modified Definitions for Section 2411, Title 13, California Code of Regulations

(Language to be added by the original proposal is shown in <u>underline</u> to indicate additions and strikeout to indicate deletions. Text added by the modifications is shown in <u>double underline</u> to indicate additions and double strikeout to indicate deletions compared to the original proposal.)

§ 2411. Definitions.

(a) The definitions in Section 1900(b), Chapter 1, Division 3, Title 13 of the California Code of Regulations, apply with the following additions:

(1)(A) "All-Terrain Vehicle (ATV) <u>Class I</u>" means any motorized off-highway motor vehicle 50 inches (1270 mm) or less in overall width, <u>50 inches</u> (1270 mm) or less in overall width, that has all of the following features and characteristics: designed to travel on four <u>or more</u> low pressure tires, having a <u>single</u> seat designed to be straddled by the operator and, <u>or a single seat</u> <u>designed to be straddled by the operator and a seat for no more than one</u> <u>passenger, having</u> handlebars for steering control, and intended for use by a single operator and no passengers. The vehicle is designed to carry not more than 350 pounds (160 kg) payload, excluding the operator, and is powered by an internal combustion engine. Width shall be exclusive of accessories and optional equipment. <u>Width shall be exclusive of accessories and optional</u> golf cart, <u>off-road sport vehicle, or off-road utility vehicle</u> is not, for purposes of this regulation, to be classified as an all-terrain vehicle.

(B) "All-Torrain Vehicle (ATV) Class II" means any off-highway motor vehicle possessing the same features and characteristics as Class I ATVs, but having straddle seating for one operator and one passenger.

(C) (18) "All-Terrain Vehicle (ATV) Class IIIOff-Road Utility Vehicle" means any off-highway motor vehicle that has all of the following features and characteristics: designed to travel on four or more wheels, having bench or bucket seating for two or more persons, having a steering wheel for steering control, designed for operation over rough terrain, having either a rear payload 350 pounds or more or seating for six or more passengers, having an internal combustion engine with a displacement less than or equal to one liter, having a maximum brake power less than or equal to 30 kilowatts, and is capable of speeds over 25 miles per hour.

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(13) "Off-Highway Recreational Vehicle Engines" or "Engines" are identified as: two-stroke or four-stroke, air-cooled, liquid-cooled, gasoline, diesel, or alternate-fuel powered engines or electric motors that are designed for powering off-road recreational vehicles and engines included in, but not limited to use in, the following: off-road motorcycles, all-terrain vehicles, <u>off-road sport</u> <u>vehicles, off-road utility vehicles</u>, and golf carts. All engines and equipment that fall within the scope of the preemption of Section 209(e)(1)(A) of the Federal Clean Air Act, as amended, and as defined by regulation of the Environmental Protection Agency, are specifically not included within this category.

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(17) "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 over 25 miles per hour. 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.

(19) "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.

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, and 43107, Health and Safety Code. Reference: Sections 43013, 43018, 43101, and 43107, Health and Safety Code.

Modified Exhaust Emission Standards in Section 2412, title 13, California Code of Regulations

DELETE the proposed single exhaust emissions standards table in section 2412(b)(1):

0	1			
Vehicle & Model Year	Hydro-	Oxides	Carbon	Particulate
	carbon	of	Monoxide	Matter ⁽¹⁾
	<u>(HC)</u>	Nitrogen	<u>(CO)</u>	
		<u>(NO_x)</u>		
Off-Road Motorcycles and All-Terrain				
Vehicles (Class I and Class II) with	1.2 ⁽²⁾	—	15.0	—
Engines Greater Than 90 cc ⁽³⁾				
1997 and Later (g/km) ⁽⁴⁾				
Off-Road motorcycles and All Terrain				
Vehicles (Class I and Class II) with	1.2 ⁽²⁾	—	15.0	—
Engines 90 cc or Less				
1999 and Later (g/km)				
All-Terrain Vehicle (Class I and Class II)	Shall comply with exhaust emission			
Option	standards equivalent to the off-road			
1997 and Later	motorcycle and all-terrain vehicle standard			
	using the utility test procedures set forth in			
	CCR, Title 13, section 2403, and the			
	incorporated document "California Exhaust			
	Emission Standards and Test Procedures for			
	1995-and Later-2004 Small Off-Road			
	Engines" which is hereby incorporated by			
	reference herein. ⁽⁵⁾			
All-Terrain Vehicles (Class III)	<u>HC+NO_x</u>			
2007 and Later (g/kW-hr) ⁽⁶⁾	<u>12.0</u>		<u>400</u>	<u> </u>
Golf Carts in Federal Ozone	7550	7556	7550	7550
Non-Attainment Areas	ZERO	ZERO	ZERO	ZERO
1997 and Later				

Emission Standards

Off-Road Motorcycle and All-Terrain Vehicle (Class I and Class II) Option:	Vehicles and engines that do not meet the emissions standards noted above may be
1997 and Later Vehicles with	certified subject to the use restrictions
Engines Greater Than 90 cc, and	described in subsection (f) below.
1999 and Later Vehicles with	
Engines 90 cc or Less	

- 1. Applicable to diesel and two-stroke spark ignited engines only.
- 2. Compliance with the 1.2 grams per kilometer HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.
- 3. Cubic centimeter.
- 4. Grams per kilometer.
- 5. Compliance with the equivalent all-terrain vehicle HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.
- 6. Grams per kilowatt-hour, as tested using the utility test procedures set forth in CCR, Title 13, section 2403, and the incorporated document "California Exhaust Emission Standards and Test Procedures for 1995-2004 Small Off-Road Engines".

REPLACE WITH the following two exhaust emissions standards tables:

01103313-D03	Chassis-Based Testing				
Vehicle & Model Year	Hydro-	Oxides of		Particulate	
	carbon	Nitrogen	Monoxide	Matter ⁽¹⁾	
	(HC)	(NO _x)	(CO)		
Off-Road Motorcycles and All-Terrain	(0)				
Vehicles with Engines Greater Than	1.2 ⁽²⁾	—	15.0	—	
$90 \text{ cc}^{(3)}$					
1997 and Later (g/km) ⁽⁴⁾					
Off-Road motorcycles and All Terrain	(2)				
Vehicles with Engines 90 cc or Less	1.2 ⁽²⁾		15.0	—	
1999 and Later (g/km)					
Off-Road Motorcycle and All-Terrain					
Vehicle Option:	Vehicles and engines that do not meet the emissions standards noted above may be				
1997 and Later Vehicles with					
Engines Greater Than 90 cc, and	certified subject to the use restrictions described in subsection (f) below.				
1999 and Later Vehicles with	described	a in subsect	ion (1) below	-	
Engines 90 cc or Less					
Off-Road Sport Vehicles					
Off-Road Utility Vehicles					
Sand Cars	1.2 ⁽²⁾		15.0		
Less than or equal to 1 Liter	1.2		10.0		
2007 and Later (g/km)					
Sand Cars					
Greater than 1 liter	1.2 ⁽²⁾		15.0		
2007 and Later (g/km)					
Golf Carts in Federal Ozone					
Non-Attainment Areas	ZERO	ZERO	ZERO	ZERO	
1997 and Later					

Exhaust Emission Standards Based on Chassis-Based Testing

1. Applicable to diesel and two-stroke spark ignited engines only.

- Compliance with the 1.2 grams per kilometer HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.
- 3. Cubic centimeter.
- 4. Grams per kilometer.
- Compliance with the equivalent all-terrain vehicle HC+NO_x standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.

Emission Standards Based on Optional Engine-Based Testing¹

Vehicle & Model Year	Hydrocarbon plus Oxides of Nitrogen (HC+NO _x)	Carbon Monoxide <u>(CO)</u>	Particulate Matter ⁽²⁾
All-Terrain Vehicles Less than 225 cc ⁽³⁾ 1997 and Later (g/kW-hr) ⁽⁴⁾	16.1 ⁽⁵⁾	400	_
All Terrain Vehicles Greater than or equal to 225 cc 1997 and Later (g/kW-hr)	13.4 ⁽⁵⁾	400	
Off-Road Sport Vehicles Off-Road Utility Vehicles Sand Cars Less than or equal to 1 liter 2007 and Later (g/kW-hr)	12.0 ⁽⁵⁾	400	_
Sand Cars Greater than 1 liter 2007 and Later (g/kW-hr)	13.4 ⁽⁵⁾	400	

- 1. All-Terrain Vehicles, Off-Road Sport and Utility Vehicles, and Sand Cars may use the utility test procedures set forth in the "California Exhaust Emission Standards and Test Procedures for 2004 Small Off-Road Engines," as incorporated by reference in CCR, title 13, section 2403(d).
- 2. Applicable to diesel and two-stroke spark ignited engines only.
- 3. Cubic centimeters.
- 4. Grams per kilowatt-hour.
- Compliance with the equivalent all-terrain vehicle HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.

§ 2415. California Off-Highway Vehicle Areas and Riding Seasons for Off-Highway Recreational Vehicles with Use Restrictions.

Public Land Management			
Ranger District: United States Forest Service			
Field Office: Bureau of Land Management	Riding Areas	<u>Riding S</u>	easons
State Vehicular Recreation Area (SVRA): California State Parks	OHV Area Name	<u>Beginning</u>	<u>End</u>
SVRA	Heber Dunes	Year round	
Sequoia National Forest	Sirretta OHV Trail	To be determined	

CALIFORNIA EXHAUST EMISSIONS STANDARDS AND TEST PROCEDURES FOR 1997 AND LATER OFF-HIGHWAY RECREATIONAL VEHICLES AND ENGINES

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1051.110 What evaporative emission standards must my vehicles meet?

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(a) Beginning with the 2008 model year, permeation emissions from your vehicle's fuel tank(s) may not exceed 1.5 grams per square-meter per day when measured with the test procedures for tank permeation in subpart F of this part of these test procedures. You may generate or use emission credits under the averaging, banking, and trading (ABT) program, as described in Subpart H, Part 1051, Title 40, Code of Federal Regulations, provided the credits and debits are from vehicles produced for sale in California.

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<u>1051.145</u> What provisions apply only for a limited time? <u>DELETE subparagraphs (a) through (f) and retain subparagraphs (g) and (h).</u>