## Proposed Additional Modifications to the Text of the "Certification Procedures for Aftermarket Parts for Off-Road Vehicles, Engines, and Equipment"

Proposed Amendments to Chapter 9, Title 13 of the California Code of Regulations

Article 7: Certification Procedures for Aftermarket Parts for Off-Road Vehicles, Engines, Equipment

## § 2471. Definitions.

- (a) The definitions in Section 1900(b), Chapter 3, Title 13 of the California Code of Regulations shall apply with the following additions:
- (1) "All-Terrain Vehicle (ATV)" means any motorized off-highway vehicle 50 inches (1270 mm) or less in overall width, with an unladen dry weight of 600 pounds (275 kg) or less, designed to travel on four low pressure tires, having a seat designed to be straddled by the operator and 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 and unladen weight shall be exclusive of accessories and optional equipment. A go-kart, golf cart or specialty vehicle is not, for purposes of this regulation, to be classified as an all-terrain vehicle. An all-terrain vehicle that is not used exclusively in competition/racing events in a closed course is not a competition/racing vehicle for purposes of these regulations.
- (4) **An** "aAlternative fuel conversion system" is means a package of fuel, ignition, emission control, and engine components that are modified, removed, or added during the process of modifying a vehicle/engine/equipment to operate on an alternative fuel and to perform at an emission rate lower than or equal to the rate to which the engine family was originally certified.
- (8 <u>5</u>) "<u>Alternative fuel c</u>Conversion system manufacturer" refers to a person who manufactures or assembles a<u>n alternative fuel</u> conversion system for sale in California, requests, and is granted the Executive Order certifying the conversion system.
- ( $5\underline{6}$ ) "Confirmatory testing" means an ARB directed follow-up emissions test and inspection of the test engine or test vehicle that had been used by the manufacturer to obtain test data for submittal with the certification application. The emissions tests can be conducted at ARB or contracted out facilities or at the manufacturer's facility.
- (67) "Conventional fuel" means gasoline or diesel fuel.

- $(9 \ \underline{8})$  "Diesel Cycle Engine" means a type of engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The primary means of controlling power output in a diesel cycle engine is by limiting the amount of fuel that is injected into the combustion chambers of the engine. A diesel cycle engine may be petroleum-fueled (i.e. diesel-fueled) or alternate-fueled.
- (\*\* 9) "Driveability" of an off-road vehicle or off-road equipment means the smooth delivery of power, as demanded by the driver or operator. Typical causes of driveability degradation are rough idling, misfiring, surging, hesitation, or insufficient power.

  Conversion from conventional fuels to alternative fuels may entail losses of volumetric efficiency, resulting in some power loss. Such power loss is not considered to be driveability degradation.
- (14) "Exhaust Emissions" means substances emitted into the atmosphere from any opening downstream from the exhaust port of an **off-highway vehicle** <u>engine</u> <u>off-road vehicle</u>, <u>engine</u>, <u>or equipment</u>.
- (17 16) "Go-Kart" means any four wheeled, open framed vehicle equipped with an internal combustion engine. These vehicles are generally found at amusement parks and rented to patrons on a "pay-by-play" basis. These vehicles are generally designed for a single rider and run on a confined track. A go-kart that is not used exclusively in competition/racing events in a closed course is not a competition/racing vehicle for purposes of these regulations.
- (18 17) "Golf Cart" means a vehicle used to convey equipment and no more than two persons, including the driver, to play the game of golf in an area designated as a golf course. Golf carts are designed to have an unladen weight of less than 1,300 pounds and carry not more than 100 pounds, excluding passengers, accessories and optional equipment. A golf cart is not used for grounds keeping or maintenance purposes.
- (19 18) "Heavy-Duty Off-Road Diesel Cycle Engines" or "Engines" are identified as: diesel or alternate fuel powered diesel cycle internal combustion engines 175 horsepower and greater, operated on or in any device by which any person or property may be propelled, moved or drawn upon a highway, but are primarily used off a highway. The engines are designed for powering construction, farm, mining, forestry and industrial implements and equipment. They are designed to be used in, but are not limited to use in, the following applications: agricultural tractors, backhoes, excavators, dozers, log skidders, trenchers, motor graders, portable generators and compressors and other miscellaneous applications. Specifically excluded from this category are: (1) engines operated on or in any device used exclusively upon stationary rails or tracks; (2) engines used to propel marine vessels; (3) internal combustion engines attached to a foundation at a location; (4) transportable engines subject to District permitting rules which have been operated at a location for a period of one year or more on January 1, 1997; and (5) stationary or transportable gas turbines for power generation.

- (20 19) "Inboard Engine" means a four-stroke gasoline spark-ignition SI marine engine not used in a personal watercraft that is designed such that the propeller shaft penetrates the hull of the marine watercraft while the engine and the remainder of the drive unit is internal to the hull of the marine watercraft.
- (21 20) "Installer" refers to means a person who installs alternative fuel conversion systems on off-road vehicles/engines/equipment.
- (22 <u>21</u>) "Marine <u>vessel</u> <u>watercraft</u>" means every description of <u>watercraft</u> <u>boat</u>, <u>ship</u> or other artificial contrivance used, or capable of being <u>used</u>, <u>as a means of transportation</u> <u>on water</u>, <u>as defined in 1 U.S.C. 3 (1992)</u>. <u>operated on water</u>.
- (23 22) "Model year" means the manufacturer s annual production period which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year.
- (27 23) "Off-Highway Recreational Vehicle Engines" or "Engines" are identified as: two-stroke or four-stroke, air-cooled, liquid-cooled, gasoline, diesel, or alternative 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, and golf carts, go-karts 25 hp and greater, and specialty vehicles. 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.
- (28 24) Off-Road Aftermarket Parts Manufacturer means any person engaged in the manufacturing of add-on or modified parts, as defined in Section 1900(b), (1) and (10), Chapter 3, Title 13, California Code of Regulations, for off-road vehicles, engines or equipment subject to California or federal emission standards.
- (24 25) "Nonroad Engine or Off-Road Engine" has the meaning defined in 40 CFR 89.2. means any internal combustion engine or motor designed for powering off-road vehicles or off-road equipment. All engines 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.
- (\*\* 26) "Off-Road Large Spark-ignition Engines" or "LSI Engines" means any engine that produces a gross horsepower 25 and greater horsepower or is designed (e.g., through fueling, engine calibrations, valve timing, engine speed modifications, etc.) to produce 25 and greater horsepower. If an engine family has models at or above 25 horsepower and models below 25 horsepower, only the models at or above 25 horsepower would be considered LSI engines. The engine's operating characteristics are significantly similar to

the theoretical Otto combustion cycle with the engine's primary means of controlling power output being to limit the amount of air that is throttled into the combustion chamber of the engine. LSI engines or alternate fuel powered LSI internal combustion engines are designed for powering, but not limited to powering, forklift trucks, sweepers, generators, and industrial equipment and other miscellaneous applications. 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 excluded from this category.

Specifically excluded from this category are: 1) engines operated on or in any device used exclusively upon stationary rails or tracks; 2)engines used to propel marine vessels; 3) internal combustion engines attached to a foundation at a location for at least 12 months; 4) off-road recreational vehicles and snowmobiles; and 5) stationary or transportable gas turbines for power generation.

- (29 30 27) "Off-Road Motorcycle" means any two or three wheeled vehicle equipped with an internal combustion engine and weighing less than 1,499 pounds. An off-road motorcycle is primarily designed for use off highways. These vehicles are mainly used for recreational riding on dirt trails but are not limited to this purpose. An off-road motorcycle that is not used exclusively in competition/racing events in a closed course is not a competition/racing vehicle for purposes of these regulations.
- (28 29 28) "Off-Road Vehicle" or "Off-Road Equipment" means any non-stationary device, powered by an internal combustion engine or electric motor, used primarily off the highways; to propel, move, or draw persons or property including any device propelled, moved, or drawn exclusively by human power, and used in, but not limited to, the following applications: Marine Vessels, Construction/Farm Equipment, Locomotives, Small Off-Road Engines, Off-Road Motorcycles, and Off-Highway Recreational Vehicles.
- (30 31 29) "Otto Cycle Engine" means a type of engine with operating characteristics significantly similar to the theoretical Otto combustion cycle. The primary means of controlling power output in an Otto cycle engine is by limiting the amount of air and fuel which can enter the combustion chambers of the engine. As an example, Ggasoline-fueled engines are Otto cycle engines.
- (31 32 30) "Outboard engine" is a means a spark-ignition marine SI engine that, when properly mounted on a marine vessel watercraft in the position to operate, houses the engine and drive unit external to the hull of the marine vessel watercraft.
- (32 33 31) "Personal watercraft engine (PWC)" are all gasoline SI means a sparkignition marine engines that does not meet the definition of outboard engine, inboard engine or sterndrive engine, except that the Executive Officer may in his or her discretion may classify a PWC personal watercraft engine as an inboard or sterndrive engine if it is comparable in technology and emissions to an inboard or sterndrive engine.
- (33 34 32) "Scheduled Maintenance" means any adjustment, repair, removal, disassembly,

cleaning, or replacement of components or systems required by the manufacturer which is performed on a periodic basis to prevent part failure or equipment or engine malfunction, or anticipated as necessary to correct an overt indication of malfunction or failure for which periodic maintenance is not appropriate.

- (34 <u>35</u> <u>33</u>) "Small <u>Oo</u>ff-Rroad <u>Eo</u>ngines" or "Lawn and Garden and Utility Engines" are identified as: small two-stroke and four-stroke, air-cooled, liquid-cooled, gasoline and diesel and alternative fuel powered engines under 25 hp (18.6 kW).

  Title 13, CCR, Section 2401(18): means any engine that produces a gross horsepower less than 25 horsepower, or is designed (e.g., through fuel feed, valve timing, etc.) to produce less than 25 horsepower, that is not used to propel a licensed on-road motor vehicle, an off-road motorcycle, an all-terrain vehicle, a marine vessel, a snowmobile, a model airplane, a model car, or a model boat. If an engine family has models below 25 horsepower and models at or above 25 horsepower, only the models under 25 horsepower would be considered small off-road engines. Uses for small off-road engines include, but are not limited to, applications such as lawn mowers, weed trimmers, chain saws, golf carts, specialty vehicles, generators and pumps. 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.
- (16 \*\* 34) "Gasoline sSpark-ignition marine engine" means any engine used to propel a marine vessel watercraft, and which utilizes the spark-ignition (SI) combustion cycle.
- (35 36 35) "Specialty Vehicles" means any vehicle powered by an internal combustion engine having not less than 3 wheels in contact with the ground, having an unladen weight generally less than 2,000 pounds, which is typically operated between 10 and 35 miles per hour. The recommended bed payload for specialty vehicles is usually up to 2,000 pounds. Specialty vehicles are mainly used off of highways and residential streets. Applications of such vehicles include, but are not limited to, carrying passengers, hauling light loads, grounds keeping and maintenance, resort or hotel areas, airports, etc.
- (36 <u>37</u> <u>36</u>) "Sterndrive engine" means a four\_stroke <u>spark-ignition</u> marine <u>SI</u> engine <u>not used in a personal watercraft</u> that is designed such that the drive unit is external to the hull of the marine <u>vessel</u> <u>watercraft</u>, while the engine is internal to the hull of the marine <u>vessel</u> <u>watercraft</u>.
- (37 <u>38</u> <u>37</u>) "Test engine" means the engine or group of engines that a manufacturer uses during certification, production line and in-use testing to determine compliance with emission standards.
- (\*\*38) "Ultimate Purchaser" means the first person who in good faith purchases a

## replacement, add-on, or modified part for purposes other than resale.

Note: Authority cited: Sections 39600, 39601, 43013, and 43018, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43000.5, 43013, and 43018, Health and Safety Code.

## § 2473. Replacement Parts.

(b) The manufacturer of any replacement part subject to the provisions of this article shall maintain sufficient records, such as performance specifications, test data, or other information, to substantiate that such a replacement part is in compliance with this article. Such records shall be open for reasonable inspection by the executive officer or his/her representative. All such records shall be maintained for four years from the year of manufacture of the replacement part. The manufacturer may determine the format for maintaining such records (including, but not limited to, electronic or computer readable files, backup tapes, or magnetic media), provided the format allows the records to be readily retrieved and displayed to the executive officer.

Note: Authority cited: Sections 39600, 39601, 43013, and 43018, Health and Safety Code. Reference: Sections 39002, 39003, 39500, 43000, 43000.5, 43013, 43017, and 43018, Health and Safety Code; Sections 27156, 38391 and 38395, Vehicle Code.