California Environmental Protection Agency AIR RESOURCES BOARD	THUNDER MOTORSPORTS INC.	EXECUTIVE ORDER U-M-048-0001-1 New Emission-Compliant Off-Highway Recreational Vehicles

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the engine and exhaust emission control systems produced by the manufacturer are certified as described below for off-highway recreational vehicles. Production vehicles shall be in all material respects the same as those for which certification is granted. **The manufacturer shall ensure that character "C" or "3" is not used in the eighth (8th) position of the vehicle identification number (VIN) of all vehicles in the engine family listed below. Violation of this VIN provision may result in incorrect registration of the vehicles.**

MODEL YEAR	ENGINE FAMILY	ENGINE DISPLACEMENT (cc)	VEHICLE TYPE	FUEL TYPE	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS
2007	7TNDX1.60E04	1600 and 1100	SC	Gasoline	TWC, O2S, MFI

ATV=all-terrain vehicle; OFMC=off-road motorcycle; OFRUV=off-road utility vehicle; OFRSV=off-road sport vehicle; SC=sand car; EM=engine modification; TWC=three-way catalyst; OC=oxidizing catalyst; WUTWC/WUOC=warm-up TWC/OC; O2S=oxygen sensor HO2S=heated O2S; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI=multi port fuel injection; SFI=sequential MFI; TBI=throttle body fuel injection DFI=direct fuel injection TC/SC=turbo/super charger; CAC=charge air cooler; 2 (prefix)=parallel; (2) (suffix)=in series

VEHICLE MODELS / ENGINE CODES (equivalent inertia mass in kilograms, kg)	1600CC SAND VIPER / 04 (710 kg) 1100CC SAND VIPER / 04 (670 kg) 1100CC TROOPER / 04 (670 kg) 1100CC DEFENDER / 04 (670 kg)

The following are the exhaust hydrocarbon (HC) and carbon monoxide (CO) emission standards, or designated HC standard as applicable, and certification levels in grams per kilometer (g/km) for this engine family. The designated HC standard, as applicable, shall be displayed on the permanent emission control label. Vehicles within this engine family shall not discharge any crankcase emissions into the ambient atmosphere in conformance with Title 13, California Code of Regulations, (13 CCR) Section 2412(i).

HC (g/km)				CO (g/km)		* = not applicable
CORPORATE AVERAGE STANDARD	DESIGNATED STANDARD	(DIRECT) STANDARD	CERTIFICATION LEVEL	STANDARD	CERTIFICATION LEVEL	
*	*	1.2	0.3	15.0	0.5	

BE IT FURTHER RESOLVED: That the listed vehicles, and engines that power such vehicles, are conditionally certified based on the amendments to 13 CCR Sections 2410 et seq. adopted by the Board on July 20, 2006. In the event the amendments do not become effective, the manufacturer shall be required to certify this engine family pursuant to 13 CCR Section 2430, et seq. (Off-Road Large Spark-Ignition Engines 25 Horsepower and Greater) within 45 days after notification by the ARB or this Executive Order may be revoked and voided *ab initio*.

BE IT FURTHER RESOLVED: That certification to the designated HC standard listed above, as applicable, is subject to the following terms, limitations and conditions:

The designated standard shall be the exhaust limit for this engine family for the model year and cannot be changed by the manufacturer. It serves as the exhaust standard applicable to this engine family for determining engine family compliance, and compliance with the corporate average HC standard in accordance with 13 CCR Sections 2412(b) and (d) and 2414.

BE IT FURTHER RESOLVED: That the listed vehicles shall be subject to 13 CCR Section 2414 (enforcement and recall provisions).

BE IT FURTHER RESOLVED: That the listed vehicles shall comply with 13 CCR Sections 1965 and 2413 (emission control labels).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Vehicles in this family that are produced for any other model-year are not covered by this Executive Order.

This Executive Order hereby supersedes Executive Order U-M-048-0001 dated November 28, 2006.

Executed at El Monte, California on this 2nd day of May 2007.

J. Lorenzo

Annette Hebert, Chief
Mobile Source Operations Division