Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

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

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR ENGINE FAMILY		DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)			
2007	7HZXL.347V30	0.347	Diesel	3000			
	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
	Direct Diesel Inje	ction	Pump, Compressor				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION			E	XHAUST (g/kW-		OPACITY (%)			
	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
kW < 8	Tier 2	STD	N/A	N/A	7.5	8.0	0.80	N/A	N/A	N/A
		CERT			6.1	4.9	0.63			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines 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. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this ________ day of December 2006.

Raphael Susnowitz

Annette Hebert, Chief Mobile Source Operations Division

Attachment 1 of 2-E0#4-R-034-0150

Return to Template

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.8HP@RPM (SAE Gross)	4.Fusi Rate: mm/stroke @ pask HP (for diesel only)	5.Fuel Rate: (fbs/hr) @ peak HP (for diesels only)	6 Torque (2 RPM (SEA Gross)	7.Fuel Rate; mm/stroke@peek torque	8 Fuel Rate: (Ibs/hr)@peak torque	ECS.
7HZXL.347V30	N/A	1B30 / V	6,7@3600	16	3,2	12,1@2000	16	1,8	DDI
7HZXL.347V30	N/A	1B30 / V	6,7@3550	16	3,2	12,1@2000	16	1,8	1
7HZXL.347V30	N/A	1B30 / V	6,6@3500	16	3,1	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6,6@3450	16	3,1	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6.6@3400	16	3,0	12,1@2000	15	1,8	
7HZXL.347V30	N/A	1B30 / V	6,5@3350	16	3,0	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6.5@3300	16	2,9	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6,5@3250	16	2,9	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6,4@3200	16	2,9	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6,4@3150	16	2,8	12,1@2000	16	1,8	
7HZXL 347V30	N/A	1B30 / V	6,3@3100	16	2,8	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6,3@3050	16	2,7	12,1@2000	16	1,8	
7HZXL.347V30	N/A	1B30 / V	6,2@3000	16.5	2,8	12,1@2000	16.5	1.8	
7HZXL.347V30	N/A	1830 / V	6.2@2950	16,5	2,7	12,1@2000	16,5	1.8	
7HZXL.347V30	N/A	1B30 / V	6,1@2900	16,5	2,7	12,1@2000	16,5	1,8	
7HZXL.347V30	N/A	1B30 / V	6,0@2850	16,5	2,6	12,1@2000	16,5	1,8	
7HZXL.347V30	N/A	1B30 / V	6,0@2800	16.5	2,6	12,1@2000	16,5	1,8	
7HZXL.347V30	N/A	1B30 / V	5.9@2750	16.5	2,5	12,1@2000	16,5	1,8 -	
7HZXL.347V30	N/A	1830 / V	5,8@2700	16,5	2,5	12,1@2000	16,5	1,8	l l
7HZXL.347V30	N/A	1B30 / V	5,8@2650	16,5	2,4	12,1@2000	16,5	1,8	
7HZX1.347V30	N/A	1B30 / V	5,7@2600	16,5	2,4	12,1@2000	16,5	1,8	
7HZXL.347V30	N/A	1B30 / V	5,6@2550	16,5	2,3	12,1@2000	16,5	1,8	1
7HZXL.347V30	N/A	1830 / V	5,5@2500	16,5	2,3	12,1@2000	16,5	1,8	
7HZXL.347V30	N/A	1B30 / V	5,4@2450	16,5	2,3	12,1@2000	16,5	1,8	
7HZXL.347V30	N/A	1B30 / V	5,4@2400	16,5	2,2	12,1@2000	16,5	1,8	
7HZXL 347V30	N/A	1B30 / V	5,3@2350	16,5	2,2	12,1@2000	16,5	1,8	
7HZXL 347V30	N/A	1B30 / V	5,2@2300	16,5	2,1	12,1@2000	16,5	1,8	
7HZXL 347V30	N/A	1B30 / V	5,1@2250	16,5	2,1	12,1@2000	16,5	1,8	N N

Attachment 2 of 2 E0#4-R-034-0150

Return to Template

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.8HP@RPM (SAE Gross)	4.Fvel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (Ibs/hr) @ peak HP (for dissels only)	6.Torque @ RPM (SEA Gross)	7.Fvel Rate: mi/stroke@peak lorque	8.Fuel Rate: (lbs/hr)@peak lorque	ECS
7HZXL.347V30	N/A	1B30 / V	5,0@2200	16,5	2,0	12,1@2000	16,5	1,8	DDI
7HZXL.347V30	N/A	1B30 / V	4,9@2150	16,5	2,0	12,1@2000	16,5	1,8	1
7HZXL.347V30	N/A	1B30 / V	4,8@2100	16,5	1,9	12,1@2000	16,5	1,8	ł
7HZXL.347V30	N/A	1830 / V	4,7@2050	16,5	1,9	12,1@2000	16,5	1,8	
7H2XL.347V30	N/A	1830 / V	4,6@2000	16,5	1,8	12,1@2000	16,5	1,8	_