California Environmental Protection Agency AIR RESOURCES BOARD	MTU DETROIT DIESEL, INC.	EXECUTIVE ORDER U-R-052-0013 New Off-Road Compression-Ignition Engines

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 systems 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)
2010	AMDDL35.8GRR	23.9, 31.8, 35.8	Diesel	8,000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module	Pump, Compressor, Generator Set

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 STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
kW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT	--	--	5.5	1.6	0.16	--	--	--

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 29 day of December 2009.

Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Template

ATTACHMENT

U-R-052-0013
12/10/09

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
AMDDL35.8GRR	7062	18V2000G85 TB	1757 @ 1800	349	593	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7072	18V2000G85 TD	1757 @ 1800	349	593	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7061	18V2000G85 TB	1597 @ 1800	315	535	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7071	18V2000G85 TD	1597 @ 1800	315	535	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7060	16V2000G85 TB	1495 @ 1800	335	508	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7070	16V2000G85 TD	1495 @ 1800	335	509	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7059	16V2000G45 TB	1354 @ 1800	305	461	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7069	16V2000G45 TD	1354 @ 1800	305	461	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7058	16V2000G85 TB	1354 @ 1800	305	461	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7068	16V2000G85 TD	1354 @ 1800	305	461	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7057	16V2000G45 TB	1227 @ 1800	278	419	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7067	16V2000G45 TD	1227 @ 1800	278	419	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7056	12V2000G85 TB	1193 @ 1800	358	414	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7066	12V2000G85 TD	1193 @ 1800	358	414	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7055	12V2000G45 TB	1046 @ 1800	320	364	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7065	12V2000G45 TD	1046 @ 1800	320	364	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7054	12V2000G85 TB	1086 @ 1800	330	372	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7064	12V2000G85 TD	1086 @ 1800	330	372	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7053	12V2000G45 TB	952 @ 1800	295	333	Genset	NA	NA	DFI, TC, CAC, ECM
AMDDL35.8GRR	7063	12V2000G45 TD	952 @ 1800	295	333	Genset	NA	NA	DFI, TC, CAC, ECM