



April 8, 2015

6400 S. Fiddler's Green Circle, Suite 2000
Greenwood Village, CO 80111
www.viawest.com

Colorado Department of Public Health and Environment
Air Pollution Control Division
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530



Dear CDPHE APCD staff,

ViaWest, Inc. is submitting the attached Air Pollutant Emission Notice (APEN) form for one new 3,000-kW diesel-fueled emergency generator located at its data center at 8636 S. Peoria Street in Englewood, Colorado:

Based on a review of Colorado air regulations and discussions with APCD personnel, it is our understanding that actual emissions from this engine, when combined with the two existing 2,000-kW diesel-fueled emergency generators already located at this data center, will exceed one ton per year of the criteria pollutant NO_x (based on 24 hours per year of operations), and therefore APEN registration is now required.

The APEN form and fees are enclosed. Please let me know if you have any questions.

David Leonard
SVP of Data Center Operations



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2015 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: MTU America, Inc.
(U.S. Manufacturer or Importer)

Certificate Number: FMDDL95.4XTR-005

Effective Date:
11/20/2014

Expiration Date:
12/31/2015

Mary J. Manners
Byron J. Bunker, Division Director
Compliance Division

Issue Date:
11/20/2014

Revision Date:
N/A

Model Year: 2015

Manufacturer Type: Original Engine Manufacturer

Engine Family: FMDDL95.4XTR

Mobile/Stationary Indicator: Stationary

Emissions Power Category: 560<kW<=2237

Fuel Type: Diesel

After Treatment Devices: No After Treatment Devices Installed

Non-after Treatment Devices: Smoke Puff Limiter, Electronic Control

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

The actual engine power may lie outside the limits of the Emissions Power Category shown above. See the certificate application for details.



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

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JAN 20 2015

December 23, 2014

Mr. Daniel Ponder
MTU Detroit Diesel Corporation
13400 West Outer Drive
Detroit, Michigan 48239-4001

Dear Mr. Ponder:

The South Coast Air Quality Management District (SCAQMD) has extended to December 31, 2015 the Certified Equipment Permits (CEPs) for the stationary emergency internal combustion (IC) engine models listed in the attached table. However, please be reminded that many of these certified diesel-fueled IC engines may not meet Rule 1470 requirements if installed near a sensitive receptor or near school grounds and, therefore, may require an aftertreatment system such as a diesel particulate filter in the exhaust stream.

Please note that the SCAQMD does not endorse or warrant any specific equipment or manufacturer. Modification of the equipment listed here will void this certification.

If you have additional questions or need further clarification on the CEP program, please feel free to contact Rizaldy Calungcagin at (909) 396-2315 or at rcalungcagin@aqmd.gov.

Sincerely,

A handwritten signature in blue ink that reads 'David De Boer'.

David De Boer
Program Supervisor
Area Sources



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

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JAN 20 2015

MTU DETROIT DIESEL CORPORATION

Certified ICE-Emergency Generators

Engine Mfg.	Model	Engine Rating	Application No.
MTU Detroit Diesel	R123-8A36 (12V-2000 G84L)	1234 BHP	457869
MTU Detroit Diesel	R123-8A36 (12V-2000 G84 3D)	1120 BHP	457870
MTU Detroit Diesel	R123-8A36 (12V-2000 G84 3B)	1021 BHP	457871
MTU Detroit Diesel	R123-8A36 (12V-2000 G44 3D)	986 BHP	457872
MTU Detroit Diesel	R123-8A36 (12V-2000 G44 3B)	896 BHP	457873
MTU Detroit Diesel	R163-8A36 (16V-2000 G84 3D)	1495 BHP	457874
MTU Detroit Diesel	R163-8A36 (16V-2000 G44 3B)	1227 BHP	457875
MTU Detroit Diesel	R163-8A36 (16V-2000 G84 3B)	1354 BHP	457876
MTU Detroit Diesel	6063-HK36	760 BHP	465048
MTU Detroit Diesel	T1238A36 (12V-4000 G83)	2561 BHP	470532
MTU Detroit Diesel	T1638A36 (16V-4000 G83 3D)	3353 BHP	470533
MTU Detroit Diesel	T1238A36 (12V-4000 G83, 12V-4000 G43)	2328 BHP	470534
MTU Detroit Diesel	T1638A36 (16V-4000 G83 3D, 16V-4000 G83 3B)	3057 BHP	470535
MTU Detroit Diesel	G83L (20V-4000 G83L)	4680 BHP	470536
MTU Detroit Diesel	G83L (20V-4000 G83L, 20V-4000 G83 3D)	4036 BHP	470537
MTU Detroit Diesel	G43D (20V-4000 G43 3D, 20V-4000 G83 3B)	3674 BHP	470538
MTU Detroit Diesel	T1238A34 (12V-4000 G73)	1482 BHP	469312
MTU Detroit Diesel	12V2000G85 TB/TD (R1238A37)	1086 BHP	495342
MTU Detroit Diesel	16V2000G45 TB/TD (R1638A37)	1227 BHP	495344
MTU Detroit Diesel	16V2000G85 TB/TD (R1638A37)	1354 BHP	495345
MTU Detroit Diesel	18V2000G85 TB/TD	1757 BHP	495348
MTU Detroit Diesel	18V2000G85 TB/TD	1597 BHP	495349
MTU Detroit Diesel	12V2000G45 TB/TD (R1238A37)	952 BHP	495350
MTU Detroit Diesel	12V1600G80S	896 BHP	503820
MTU Detroit Diesel	12V1600G70S	822 BHP	503822
MTU Detroit Diesel	6R1600G70S	419 BHP	518630
MTU Detroit Diesel	6R1600G80S	460 BHP	518631
MTU Detroit Diesel	8V1600G70S	548 BHP	518632
MTU Detroit Diesel	8V1600G80S	601 BHP	518633

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Application	x				
Engine model	20V4000G83L				
Emission Stage	EPA2 (EPA2 parameter-setting/D2-Cycle)				
Optimisation					
Application group	3D				

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					Emissionsdatenblatt	
				MTU Friedrichshafen GmbH	Emission Data Sheet	
					Datum/Date	Name/Name
a	Hinzufügen „Not to exceed“ Werte	21.01.14	Lenhof	Bearbeiter/Drawn by	09.05.2012	Lenhof
-	Freigabe	06.06.12	Zwisler	Geprüft/Checked	04.06.2012	Rehm
Buchstabe/ Revision	Änderung Modifikation	Datum Date	Name Name	Org.-Einheit/Dept.	TKF	Veser
Vers. 2.0						EDS 4000 0527

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Emissions Daten Blatt (EDS)

emission Data Sheet (EDS)

	Genset	Marine	O & G	Rail	C & I
Application	x				
Engine model	20V4000G83L				
Emission Stage	EPA2 (EPA2 parameter-setting/D2-Cycle)				
Optimisation					
Application group	3D				
Date	09.05.2012				
fuel sulphur content [ppm]	5				
mg/mN³ values base on residual oxygen value of [%]	measured				

Engine raw emissions*

Cycle point	[-]	n1	n2	n3	n4	n5	n6	n7	n8
Power (P/PN)	[-]	1	0,75	0,50	0,25	0,10			
Power	[kW]	3490	2618	1745	872	349			
Speed (n/nN)	[-]	1	1	1	1	1			
Speed	[rpm]	1800	1800	1800	1800	1800			
Exhaust temperature after turbine	[°C]	495	431	386	350	255			
Exhaust massflow	[kg/h]	19529	17631	14079	9354	6616			
Exhaust back pressure	[mbar]	64	43	25	10	4			
NOx	[g/kWh]	6,7	5,4	4,6	4,1	7,5			
	[mg/mN³]	1869	1238	881	581	595			
CO	[g/kWh]	0,8	0,7	0,9	1,9	3,7			
	[mg/mN³]	197	148	155	239	259			
HC	[g/kWh]	0,14	0,19	0,29	0,45	1,66			
	[mg/mN³]	34	39	49	57	117			
O2	[%]	9,1	11,0	12,4	13,7	15,8			
Particulate measured	[g/kWh]	0,04	0,06	0,14	0,30	0,74			
	[mg/mN³]	10,99	11,25	23,62	37,46	52,46			
Particulate calculated	[g/kWh]	-	-	-	-	-			
	[mg/mN³]	-	-	-	-	-			
Dust (only TA-Luft)	[mg/mN³]	-	-	-	-	-			
FSN	[-]	0,3	0,4	0,7	1,0	0,3			
NO/NO2**	[-]	-	-	-	-	-			
CO2	[g/kWh]	647,9	659,8	684,6	776,3	973,6			
	[mg/mN³]	162461	135829	116579	98698	69093			
SO2	[g/kWh]	0,002	0,002	0,002	0,002	0,003			
	[mg/mN³]	0,5	0,4	0,4	0,3	0,2			

* Emission data measurement procedures are consistent with the respective emission evaluation process. Noncertified engines are measured to sales data (TVU/TEN) standard conditions. These boundary conditions might not be representative for detailed dimensioning of exhaust gas aftertreatment, in this case it is recommended to contact the responsible department for more information. Measurements are subject to variation. The nominal emission data shown is subject to instrumentation, measurement, facility, and engine-to-engine variations. All data applies to an engine in new condition. Over extended operating time deterioration may occur which might have an impact on emission. Exhaust temperature depends on engine ambient conditions.

** No standard test. To be measured on demand.

						Benennung/Title
				MTU Friedrichshafen GmbH		Emissionsdatenblatt Emission Data Sheet
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a	Hinzufügen „Not to exceed“ Werte	21.01.14	Lenhof	Bearbeiter/Drawn by	09.05.2012	Lenhof
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Vers. 2.0						Zeichnungs-Nr./Drawing No.
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Not to exceed Werte

not to exceed values

	Genset	Marine	O & G	Rail	C & I
Application	x				
Engine model	20V4000G83L				
Emission Stage	EPA2 (EPA2 parameter-setting/D2-Cycle)				
Optimisation					
Application group	3D				
Date	21.01.2014				
fuel sulphur content [ppm]	5				
mg/mN³ values base on residual oxygen value of [%]	measured				

Engine raw emissions - Not to exceed

Cycle point	[-]	n1	n2	n3	n4	n5	n6	n7	n8
Power (P/PN)	[-]	1	0,75	0,50	0,25	0,10			
Power	[kW]	3490	2618	1745	872	349			
Speed (n/nN)	[-]	1	1	1	1	1			
Speed	[rpm]	1800	1800	1800	1800	1800			
NOx	[g/kWh]	8,0	6,5	5,6	4,9	9,0			
	[mg/mN³]	2243	1485	1057	697	714			
NO2**	[g/kWh]	0,9	0,8	0,6	0,6	1,1			
	[mg/mN³]	262	173	123	81	83			
CO	[g/kWh]	1,4	1,3	1,6	3,4	6,6			
	[mg/mN³]	354	266	278	429	466			
HC	[g/kWh]	0,20	0,29	0,44	0,68	2,48			
	[mg/mN³]	51	59	74	86	176			
O2	[%]	9,1	11,0	12,4	13,7	15,8			
Particulate measured	[g/kWh]	0,06	0,08	0,19	0,41	1,03			
	[mg/mN³]	15	16	33	52	73			

GASEOUS EMISSIONS DATA MEASUREMENTS ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 60 SUBPART IIII AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX.

Locality	Agency	Regulation	Tier/Stage	Max Limits - G/(KW – HR)
U.S. (INCL CALIF)	EPA	STATIONARY	EMERGENCY STATIONARY	NOx + HC: 6.4 CO: 3.5 PM: 0.20

** No standard test. To be measured on demand.

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