DIESEL GENERATOR ENGINES AFTER 2007

Generator engines in Michigan do not require a Michigan Permit to Install (PTI) if the heat input is less than 10 mmbtu/hr under Rule 285(2)(g). But diesel generator engines have additional regulatory requirements that must be met to ensure environmental compliance. Generator engines must meet certain emissions and other requirements based on the date they were ordered or manufactured.

FEDERAL NSPS (40 CFR PART 60, SUBPART IIII)

Diesel generator engines ordered after July 11, 2005 and installed after April 1, 2006 (July 1,2006 for fire pumps) are subject to IIII. The 2007 and later model CI engines must be certified by the manufacturer and the engine must be labeled with the certification. To maintain its certification, the engine must be operated according to the manufacturer's recommendations. The operator must also minimize emissions during startup and shutdown. An engine that is certified (for example, certified to the Tier 2 standard) is not required to perform emissions testing. But uncertified engines will require periodic stack testing if subject to emission requirements.

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines. These emission requirements are summarized below:

ENGINE POWER	YEAR	CO	NMHC	NMHC+NOX	NOX	PM
kW<8	2008	8.0	-	7.5	-	0.4
8<kW<19	2008	6.6	-	7.5	-	0.4
19<kW<37	2008	5.5	-	7.5	-	0.3
	2013	5.5	-	4.7	-	0.03b
37<kW<56	2008	5.0	-	4.7	-	0.3
	2013	5.0	-	4.7	-	0.03
56<kW<130	2012-2014c	-	0.19	-	0.40	0.02
130<kW<560	2011-2014d	3.5	0.19	-	0.40	0.02

a - hand-startable, air-cooled, DI engines may be certified to Tier 2 standards through 2009 and to an optional PM standard of 0.6 g/kWh starting in 2010
b - 0.4 g/kWh (Tier 2) if manufacturer complies with the 0.03 g/kWh standard from 2012
c - PM/CO: full compliance from 2012; NOx/HC: Option 1 (if banked Tier 2 credits used)—50% engines must comply in 2012-2013; Option 2 (if no Tier 2 credits claimed)—25% engines must comply in 2012-2014, with full compliance from 2014.12.31
d - PM/CO: full compliance from 2011; NOx/HC: 50% engines must comply in 2011-2013

FEDERAL NESHAP (40 CFR PART 63, SUBPART ZZZZ)

Engines subject to the NSPS demonstrate compliance with the ZZZZ requirements by complying with NSPS requirements. Mobile or portable engines are not subject to NSPS/NESHAP requirements though they cannot remain on one site for more than 12 months.

Prepared by Fishbeck for Use by Michigan Aggregate Association members. It is not meant to represent legal advice but an overview of generator engine requirements.

ADDITIONAL INFORMATION: USEPA Controlling Air Pollution from Stationary Engines | www.epa.gov/stationary-engines

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