

U.S. EPA emissions regulations for on-site power generation



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Final standards for stationary and nonroad diesel generator sets

On July 11, 2006, the US EPA finalized its proposal to regulate emissions from stationary diesel compression-ignition engines. Called the "New Source Performance Standards," the EPA rule requires emissions from stationary diesel-powered generator sets to be harmonized with nonroad (mobile) applications starting from January 1, 2007.

As a result of the rule:

- > Generators with engine ratings of 10-99 hp must comply with Tier 2 regulations;
- > Generators with engine ratings of 100-751 hp must comply with Tier 3 regulations;
- > Generators with engine ratings of 752-3000 hp must comply with Tier 2 regulations;
- > Engines that are not certified to 2007 nonroad standards must be installed by the end-user by January 1, 2009.

Key exceptions are:

- > Stationary engines over 3000 hp will remain at Tier 1 until their Tier 4 requirements become effective in 2011.
- > Beginning in 2011 at Tier 4, emergency stationary diesel generators will not have to advance to standards that require aftertreatment.

Proposed regulations for spark-ignited gas engines

On June 12, 2006, the EPA proposed new rules to regulate emissions from stationary spark-ignited gas engines. The first regulation will become effective July 1, 2007, when emissions levels for stationary non-emergency engines (typically used in peaking and landfill gas) and engines below 25 hp will be regulated. Spark-ignited gas engines above 25 hp used in stationary emergency applications will require EPA certification effective January 1, 2009.

Cummins Power Generation intends to offer EPA-certified gas products to meet the EPA stationary emergency requirements for spark-ignited gas. Please consult your Cummins Power Generation dealer or visit www.cumminspower.com for a list of our EPA-compliant gas generator sets.

Award-winning diesel technology

Frost & Sullivan named Cummins Power Generation the recipient of the 2006 North American Diesel Engine Technology Leadership of the Year Award. The award recognizes Cummins Power Generation's advancements and market leadership in emissions technology.



“As a recognized industry leader, Cummins Power Generation has been working closely with the EPA and supports their efforts to strengthen emissions regulations for nonroad and stationary diesel engines. Cummins Power Generation was the first manufacturer to offer EPA-certified Tier 3 generator sets.

“Cummins Power Generation’s design strategy for meeting new emissions standards has been to focus on our existing electronic-controlled engine platforms and new in-cylinder design

enhancements. We believe this has been the best approach to higher performance, better fuel efficiency and high reliability than designs that rely on costly exhaust aftertreatments. This design strategy has helped us become one of the few manufacturers who can offer the marketplace a full line of EPA-certified products.”

Tom Linebarger
President, Cummins Power Generation

Cummins Power Generation Tier-certified products by application

Cummins Power Generation offers a full range of diesel generator sets that meet or exceed

EPA requirements. Below are the U.S. EPA Tier levels for stationary and nonroad applications and corresponding Cummins Power Generation Tier-certified models:

Cummins Power Generation Tier-certified diesel generator sets

kWe	Stationary*	Nonroad	Stationary and Nonroad	Stationary and Nonroad	Stationary and Nonroad
	2006	2006	2007	2008	2009
15 / 20 / 25	DK Series	DK Series	DK Series	DSBAB, DSCAA, DSCAB	DSBAB, DSCAA, DSCAB
30				DSCAC	DSCAC
35	DGGD, DGBB**	DGBB**	DGBB**, DGGD**	DSDAA	DSDAA
40	DGHD, DGBC**	DGBC**	DGBC**, DGHD**	DSDAB	DSDAB
50	DGHE, DGCA**	DGCA**	DGCA**, DGHE**	DSDAC	DSDAC
60	DGCB**	DGCB**	DGCB**	DSFAA	DSFAA
80	DGCG, DGDA	DGDA	DSFAE	DSFAE	DSFAE
100	DGDB	DGDB	DSHAF, DSGAA	DSGAA	DSGAA
125	DGDK, DSGAB	DSHAE	DSHAE, DSGAB	DSGAB	DSGAB
150	DGFA, DSHAA	DSHAA	DSHAA, DSGAC	DSGAC	DSGAC
175	DGFB, DSHAB	DSHAB	DSHAB	DSHAB	DSHAB
200	DGFC, DSHAC	DSHAC	DSHAC	DSHAC	DSHAC
230	DGFS, DSHAD	DSHAD	DSHAD	DSHAD	DSHAD
250	DQDAA	DQDAA***	DQDAA***	DQDAA***	DQDAA***
275	DQDAB	DQHAA	DQHAA	DQHAA	DQHAA
300	DQDAC	DQHAB	DQHAB	DQHAB	DQHAB
350	DFEG	DFEG	DFEG	DFEG	DFEG
400	DFEH	DFEH	DFEH	DFEH	DFEH
450	DFEJ	DFEJ	DFEJ	DFEJ	DFEJ
500	DFEK	DFEK	DFEK	DFEK	DFEK
600	DFHA, DQCA, DQMAA	DQMAA, DQCA	DQMAA, DQCA	DQMAA, DQCA	DQMAA, DQCA
750	DFHA, DQCB, DQFAA	DQFAA, DQCB	DQFAA, DQCB	DQFAA, DQCB	DQFAA, DQCB
800	DFHB, DQCC, DQFAB	DQFAB, DQCC	DQFAB, DQCC	DQFAB, DQCC	DQFAB, DQCC
900	DFHD, DQFAC	DQFAC	DQFAC	DQFAC	DQFAC
1000	DFHD, DQFAD	DQFAD	DQFAD	DQFAD	DQFAD
1250	DFLE, DQGAA	DQGAA	DQGAA	DQGAA	DQGAA
1500	DFLE, DQGAB	DQGAB	DQGAB	DQGAB	DQGAB
1750	DQKB, DQKAA	DQKAA	DQKAA	DQKAA	DQKAA
2000	DQKC, DQKAB	DQKAB	DQKAB	DQKAB	DQKAB
2250*	DQKH	DQKH	DQKH	DQKH	DQKH
2500*	DQLC		DQLC	DQLC	DQLC

EPA Certification Levels:

- Tier 2
- Tier 3
- Tier 4
- Tier 1 Stationary only (cannot use for nonroad)

* Tier 1 or greater required for stationary from 4/1/2006.

** Tier 1 and Tier 2 models available.

*** Tier 1 and Tier 3 models available.

Note: Our interpretation of the NSPS as it applies to stationary diesel generators is believed to be accurate. However, do not rely solely on this document for compliance information.

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