

NSPS JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Applicability: NSPS JJJJ standards apply if you commence construction after 6/12/2006 and your engine is manufactured:

Modified or Reconstructed, All Engines	Any
Emergency, hp > 25	On/after 1/1/2009
Non-Emergency, hp < 500	On/after 7/1/2008
Non-Emergency Lean Burn, 500 ≤ hp < 1,350	On/after 1/1/2008
Non-Emergency, hp ≥ 500	On/after 7/1/2007

Certified Engines Compliance: Purchase an EPA-certified engine and:

Option 1	Install, configure, operate, and maintain per manufacturers written emission-related instructions, and keep required records.
Option 2	Implement maintenance plan consistent with good air pollution control practices, keep required records, and Conduct initial performance test (if hp ≥ 100), and Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first (if hp > 500).

Note: If emergency engine does not meet non-emergency standards, install non-resettable hour meter.

Non-Certified Engines Compliance:

HP	Non-Emergency			LFG/DG, Mod/Recon	Emergency		
	Gasoline or Rich Burn using LPG	Other Non-Emergency	Modified or Reconstructed		Gasoline or Rich Burn using LPG	Other Emergency	Modified or Reconstructed
25 < hp < 100	2.7 g/kW-hr HC+NO _x , 2.2 g/kW-hr CO, d	3.8 g/kW-hr HC+NO _x , 6.5 g/kW-hr CO, a	3.8 g/kW-hr HC+NO _x , 6.5 g/kW-hr CO, a, c	Table 1, b	13.4 g/kW-hr HC+NO _x , 519 g/kW-hr CO, d, e	Table 1, a, e	3.8 g/kW-hr HC+NO _x , 6.5 g/kW-hr CO, a, e
100 ≤ hp < 130	2.7 g/kW-hr HC+NO _x , 2.2 g/kW-hr CO, d	Table 1, b	Table 1, b, c	Table 1, b	13.4 g/kW-hr HC+NO _x , 519 g/kW-hr CO, d, e	Table 1, b, e	Table 1, b, e
130 ≤ hp ≤ 500	2.7 g/kW-hr HC+NO _x , 2.2 g/kW-hr CO, d	Table 1, b	Table 1, b, c	Table 1, b	2.7 g/kW-hr HC+NO _x , 2.2 g/kW-hr CO, d, e	Table 1, b, e	Table 1, b, c, e
> 500	2.7 g/kW-hr HC+NO _x , 2.2 g/kW-hr CO, d	Table 1, b	Table 1, b, c	Table 1, b	2.7 g/kW-hr HC+NO _x , 2.2 g/kW-hr CO, d, e	Table 1, b, e	Table 1, b, c, e

a Manufactured prior to 1/1/2011 and certified to Table 1 100 ≤ hp < 500 standards, can alternately meet that standard.

b Manufactured prior to 1/1/2011 and certified to 40 CFR 1048, can alternately meet that non-field test CO certification standard.

c If NG or LB LPG engines manufactured prior to the above dates, NO_x of 3.0 g/hp-hr or 250 ppmvd, CO of 4.0 g/hp-hr or 540 ppmvd (Non-emerg <100hp, CO of 5.0 g/hp-hr or 675 ppmvd), and VOC 1.0 g/hp-hr or 86 ppmvd.

d Maximum sulfur content of gasoline fuels is 80 ppm.

e If emergency engine does not meet non-emergency standards, install a non-resettable hour meter.

Table 1: Emission Standards per NSPS JJJJ

Engine Type	Maximum Engine Power	Manufacture Date	g/hp-hr (ppmvd at 15% O ₂)		
			NO _x	CO	VOC
Non-Emergency NG and LB LPG ^b	100 ≤ hp < 500	7/1/2008	2.0 (160)	4.0 (540)	1.0 (86)
		1/1/2011	1.0 (82)	2.0 (270)	0.7 (60)
Non-Emergency LB NG and LB LPG	500 ≤ hp < 1,350	1/1/2008	2.0 (160)	4.0 (540)	1.0 (86)
		7/1/2010	1.0 (82)	2.0 (270)	0.7 (60)
Non-Emergency NG and LB LPG (except LB LPG <1,350)	hp ≥ 500	7/1/2007	2.0 (160)	4.0 (540)	1.0 (86)
		7/1/2010	1.0 (82)	2.0 (270)	0.7 (60)
LFG/DG (except LB 500 ≤ HP <1,350)	hp < 500	7/1/2008	3.0 (220)	5.0 (610)	1.0 (80)
		1/1/2011	2.0 (150)	5.0 (610)	1.0 (80)
	hp ≥ 500	7/1/2007	3.0 (220)	5.0 (610)	1.0 (80)
		7/1/2010	2.0 (150)	5.0 (610)	1.0 (80)
LFG/DG	500 ≤ hp < 1,350	1/1/2008	3.0 (220)	5.0 (610)	1.0 (80)
		7/1/2010	2.0 (150)	5.0 (610)	1.0 (80)
Emergency	25 < hp < 130	1/1/2009	^c 10 (n/a)	387 (n/a)	n/a (n/a)
	hp ≥ 130		2.0 (160)	4.0 (540)	1.0 (86)

b If Major Source, non-emergency LB ≥ 250hp, and complying with NESHAP ZZZZ Table 2a, then Table 1 CO emission standards n/a.

c The NO_x emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_x+ HC.

d When calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.