

Major Source, Existing, NESHAP ZZZZ Engine Requirements

Compliance Dates: CI - 5/3/13 SI less than/equal to 500hp - 10/19/2013 SI greater than 500hp - 6/15/2007

Records: Keep records for 5 yrs that show compliance (notifications, reports, tests, maintenance, etc)

HP	CI/Diesel	2-Stroke Lean Burn	4-Stroke Lean Burn	4-Stroke Rich Burn	Landfill & Digester Gas	Black Start RICE	Emergency RICE
	hp < 100	b	b	b	b	b	b
100 ≤ hp ≤ 300	a	a	a	a	a	b	b
300 < hp ≤ 500	a	a	a	a	a	b	b
> 500	a	none	none	a	none	none	c

Notifications & Reports

a Initial Notification, Notice of Performance Test (60 days before), Notification of Compliance Status (within 60 days of test), Semiannual Compliance Report (annual if operates < 100hrs/yr).

b Deviation Report (only if a deviation from NESHAP ZZZZ requirements occurs).

c Annual Report (if operated or is contractually obligated to operate > 15 hrs/yr via an allowable power supply agreement).

HP	CI/Diesel	2-Stroke Lean Burn	4-Stroke Lean Burn	4-Stroke Rich Burn	Landfill & Digester Gas	Black Start RICE	Emergency RICE
	hp < 100	none	none	none	none	none	none
100 ≤ hp ≤ 300	230 ppm CO, d	225 ppm CO, d	47 ppm CO, d	10.3 ppm CH ₂ O, d	177 ppm CO, d	none	none
300 < hp ≤ 500	49 ppm CO or 70% CO ↓, e					none	none
> 500	23 ppm CO or 70% CO ↓, e	none	none	350 ppbvd CH ₂ O or reduction, f	none	none	none

Emission Limits & Performance Tests

d Initial performance test only (due 10/30/2013 for CI, due 4/17/2014 for SI).

e Indicated ppm CO limit or 70% CO reduction; initial performance test (due 10/30/2013), then subsequent performance tests every 8,760 hrs or 3 yrs, whichever comes first (5 yrs. if operates < 100hrs/yr).

f 350 ppbvd CH₂O limit, 76% CH₂O reduction, or 30% THC reduction; initial performance test (due by 12/12/2007), then subsequent performance tests semiannually (not required if reducing CH₂O or THC and < 5,000 hp).

HP	CI/Diesel	2-Stroke Lean Burn	4-Stroke Lean Burn	4-Stroke Rich Burn	Landfill & Digester Gas	Black Start RICE	Emergency RICE
	hp < 100	g, n	g, o	g, p	g, p	g, p	g, q
100 ≤ hp ≤ 300	g	g	g	g	g	g, q	g, q, r
300 < hp ≤ 500	g, h, i	g	g	g	g	g, q	g, q, r
> 500	g, h, i, j, k	none	none	g, l, m	none	none	none

Operating Limits & Maintenance Requirements

g Mimimize idle time during startup (startup not to exceed 30 mins), then normal emission standards apply.

h CARB diesel fuel required if displacement is < 30 liters per cylinder.

i Operate a closed crankcase ventilation system or open crankcase filtration emission control system per manufacturer's requirements.

j If catalyst is installed, catalyst pressure drop ≤ 2 inH₂O different than measured @ initial performance test; & measure monthly.

k If catalyst is installed, 450°F < catalyst inlet temperature < 1,350°F; continuously monitored; & conduct annual system audit.

l If catalyst is installed, catalyst pressure drop ≤ 2 inH₂O @ 100% load ±10% of performance test; & measure monthly.

m If catalyst is installed, 750°F < catalyst inlet temperature < 1,250°F; continuously monitored; & conduct annual system audit.

n Change engine oil & filter and inspect air cleaner every 1,000 hrs and inspect/replace as necessary all hoses & belts every 500 hrs, or annually (whichever comes first).

o Change engine oil & filter, install spark plug, and inspect/replace as necessary all hoses & belts every 4,320 hrs or annually (whichever comes first).

p Change engine oil & filter, install spark plug, and inspect/replace as necessary all hoses & belts every 1,440 hrs or annually (whichever comes first).

q Change engine oil & filter and inspect/replace as necessary all hoses & belts every 500 hrs and inspect air cleaner or spark plug every 1,000 hrs, or annually (whichever comes first).

r Install a non-resettable hour meter.