

EPA RICE NESHAP

(National Emission Standards for Hazardous Air Pollutants) for Existing Stationary Gas and Diesel Engines

Gas Engine Standards (effective October 2013)

Type of Engine	100 to 500 Hp Non-Emergency Engine Located at Major Sources	> 500 Hp that Operate > 24 Hrs/Yr Located at New/ Reconstructed/Existing Major Source or Existing Area Sources in Populated Areas
2SLB (2-stroke lean burn)	225 ppmvd CO @ 15% O ₂	No MACT std. due to insufficient data
4SLB (4-stroke lean burn)	47 ppmvd CO @ 15% O ₂	Source test/annual checks/high temperature shutdown/monitor catalyst inlet temperature. 93% CO reduction.
4SRB (4-stroke rich burn)	10.3 ppmvd formaldehyde @ 15% O ₂	Source test/annual checks/high temperature shutdown/monitor catalyst inlet temperature. 76% formaldehyde or 30% THC reduction.
Landfill/Digester Gas	177 ppmvd CO @ 15% O ₂	
After Treatment	3-way (NSCR) for rich burn engines and 2-way (oxidation catalyst) for lean burn engines	

Diesel Engine Standards (effective May 2013)

Engine Size	Non-Emergency Engines Located at Major Sources	Non-Emergency Engines Located at Area Sources
100 to 300 Hp	230 ppmvd CO @ 15% O ₂	
300 to 500 Hp	49 ppmvd CO @ 15% O ₂ or 70% reduction	49 ppmvd CO @ 15% O ₂ or 70% reduction
> 500 Hp	23 ppmvd CO @ 15% O ₂ or 70% reduction	23 ppmvd CO @ 15% O ₂ or 70% reduction
After Treatment	Burn ULSD and install DOC on non-emergency engines with a site limit of > 300 Hp	

Populated Area: Not on a Class 1 gas pipeline or is within a 1/4 mile radius of five or more buildings.

Emergency Engines: Operating maximum 100 hours per year for maintenance & testing, emergency demand response or responding to ≥ 5% change in voltage; operating up to 50 hours to head off potential voltage collapse or line overload.

Major Source: Any stationary source or group of stationary sources located within a contiguous area and under common control emits or has the potential to emit considering controls, in the aggregate ≥ 10 TPY of a single HAP or ≥ 25 TPY of two or more HAPs.

Area Source: Not a major source | EPA estimates there are > 900,000 stationary CI engines installed | EPA estimates there are > 330,000 stationary SI engines installed.

Date Applicability: ENGINES >500 HP AT MAJOR SOURCE: Existing if constructed before Dec. 19, 2002 | New if constructed on or after Dec. 19, 2002 | Reconstructed if reconstruction began after Dec. 19, 2002. ENGINES ≤500 HP AT MAJOR SOURCE OF HAP AND ENGINES OF ALL HP AT AN AREA SOURCE OF HAP: Existing if constructed before June 12, 2006 | New if constructed on or after June 12, 2006 | Reconstructed if reconstruction began after June 12, 2006.



Johnson Matthey

Johnson Matthey

Stationary Emissions Control
Suite 100, 900 Forge Avenue
Audubon, PA 19403-2305 USA

Tel: 484-320-2125, Fax: 484-320-2152
E-mail: info@jmsec.com
www.jmsec.com