



20.11.41 NMAC Air Quality Permit Application

For
EMERGENCY DIESEL ENGINES
SUBJECT TO FEDERAL (USEPA) NEW SOURCE PERFORMANCE STANDARDS (NSPS)

Section 1. General Information

Date Submitted: ____ / ____ / 20__

1. Company Name: _____ Ph: (____) _____ Fax: (____) _____
2. Company Address: _____ City: _____ State: _____ Zip: _____
3. Company Mailing Address (if different): _____ Zip: _____
4. Company Contact: _____ Title: _____ Ph: (____) _____ - _____ Fax: (____) _____ - _____
5. Facility Name: _____ Facility Hours: _____: _____ am or pm TO _____: _____ am or pm
6. Facility Address: _____ City: _____ State: NM Zip: _____
7. Local Business Mailing Address (if different): _____ Zip: _____
8. Facility Environmental Contact: _____ Title: _____ Ph: (____) _____ - _____ Fax: (____) _____ - _____
9. Facility Environmental Contact E-Mail Address: _____ 10. Type of Business: _____
11. Environmental Consultant Name and E-Mail Address (if applicable): _____
12. North American Industry Classification System (NAICS): _____ 13. Standard Industrial Classification (SIC): _____
14. UTM coordinates (required): _____ east _____ north 15. Facility Ph: (____) _____ - _____ Fax: (____) _____ - _____
16. Billing Contact: _____ Title: _____ Ph: (____) _____ - _____ Fax: (____) _____ - _____
17. Billing Address: _____ City: _____ State: _____ Zip: _____
18. Is this an Initial Installation; OR Modification of an Existing Unit: Initial Modification 19. Current or requested operating hrs/yr: _____
20. Is engine or genset installed: Yes No If yes, date installed: ____/____/____ If no, anticipated installation date: ____/____/20__

Provide an engine spec sheet and a detailed site plan or plat of the property where engine or genset is to be installed.

Section 2. Compression Ignition Internal Combustion Engine for Stationary Emergency Engines

Provide engine rating in horsepower (Hp) as determined by manufacturer's spec sheet.

Process Equipment Unit	Manufacturer	Model Number	Serial Number	Manufacturer Date	Modification Date	Engine Size In Horsepower (Hp)	Size of Generator In kilowatts (kW)
Example Engine	Unigen	B-2500	A56732195C-222	02/2008	N/A	375	N/A
Example Generator	Gentor	A56789B234	XYZ13247586	02/2008	N/A	N/A	280 kW
Engine							N/A
Generator						N/A	

Section 3. Stack and Emissions Information

Stack Height Above Ground & Stack Diameter In Feet		Stack Temperature	Stack Flow Rate & Exit Direction
Example 18 feet – Height	0.42 feet – Diameter	625 °F	3,000 ft ³ /min – Flow Rate Exit - upward

Section 4. Potential Emission Rate (Uncontrolled Emissions)

Use manufacturer's data, compliance performance stack test data or the attached USEPA Emission Factors in grams per horsepower-hour (g/Hp-hr) associated with the Engine's Horsepower Rating and Model Year

Model Year	Pollutant	Emission Factors g/Hp-hr	T I M E S	Actual Engine Hp	E Q U A L S	Emission In Grams Per Hour	D I V I D E	Grams Per Pound	E Q U A L S	Emission in Pounds Per Hour	T I M E S	Potential Operating Hours Per Year	D I V I D E	Pounds Per Ton	E Q U A L S	Emission In Tons Per Year
EXAMPLE 2008	CO	2.6	x	375 Hp	=	975	÷	453.6	=	2.15	x	8,760	÷	2,000	=	9.4
	NO _x	0.3	x		=	112.5	÷		=	0.25	x	8,760	÷	2,000	=	1.1
	NMHC	0.14	x		=	52.5	÷		=	0.12	x	8,760	÷	2,000	=	0.53
	*NO _x + NMHC	3.0	x		=	1,125	÷		=	2.48	x	8,760	÷	2,000	=	10.86
	**SO _x	0.93	x		=	348.8	÷		=	0.77	x	8,760	÷	2,000	=	3.37
	***PM	0.15	x		=	56.25	÷		=	0.12	x	8,760	÷	2,000	=	0.53
	CO		x		=		÷		=		x	8,760	÷	2,000	=	
	NO _x		x		=		÷		=		x	8,760	÷	2,000	=	
	NMHC		x		=		÷		=		x	8,760	÷	2,000	=	
	*NO _x + NMHC		x		=		÷		=		x	8,760	÷	2,000	=	
	**SO _x		x		=		÷		=		x	8,760	÷	2,000	=	
	***PM		x		=		÷		=		x	8,760	÷	2,000	=	

- * If the USEPA Emission Factor or manufacturer's data is given as combined NO_x + NMHC, also provide individual emission factors for NO_x and NMHC from the manufacturer or other approved methodology for estimating individual emission factors.
- ** Manufacturer's SO_x factor shall be used when larger than the USEPA Emission Factor.
- *** Particulate Matter (PM) emissions are considered to be < 1µm (micron). Therefore, PM emissions also reflect PM₁₀ & PM_{2.5}.

Section 5. Potential to Emit (Requested allowable rate) (Controlled Emissions)

Transfer each pollutant Emission in Pounds Per Hour from column above to the Emission in Pounds Per Hour column below. Complete the equation after inserting the Requested Operating Hours Per Year. Pound Per Hour rate for each pollutant must be met if performance testing is requested.

Pollutant	Emission in Pounds Per Hour	T I M E S	Requested Operating Hours Per Year	E Q U A L S	Pounds Per Year	D I V I D E	Pounds Per Ton	E Q U A L S	Emission In Tons Per Year
EXAMPLE CO	2.15	x	200	=	430	÷	2,000	=	0.22
NO _x		x		=		÷		=	
NMHC		x		=		÷		=	
*NO _x + NMHC	2.48	x	200	=	496	÷	2,000	=	0.25
**SO _x	0.77	x	200	=	154	÷	2,000	=	0.08
***PM	0.12	x	200	=	24	÷	2,000	=	0.012
CO		x		=		÷	2,000	=	
NO _x		x		=		÷	2,000	=	
NMHC		x		=		÷	2,000	=	
*NO _x + NMHC		x		=		÷	2,000	=	
**SO _x		x		=		÷	2,000	=	
***PM		x		=		÷	2,000	=	

I, the undersigned, a responsible officer of the applicant company, certify that to the best of my knowledge, the information stated on this application, together with associated drawings, specifications, and other data, give a true and complete representation of the existing, modified existing, or planned new stationary source with respect to air pollution sources and control equipment. I also understand that any significant omissions, errors, or misrepresentations in these data will be cause for revocation of part or all of the resulting source registration and air quality permit.

Note: The following shall be protected as confidential if requested (checked) by the applicant. Provide detailed nature of request as an attachment.

- Any information relating to processes or production techniques, which are unique to owner / operator
- Data relating to owner / operator profits and costs, which have not previously been made public

Print Name _____ Sign Name _____ Title _____ / _____/20____

METHOD OF SUBMITTAL: Mail OR Hand deliver (8:00am – 5:00pm ; Monday – Friday) to the Address at the top of Page 1.

Federal New Source Performance Standards (NSPS) for Stationary EMERGENCY Diesel Engines (40CFR 60.4202 & 60.4205) in Grams Per Horsepower Hour (g/hp-hr) for Engines with a displacement of < 10 Liters Per Cylinder

Horsepower / kW	Tier (CFR Section)	Year Of Manufacture	CO (g/hp-hr)	NOx ¹ (g/hp-hr)	NMHC ¹ (g/hp-hr)	NOx + NMHC ¹ (g/hp-hr)	SOx ² (g/hp-hr)	Particulate Matter (PM) (g/hp-hr)	Notes
< 11 Hp < 8 kW	1 (60.4205)	Pre 2007 ³	6.0			7.8	0.93*	0.75	* Use AP-42 Section 3.3 SOx factors if <600Hp and Section 3.4 if >600Hp, as shown on this table, or manufacturer's factors. Manufacturer's factors shall be used when larger than AP-42 factors.
		2007	6.0			5.6	0.93*	0.6	
≥ 11 Hp < 25 Hp	2 (60.4202) - (89.112)	2008 +	6.0			5.6	0.93*	0.3	
		Pre 2007 ³	4.9			7.1	0.93*	0.6	
≥ 8 kW < 19 kW	2 (60.4202) - (89.112)	2007	4.9			5.6	0.93*	0.6	
		2008 +	4.9			5.6	0.93*	0.3	
≥ 25 Hp < 50 Hp	1 (60.4205)	Pre 2007 ³	4.1			7.1	0.93*	0.6	
		2007	4.1			5.6	0.93*	0.45	
≥ 19 kW < 37 kW	2 (60.4202) - (89.112)	2008 +	4.1			5.6	0.93*	0.22	
		Pre 2007 ³	3.03**	6.9	1.12**		0.93*	1.0**	
≥ 50 Hp < 100 Hp	1 (60.4205)	2007	3.7			5.6	0.93*	0.3	
		2008 +	3.7			3.5	0.93*	0.3	
≥ 37 kW < 75 kW	3 (60.4202) - (89.112)	Pre 2007 ³	3.03**	6.9	1.12**		0.93*	1.0**	
		2007 +	3.7			3.0	0.93*	0.22	** Use AP-42 Section 3.3 factors for CO, NMHC, and PM as shown on this table, or manufacturer's factors. Manufacturer's factors shall be used when larger than AP-42 factors.
≥ 100 Hp < 175 Hp	1 (60.4205)	Pre 2007 ³	3.03**	6.9	1.12**		0.93*	0.4	
		2007 +	3.7			3.0	0.93*	0.22	
≥ 75 kW < 130 kW	3 (60.4202) - (89.112)	Pre 2007 ³	8.5	6.9	1.0		0.93*for < 600Hp or 3.67* for > 600Hp	0.15	
		2007 +	2.6			3.0		0.15	
≥ 175 Hp ≤ 750 Hp	1 (60.4205)	Pre 2007 ³	8.5	6.9	1.0			0.4	
		2007 +	2.6			3.0		0.15	
> 750 Hp	3 (60.4202) - (89.112)	Pre 2007 ³	8.5	6.9	1.0			0.4	
		2007***	2.6			4.8		0.15	
> 560 kW	3 (60.4202) - (89.112)	*** 2007 – 2010 Model Year Engines > 3,000 Hp shall meet the Pre 2007 standards and beginning with the 2011 model year, Engines > 3,000 Hp shall meet the 2007 standards							

¹ When an emission factor is given for combined NOx + NMHC, individual emission factors for NOx and NMHC must be obtained from the manufacturer.

² SOx emission factors shall be based on AP-42 Section 3.3 for engines less than (<) 600 Hp and Section 3.4 for engines greater than (>) 600 Hp, or manufacturer's factors since SOx emission standards were not established for non-road diesel engine rulemaking. Manufacturer's factors shall be used when larger than the AP-42 factors. For engines > 600 Hp, the "S" multiplier is 0.05 (5%) if calculating SOx to reflect the current low sulfur diesel fuel standard of 500 ppm. Percent sulfur in diesel fuel transitions to Ultra Low Sulfur Diesel (15 ppm) by October 2010. For engines operated after October 2010, with a year of manufacture of 2010 or later, the "S" multiplier is 0.0015 (0.15%) if calculating SOx to reflect the proposed new standard.

³ Pre 2007 means each stationary Compression Ignition Internal Combustion Engine (CI ICE) whose construction, modification or reconstruction commenced after July 11, 2005. The date of construction is the date the engine is ordered by the owner or operator. Stationary CI ICE manufactured prior to April 1, 2006, that are not fire pump engines are not subject to NSPS, unless the engines are modified or reconstructed after July 11, 2005. A modified or reconstructed CI ICE must meet the emission standards for the model year in which the engine was originally new, not the year the engine is modified or reconstructed (Preamble language – Section II. E).