



**20.11.41 NMAC Air Quality Permit Application**  
**For**

**NON - 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. Is engine or genset installed:  Yes  No If yes, date installed: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ If no, anticipated installation \_\_\_\_ / \_\_\_\_ / 20 \_\_\_\_
20. Current or requested operating times of facility: \_\_\_\_ hours/day \_\_\_\_ days/week \_\_\_\_ weeks/month \_\_\_\_ months/year = \_\_\_\_\_ hrs/yr

**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 Non - 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 <sup>3</sup> /min – Flow Rate Exit - upward

**Section 4. Potential Emission Rate (Uncontrolled Emissions)**

Use the attached USEPA Emission Factors, manufacturer's data or compliance performance stack test data 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
E X A M P L E 2008	CO	2.6	x	375 Hp	=	975	+	453.6	=	2.15	x	8,760	+	2,000	=	9.4
	NO <sub>x</sub>	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 <sub>x</sub> + NMHC	3.0	x		=	1,125	+		=	2.48	x	8,760	+	2,000	=	10.86
	**SO <sub>x</sub>	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 <sub>x</sub>		x		=		+		=		x	8,760	÷	2,000	=	
	NMHC		x		=		÷		=		x	8,760	÷	2,000	=	
	*NO <sub>x</sub> + NMHC		x		=		÷		=		x	8,760	÷	2,000	=	
	**SO <sub>x</sub>		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<sub>x</sub> + NMHC, also provide individual emission factors for NO<sub>x</sub> and NMHC from the manufacturer or other approved methodology for estimating individual emission factors.

\*\* Manufacturer's SO<sub>x</sub> factor shall be used when larger than the USEPA Emission Factor.

\*\*\* Particulate Matter (PM) emissions are considered to be < 1um (micron). Therefore, PM emissions also reflect PM10 & PM2.5.

**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	3,000	=	6,450	÷	2,000	=	3.23
NO <sub>x</sub>		x		=		+		=	
NMHC		x		=		+		=	
*NO <sub>x</sub> + NMHC	2.48	x	3,000	=	7,440	+	2,000	=	3.72
**SO <sub>x</sub>	0.77	x	3,000	=	2,310	÷	2,000	=	1.16
***PM	0.12	x	3,000	=	360	+	2,000	=	0.18
CO		x		=		+	2,000	=	
NO <sub>x</sub>		x		=		÷	2,000	=	
NMHC		x		=		÷	2,000	=	
*NO <sub>x</sub> + NMHC		x		=		+	2,000	=	
**SO <sub>x</sub>		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 \_\_\_\_\_ Date \_\_\_\_\_ / \_\_\_\_ / 20 \_\_\_\_

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

Version: 08/08 Construction, Installation, or Operation of an engine or genset shall not take place until a 20.11.41 NMAC Air Quality permit is issued.

**Federal New Source Performance Standards (NSPS) for Stationary NON - EMERGENCY Diesel Engines (40CFR 60.4201 & 60.4204) 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 (g/hp-hr)	NMHC (g/hp-hr)	NOx + NMHC (g/hp-hr)	SO <sub>2</sub> (g/hp-hr)	Particulate Matter (g/hp-hr)	Notes
< 11 Hp	1 (60.4204)	Pre 2007 <sup>4</sup>	6.0			7.8	0.93*	0.75	* Use AP-42 Section 3.3 if <600Hp, 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.
	2 (60.4201) - (89.112)	2007	6.0			5.6	0.93*	0.6	
< 8 kW	4 (60.4201) - (1039.102)	2008 - 2014	6.0			5.6	0.93*	0.3	
	4 (60.4201) - (1039.101)	2015 +	6.0			5.6	0.93*	0.3	
≥ 11 Hp < 25 Hp	1 (60.4204)	Pre 2007 <sup>4</sup>	4.9			7.1	0.93*	0.6	
	2 (60.4201) - (89.112)	2007	4.9			5.6	0.93*	0.6	
≥ 8 kW < 19 kW	4 (60.4201) - (1039.102)	2008 - 2014	4.9			5.6	0.93*	0.3	
	4 (60.4201) - (1039.101)	2015 +	4.9			5.6	0.93*	0.3	
≥ 25 Hp < 50 Hp	1 (60.4204)	Pre 2007 <sup>4</sup>	4.1			7.1	0.93*	0.6	
	2 (60.4201) - (89.112)	2007	4.1			5.6	0.93*	0.45	
≥ 19 kW < 37 kW	4 (60.4201) - (1039.102)	2008 - 2012	4.1			5.6	0.93*	0.22	
	4 (60.4201) - (1039.101)	2013 +	4.1			3.5	0.93*	0.02	
≥ 50 Hp < 75 Hp ≥ 37 kW < 56 kW	1 (60.4204)	Pre 2007 <sup>4</sup>	**	6.9	**		0.93*	**	** 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.
	2 (60.4201) - (89.112)	2007	3.7			5.6	0.93*	0.3	Option #2
	3 (60.4201) - (89.112) & 4 (1039.102)	2008 - 2011	3.7			3.5	0.93*	0.3 (0.02 by 2012+)	
	4 (60.4201) - (1039.102)	2008 - 2012	3.7			3.5	0.93*	0.22	Option #1
	4 (60.4201) - (1039.102) & (1039.101)	2013 +	3.7			3.5	0.93*	0.02	***Phase in/out <sup>3</sup> [1039.102(c)(1)]
	1 (60.4204)	Pre 2007 <sup>4</sup>	**	6.9	**		0.93*	**	
≥ 75 Hp < 100 Hp	2 (60.4201) - (89.112)	2007	3.7			5.6	0.93*	0.3	
≥ 56 kW < 75 kW	3 (60.4201) - (89.112)	2008 - 2011	3.7			3.5	0.93*	0.3	
	4 (60.4201) - (1039.102)	2012 - 2013	3.7	0.3***	0.14***	3.5***	0.93*	0.01	
≥ 100 Hp < 175 Hp	4 (1039.102) & (1039.101)	2014 +	3.7	0.3	0.14		0.93*	0.01	
	1 (60.4204)	Pre 2007 <sup>4</sup>	**	6.9	**		0.93*	**	
≥ 75 kW < 130 kW	3 (60.4201) - (89.112)	2007 - 2011	3.7			3.0	0.93*	0.22	
	4 (60.4201) - (1039.102)	2012 - 2013	3.7	0.3***	0.14***	3.0***	0.93*	0.01	***Phase in/out <sup>3</sup> [1039.102(c)(1)]
≥ 175 Hp ≤ 750 Hp	4 (60.4201) - (1039.102) & (1039.101)	2014 +	3.7	0.3	0.14		0.93*	0.01	
	1 (60.4204)	Pre 2007 <sup>4</sup>	8.5	6.9	1.0	3.0	0.93*	0.4	
≥ 130 kW ≤ 560 kW	3 (60.4201) - (89.112)	2007 - 2010	2.6			3.0	0.93*	0.15	
	4 (60.4201) - (1039.102)	2011 - 2013	2.6	0.3***	0.14***	3.0***	0.93*for < 600Hp or 3.67* for > 600Hp	0.01	***Phase in/out <sup>3</sup> [1039.102(c)(1)]
> 750	4 (60.4201) - (1039.102) & (1039.101)	2014 +	2.6	0.3	0.14		0.93*	0.01	
	1 (60.4204)	Pre 2007 <sup>4</sup>	8.5	6.9	1.0	4.8	3.67*	0.4	
> 560 kW	2 (60.4201) - (89.112)	2007 - 10****	2.6			4.8	3.67*	0.15	
	4 (60.4201) - (1039.102)	2011 - 2014	2.6	2.6	0.3	**** 2007 - 2010 Model Year Engines > 3,000 Hp shall meet the Pre 2007 standards	3.67*	0.075	
	4 (60.4201) - (1039.101)	2015 +	2.6	2.6	0.14		3.67*	0.03	

## Gensets<sup>5</sup>

	Tier (CFR Section)	Year Of Manufacture	CO (g/hp-hr)	NOx (g/hp-hr)	NMHC (g/hp-hr)	NOx + NMHC <sup>1</sup> (g/hp-hr)	SOx <sup>2</sup> (g/hp-hr)	Particulate Matter (g/hp-hr)	Notes
> 750 Hp ≤ 1200 Hp > 560 kW ≤ 900 kW	2(60.4200) (89.1112)	2007-2010	2.6			4.8	3.67*	0.15	
	4 (1039.102)	2011 - 2014	2.6	2.6	0.3		3.67*	0.075	
	4 (1039.101)	2015 +	2.6	0.5	0.14		3.67*	0.02	
> 1200 Hp > 900 kW	2(60.4200) (89.1112)	2007-2010	2.6			4.8	3.67*	0.15	
	4 (1039.102)	2011 - 2014	2.6	0.5	0.3		3.67*	0.075	
	4 (1039.101)	2015 +	2.6	0.5	0.14		3.67*	0.02	

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

<sup>2</sup> 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.

<sup>3</sup> 50 percent of the engines produced have to meet the NOx + NMHC standard, and 50 percent have to meet the separate NOx and NMHC limits. If claiming your unit was manufactured to meet the NOx + NMHC standard, please provide certified documentation citing the unit is part of the Phase-out option.

<sup>4</sup> 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).

<sup>5</sup> Generator sets (Gensets) are given specific emission requirements for engines >750 Hp in the preamble of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines-Final Rule; but are not cited in 40 CFR 60 Subpart IIII emission tables. They are addressed in 40 CFR 89.112, 1039.102 and 1039.101 for exhaust emission standards 2007-2010, 2011-2014 and after the 2014 model year, respectively.