

Version: 02/14

City of Albuquerque Environmental Health Department Air Quality Program

Please mail this application to P.O. Box 1293, Albuquerque, NM 87103 or hand deliver between 8:00am - 5:00pm Monday - Friday to:

3rd Floor, Suite 3023 - One Civic Plaza NW, Albuquerque, New Mexico 8710 (505) 768 - 1972 aqd@cabq.gov (505) 768 - 1977 (Fax)

20.11.41 NMAC Air Quality Permit Application For

EMERGENCY DIESEL ENGINES

SUBJECT TO FEDERAL (USEPA) NEW SOURCE PERFORMANCE STANDARDS (NSPS)

	General In					Date S	ubmitted:/	/ 20
1. Company Name: University of New Mexico Ph: (505) 277					′-7520 _{Emi}	ով։ cbhall4@unr	n.edu	
2. Company Address:	Scholes Hall 1	60, Bldg. 10	1800 Roma Ave	NE City	, _: Albı	uquerque	State: NM	_{Zip:} 87131
3. Company Mailing Ad	ddress (if different): MSC05 335	0 1 University	of New	Mexi	ico Albuque	rque, NM	_{Zip:} 87131
4. Company Contact:	Craig White	Ti	Senior Vice President for F	inance and Adm	inistration	Ph: (505)277	_7520 Email:	cwhite@unm.edu
4. Company Contact: C 5. Facility Name: Fam	nily Practice (Center	Facility	y Hours:_1	2 :	00 am or pm	TO 12 :00 a	m or pm
6. Facility Address: 24	00 Tucker R	d. NE Bldg #2	48	57	City: _	Albuquerque	State: NM	Zip: 87131
7. Local Business Maili	ng Address (if difl	ferent): MSC07 4	100 1 University o	f New Me	exico A	Albuquerque, N	M 87131 Email: Ct	ohall4@unm.edu
8. Facility Environment	al Contact: Case	ey Hall	Title: Environm	ental Health	Manage	er Ph: () 27	7 0305 Fax:(505,277_9006
9. Email: cbhall4@	unm.edu	10. T	ype of Business: Coll	eges, Univer	rsities, an	d Professional School	ols	46
11. Environmental Con	sultant Name and	Email Address (if ap	oplicable):					
12. North American Ind 14. UTM coordinates (r	lustry Classification	n System (NAICS):	611310	13. St	andard	Industrial Classif	ication (SIC): 8221	
14. UTM coordinates (r	equired): 35250	05east_3	884270 _{no}	orth 15. Fa	cility Pl	h: (_505 ₎ 272	3843 Fax:(505	277 9006
16. Billing Contact: C	asey Hall	Tit	le: Environmental H	lealth Mar	nager p	h: (505)277	_0305Fax:(_50	⁵ ,277 ₋ 9006
17. Billing Address: M								
18. Is this an Initial Inst	allation; OR Modi	fication of an Exist	ing Unit: Initi	al X	Modific	ation 19. Curren	t or requested operation	ng hrs/yr: 200
20. Is engine or genset i	nstalled:Y	es X No If	yes, date installed: _	/	/	_ If no, anticipal	ed installation date:	9 /15 /20 19
Provide an en	gine spec shee	t and a detailed	l site plan or pla	t of the	prope	rty where eng	ine or genset is t	o be installed.
Section 2.							Emergency Engir	.
Section 2.		5.54			-		rer's spec sheet.	103
Process Equipment Unit	Manufacturer	Model Number	Serial Number	Manufa Dat	cturer	Modification Date	Engine Size In Horsepower (Hp)	Size of Generator In kilowatts (kW)
Example Engine	Unigen	B-2500	A56732195C-222	02/20	800	N/A	375	N/A
Example Generator	Gentor	A56789B234	XYZ13247586	02/20	008	N/A	N/A	280 kW
Engine	Engine Cummins 4BT3.3-G5 TBD TBD N/A 69 N/A							
Generator	Cummins	TBD	TBD	ТВ	D	N/A	N/A	25
Section 3.	Stack and	d Emissions Inf	<u>ormation</u>					
Stack	Height Above G	round & Stack Dia	ımeter In Feet	5		Stack perature	Stack Flow Exit Dire	
Example 18	feet - Height	0.	42 feet – Diameter	U, sw	6	25 °F	3,000 ft ³ /min – Exit - upv	

0.25 ft

825 F

290cfm-Flow Rate Exit-Up

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)

11 E	T		Τ.	associated	with		's H	orsepower	r Rat	ting and Mo			D		Le	
Model Year	Pollutant	Emission Factors g/Hp-hr	T I M E S	Actual Engine Hp	Q U A L S	Emission In Grams Per Hour	I V I D E	Grams Per Pound	Q U A L S	Emission in Pounds Per Hour	T 1 M E S	Potential Operating Hours Per Year	I V I D E	Pounds Per Ton	E Q U A L S	Emission In Tons Per Year
E	CO	2.6	X	Chi Est	-	975	+	n Yale	=	2.15	X	8,760	+	2,000	=	9.4
X	NO _x	0.3	x	TAKE NO	=	112.5	+		=	0.25	X	8,760	+	2,000	=	1.1
M	NMHC	0.14	X	ASTA SE	=	52.5 +		=	0.12	X	8,760	+	2,000	-	0.53	
P	*NOx + NMHC	3.0	x	375 Hp	=	1,125	+	453.6	=	2.48	x	8,760	+	2,000	=	10.86
E	**SO,	0.93	x		=	348.8	+		=	0.77	x	8,760	+	2,000		3.37
2008	***PM	0.15	x		=	56.25	+		=	0.12	х	8,760	+	2,000	=	0.53
2019	CO	1.5	х	69	100	103.5	+	453.6	=	0.23	x	8,760	+	2,000	=	1.00
2015	NO _x	4.67	x	69	=	322.23	+	453.6	=	0.71	х	8,760	+	2,000	=	3.11
	NMHC	2.93	х	69	=	202,17	+	453.6	=	0.45	X	8,760	+	2,000	=	1.95
	*NOx + NMHC	3.3	x	69	=	227.7	+	453.6	-	0.50	х	8,760	+	2,000	=	2.20
	**SO _x	0.25	X	69	=	12.42	+	453.6	=	0.03	х	8,760	+	2,000	=	0.12
	***PM	0.22	x	69	=	15.18	+	453.6	=	0.15	x	8,760	+	2,000	=	0.15

^{*} If the USEPA Emission Factor or manufacturer's data is given as combined NOx + NMHC, also provide individual emission factors for NOx and NMHC from the manufacturer or other approved methodology for estimating individual emission factors

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 Your. 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	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	Parameter.	=	A STATE OF THE	+	Service as	=	100000000000000000000000000000000000000
NMHC	Silina et a	X	TOWNS A. P.	=	1000	+		=	No. The last
*NOx + NMHC	2.48	X	200	=	496	+	2,000	=	0.25
**SO,	0.77	x	200	=	154	+	2,000	-	0.08
***PM	0.12	x	200	Tax .	24	+	2,000	20	0.012
CO	0.23	Х	200	=	45.63	+	2,000	=	0.023
NO,	0.71	x	200	=	142.08	+	2,000	=	0.071
NMHC	0.45	X	200	=	122.91	+	2,000	==	0.061
*NOx + NMHC	0.50	Х	200	=	100.4	+	2,000	=	0.050
**SO,	0.03	X	200	=	5.48	+	2,000	=	0.0027
***PM	0.03	X	200	=	6.69	+	2,000	=	0.0033

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.

Trin like

Sign Name

If SUP

C 18 1269

^{**} Manufacturer's SOx factor shall be used when larger than the USEPA Emission Factor.

^{***} Particulate Matter (PM) emissions are considered to be < 1 µm (micron). Therefore, PM emissions also reflect PM₁₀ & PM₂₅.



City of Albuquerque

Environmental Health Department Air Quality Program



Permit Application Checklist

Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to ruling a submitted application complete each application submitted shall contain the required items listed below. This checklist must be returned with the application.

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

All applicants shall:

- 1. Fill out and submit the *Pre-permit Application Meeting Request* form a. Attach a copy to this application
- 2. Attend the pre-permit application meeting
 - a. X Attach a copy of the completed Pre-permit Application Meeting Checklist to this application
- 3. Provide public notice to the appropriate parties
 - a. Attach a copy of the completed Notice of Intent to Construct form to this form

i.	Neighborho	ood Asso	ciation(s):	Campu:	NA D	istrict 6	Coultan	of NA's,	
_	District 7	Coalition	of NA'S	North	Campus N	A. Nob Hill	NA, Su	imit Pork	AN

ii.	Coalition(s):	
	` /	

b. Attach a copy of the completed Public Sign Notice Guideline form

- 4. Fill out and submit the *Permit Application*. All applications shall:
 - A. k be made on a form provided by the Department. Additional text, tables, calculations or clarifying information may also be attached to the form.
 - B. at the time of application, include documentary proof that all applicable permit application review fees have been paid as required by 20 NMAC 11.02. Please refer to the attached permit application worksheet.
 - C. contain the applicant's name, address, and the names and addresses of all other owners or operators of the emission sources.

- D. & contain the name, address, and phone number of a person to contact regarding questions about the facility.
- E. X indicate the date the application was completed and submitted
- F. K contain the company name, which identifies this particular site.
- G. X contain a written description of the facility and/or modification including all operations affecting air emissions.
- H. M contain the maximum and standard operating schedules for the source after completion of construction or modification in terms of hours per day, days per week, and weeks per year.
- I. Some provide sufficient information to describe the quantities and nature of any regulated air contaminant (including any amount of a hazardous air pollutant) that the source will emit during:
 - Normal operation
 - Maximum operation
 - Abnormal emissions from malfunction, start-up and shutdown
- J. Include anticipated operational needs to allow for reasonable operational scenarios to avoid delays from needing additional permitting in the future.
- K. contain a map, such as a 7.5-minute USGS topographic quadrangle, showing the exact location of the source; and include physical address of the proposed source.
- L. contain an aerial photograph showing the proposed location of each process equipment unit involved in the proposed construction, modification, relocation, or technical revision of the source except for federal agencies or departments involved in national defense or national security as confirmed and agreed to by the department in writing.
- M. Contain the UTM zone and UTM coordinates.
- N. include the four digit Standard Industrialized Code (SIC) and the North American Industrial Classification System (NAICS).
- O. A contain the types and <u>potential emission rate</u> amounts of any regulated air contaminants the new source or modification will emit. Complete appropriate sections of the application; attachments can be used to supplement the application, but not replace it.
- P. contain the types and **controlled** amounts of any regulated air contaminants the new source or modification will emit. Complete appropriate sections of the application; attachments can be used to supplement the application, but not replace it.

- Q. contain the basis or source for each emission rate (include the manufacturer's specification sheets, AP-42 Section sheets, test data, or other data when used as the source).
- R. contain all calculations used to estimate potential emission rate and controlled emissions.
- S. contain the basis for the estimated control efficiencies and sufficient engineering data for verification of the control equipment operation, including if necessary, design drawings, test reports, and factors which affect the normal operation (e.g. limits to normal operation).
- T. **Contain fuel data for each existing and/or proposed piece of fuel burning equipment.
- U. K contain the anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.
- V. Contain the stack and exhaust gas parameters for all existing and proposed emission stacks.
- W. provide an ambient impact analysis using a atmospheric dispersion model approved by the US Environmental Protection Agency (EPA), and the Department to demonstrate compliance with the ambient air quality standards for the City of Albuquerque and Bernalillo County (See 20.11.01 NMAC). If you are modifying an existing source, the modeling must include the emissions of the entire source to demonstrate the impact the new or modified source(s) will have on existing plant emissions.
- X. X contain a preliminary operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown.
- Y.

 contain a process flow sheet, including a material balance, of all components of the facility that would be involved in routine operations. Indicate all emission points, including fugitive points.
- Z. contain a full description, including all calculations and the basis for all control efficiencies presented, of the equipment to be used for air pollution control. This shall include a process flow sheet or, if the Department so requires, layout and assembly drawings, design plans, test reports and factors which affect the normal equipment operation, including control and/or process equipment operating limitations.
- AA. \checkmark contain description of the equipment or methods proposed by the applicant to be used for emission measurement.
- BB. \times be signed under oath or affirmation by a corporate officer, authorized to bind the company into legal agreements, certifying to the best of his or her knowledge the truth of all information submitted.





Pre-Permit Application Meeting Request Form

Air Quality Program- Environmental Health Department

Please complete appropriate boxes and email to aqd@cabq.gov or mail to:

Environmental Health Department Air Quality Program P.O. Box 1293 **Room 3047** Albuquerque, NM 87103

Name:	Casey Hall
Company/Organization:	University of New Mexico, Safety and Risk Services
Point of Contact: (phone number and email): Preferred form of contact (circle one): Phone E-mail Preferred meeting date/times:	Phone: 505-277-0305 Email: cbhall4@unm.edu 4/5 – 9:00 AM, 4/8 9:00 AM, 4/10 9:00 AM
Description of Project:	UNM is currently in the planning stages of a project to replace or remove of several emergency generators around campus. The generators being replaced are as follows: • REG# 1972: 12 KW diesel EG replaced with 25 KW diesel EG • ATC# 1971: 70 KW natural gas EG replaced with 50 KW diesel EG • REG# 1970: 55 KW diesel EG replaced with 50 KW diesel EG • REG# 1971: 90 KW diesel EG replaced with 60 KW diesel EG
	The following generators UNM plans to remove without replacement: • REG# 1973: 27 hp natural gas EG • REG# 1974: 27 hp natural gas EG

City of Albuquerque- Environmental Health Department Air Quality Program- Permitting Section Email: aqd@cabq.gov

Phone: (505) 768-1972



City of Albuquerque

Environmental Health Department Air Quality Program



Pre-Permit Application Meeting Checklist

Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to submitting an application, the applicant shall contact the department in writing and request a pre-application meeting for information regarding the contents of the application and the application process. This checklist is provided to aid the applicant and a copy must be submitted with the application.

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

Name: Cor Hall		
Contact: 271-0	7305	
Company/Business: \	UNN	

Fill out and submit a Pre-Permit Application Meeting Request form ⇒ Available online at http://www.cabq.gov/airquality

Emission Factors and Control Efficiencies Notes:

Air Dispersion modeling guidelines and protocol Notes:

NA

Department Policies Notes:

90 day

Air quality permit fees Notes:

Ver. 11/13

Public notice requirements

- Replacement Part 41 Implementation
 - o 20.11.41.13 B. Applicant's public notice requirements
 - Providing public notice to neighborhood association/coalitions

•	Neighborhood associatio	n:	
•	Coalition:	3.00	
	Notes:		

Posting and maintaining a weather-proof sign Notes:

Regulatory timelines

- 30 days to rule application complete
- 90 days to issue completed permit
- Additional time allotted if there is significant public interest and/or a significant air quality issue
 - o Public Information Hearing
 - o Complex permitting action

Notes:



Notice of Intent to Construct



Under 20.11.41.13B NMAC, the owner/operator is required to provide public notice by certified mail or electronic mail to the designated representative(s) of the recognized neighborhood associations and recognized coalitions that are with-in one-half mile of the exterior boundaries of the property on which the source is or is proposed to be located if they propose to construct or establish a new facility or make modifications to an existing facility that is subject to 20.11.41 NMAC - Construction Permits. A copy of this form must be included with the application.

Applicant's Name and Address: University of New Mexico, 1 University of New Mexico 87131

Owner / Operator's Name and Address: Same as above

Actual or Estimated Date the Application will be submitted to the Department; 4/30/2019

Exact Location of the Source or Proposed Source: Family Practice Center 2300 Tucker Ave. NE

Albuquerque, NM 87131

Description of the Source: Diesel Fired Emergency Generator

Nature of the Business: University/Higher Education

Process or Change for which the permit is requested: Emergency Power Generation

Preliminary Estimate of the Maximum Quantities of each regulated air contaminant the source will emit:

Net Changes In Emissions

Initial Construction Permit

(Only for permit Modifications or Technical Revisions)

	Pounds Per Hour (lbs/hr)	Tons Per Year (tpy)		lbs/hr	tpy	Estimated Tota TPY
CO	0.23	0.023	СО	-0.0i	-0.001	
NOx	0.42	0.042	NOx	-0.25	-0.025	
NOx + NMHC	0.50	0.05	NOx + NMHC	-0.21	-0.021	2
VOC	0.18	0.018	VOC	-0.05	-0.005	
SO ₂	0.03	0.003	SO ₂	-0.04	-0.004	
TSP	0.03	0.003	TSP	+/=0	+/-0	
PM10	0.03	0.003	PM10	+/-0	+/-0	
PM2.5	0.03	0.003	PM2.5	+/-0	+/-0	
VHAP	0.03	0.003	VHAP	+/-0	+/-()	

Maximum Operating Schedule: 200hrs/yr

Normal Operating Schedule: 30 min/wk

Last Revised 10/25/2018

City of Albuquerque- Environmental Health Department
Air Quality Program- Permitting Division
Phone: (505) 768-1972 Email: aqd@cabq.gov

Current Contact Information for Comments and Inquires:

Name: Casey Hall

Address: 1801 Tucker St NE Albuquerque, NM 87104

Phone Number: 505-277-0305 E-Mail Address: cbhall4@unm.edu

If you have any comments about the construction or operation of the above facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to the address below:

Environmental Health Manager

Permitting Division

Albuquerque Environmental Health Department

Air Quality Program

PO Box 1293

Albuquerque, New Mexico 87103

(505) 768-1972

Other comments and questions may be submitted verbally.

Please refer to the company name and facility name, as used in this notice or send a copy of this notice along with your comments, since the Department may not have received the permit application at the time of this notice. Please include a legible mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, if required, the Department's notice will be published on the City of Albuquerque's website, https://www.cabq.gov/airquality/airquality-permits and mailed to neighborhood associations and neighborhood coalitions near the facility location or near the facility proposed location.

Casey Hall

From:

Casey Hall

Sent:

Friday, April 26, 2019 4:28 PM

To:

eileentjessen@gmail.com

Subject:

Public Notice of Proposed Air Quality Construction Permit Application

Attachments:

Fam Prac NOI Construct.pdf

Dear Neighborhood Association/Coalition Representative(s),

Why did I receive this public notice?

You are receiving this notice in accordance with New Mexico Administrative Code (NMAC) 20.11.41.13.B(1) which requires any applicant seeking an Air Quality Construction Permit pursuant to 20.11.41 NMAC to provide public notice by certified mail or electronic mail to the designated representative(s) of the recognized neighborhood associations and recognized coalitions that are within one-half mile of the exterior boundaries of the property on which the source is or is proposed to be located.

What is the Air Quality Permit application review process?

The City of Albuquerque, Environmental Health Department, Air Quality Program (Program) is responsible for the review and issuance of Air Quality Permits for any stationary source of air contaminants within Bernalillo County. Once the application is received, the Program reviews each application and rules it either complete or incomplete. Complete applications will then go through a 30-day public comment period. Within 90 days after the Program has ruled the application complete, the Program shall issue the permit, issue the permit subject to conditions, or deny the requested permit or permit modification. The Program shall hold a Public Information Hearing pursuant to 20.11.41.15 NMAC if the Director determines there is significant public interest and a significant air quality issue is involved.

What do I need to know about this proposed application?

Applicant Name	University of New Mexico
Site or Facility Name	Family Practice Building
Site or Facility Address	2300 Tucker Rd NE Albuquerque, NM 87131
New or Existing Source	Existing
Anticipated Date of Application Submittal	4/30/2019
Summary of Proposed Source to Be Permitted	The application is to replace a 27 hp emegency generator manufactured in 1977 with a new 69 horsepower, EPA Tier III emission, diesel fired internal combustion engine coupled to a 25KW generator. The application seeks to restrict the unit to 200 hours per year of operation. The purpose of the unit is to provide emergency backup electrical power in the case of the unavoidable loss of commercial power.

What emission limits and operating schedule are being requested?

See attached Notice of Intent to Construct form for this information.

How do I get additional information regarding this proposed application?

For inquiries regarding the proposed source, contact:

- Casey Hall
- Cbhall4@unm.edu
- (505) 277- 0305

For inquiries regarding the air quality permitting process, contact:

- City of Albuquerque Environmental Health Department Air Quality Program
- aqd@cabq.gov
- (505) 768-1972

Casey B. Hall

Environmental Health Manager

Casey Hall

From:

Casey Hall

Sent:

Friday, April 26, 2019 4:27 PM

To: Subject: saralosborne@gmail.com; campus.neighborhood.assoc@gmail.com
Public Notice of Proposed Air Quality Construction Permit Application

Attachments:

Fam Prac NOI Construct.pdf

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- aqd@cabq.gov
- (505) 768-1972

Casey B. Hall

Environmental Health Manager

Casey Hall

From:

Casey Hall

Sent:

Friday, April 26, 2019 3:19 PM

To:

Sunflower H Chirieleison

Subject:

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Attachments:

Fam Prac NOI Construct.pdf

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- (505) 768-1972

Casey B. Hall

Environmental Health Manager

Fra 16:20194.35 PM Casey Hall

Casey Thail
Public Notice of Proposed Air Quality Construction Permit Application

dochell concerned in president of the Standard Concerned to the Standard Standard Concerned to the Standard Sta out C.P. Charlomm & Com Lean ... Sanda Carlo Dela

Dear Neighborhood Ameciation Coalmon Representative(s),

Fam Prac NOI Continue tipeli

Bby all receive all public nutses?
The all receives the public nutses?
The active one with New Merrico Administrative Code (NMAC) 2011 4113 R(1) which requires any applicant reventing an Aut Quality Construction Perman pursuant to 20.11 41 NMAC to provide public notice by certified mail to the designated representative(s) of the recognized sugglished on this file active to or is proposed to be located.

And the activity of the exterior boundaries of the property on which the source is or is proposed to be located.

Phat is the Action of Quality Permit application review prevers?

The City of Abdrugetor, Environmental Halth Department, Ast Quality Program (Program) is responsible for the review and sursance of Ast Quality Permits for any stationary source of air containments within Bernalillo Commy. Once the application and subject command permit and Quality public command permit and the Program and subject to conditions, or designated application and sugarificant air quality issue is in croteed.

NAIAC if the Director determanes there is significant problem air quality issue is in croteed.

What do I need to know about this proposed application?

				rearstor manufactured in non, detail fired unternal The application seeks to The purpose of the unit u	
Site or Facility Name Family Practice Building	2300 Tucker Rd NE Albaquerque, NM 87131	Exiting	4 30:2019	The application is to splace 1.27 by enegleary generator manufactured in 19.7 with a new 60 biversporker, E.P. The III measures, detail freed universal confliction singues coupled to a 1.3KW generator. The application needs to restrict the unit to, 2000 hours per year of operation. The purpose of the sant is no provide emergency backup electrical power in the case of the marvedable. Isse of commercial power.	
Sate or Facility Name	Site or Facility Address	New or Existing Source	Assucipated Date of Application Submitted	Stammary of Proposed Source to Be Permitted	

What amirsion limits and operating schodule are being requested? See attached Notice of Intent to Construct form for this information.

How to I get additional byformation regarding this proposed application?

For impuries segrading the proposed source, conset.

• Creey Hall

• Creey Hall

(505) - 277. 0305

For inquiries regarding the air quality permitting grocess, contact:

- Crip of Manquerque Enrurenmental Realth Department Air Quality Program

- and SECIOL 100.

- (505) 788-1912.

Casey B. Hall

Environmental Health Manager
Department of Safety & Risk Services
The University of New Mexico



City of Albuquerque

Environmental Health Department Air Quality Program

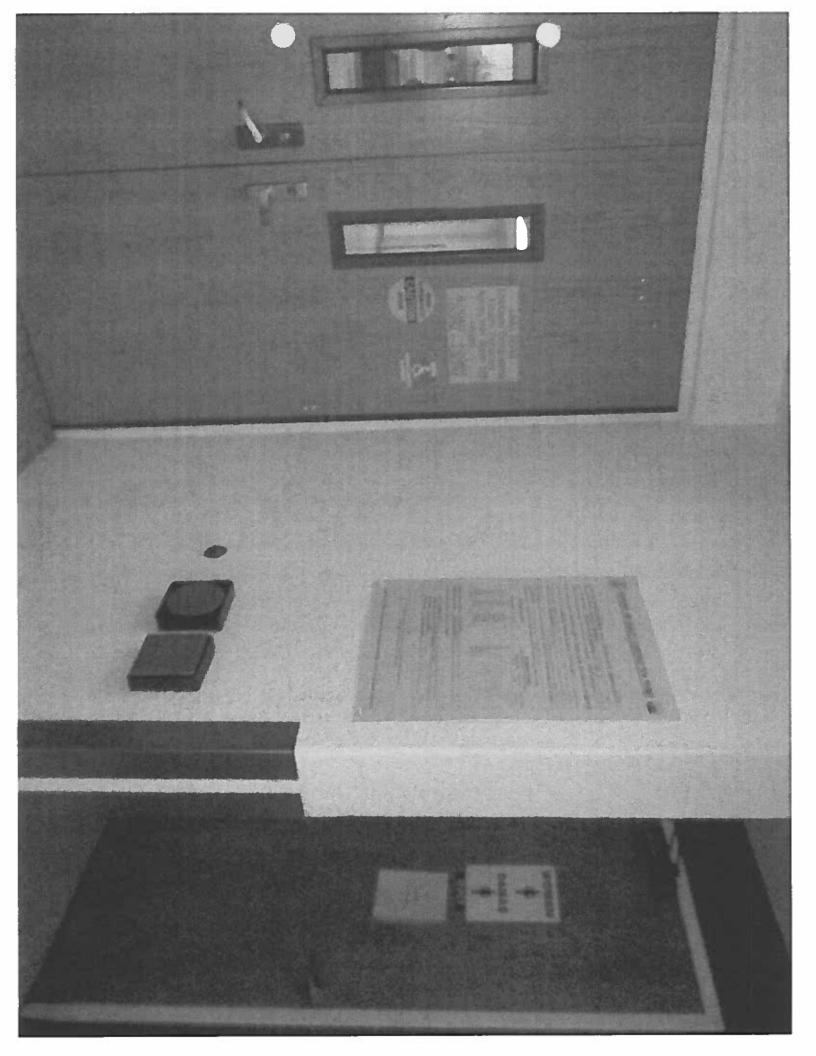


Public Notice Sign Guidelines

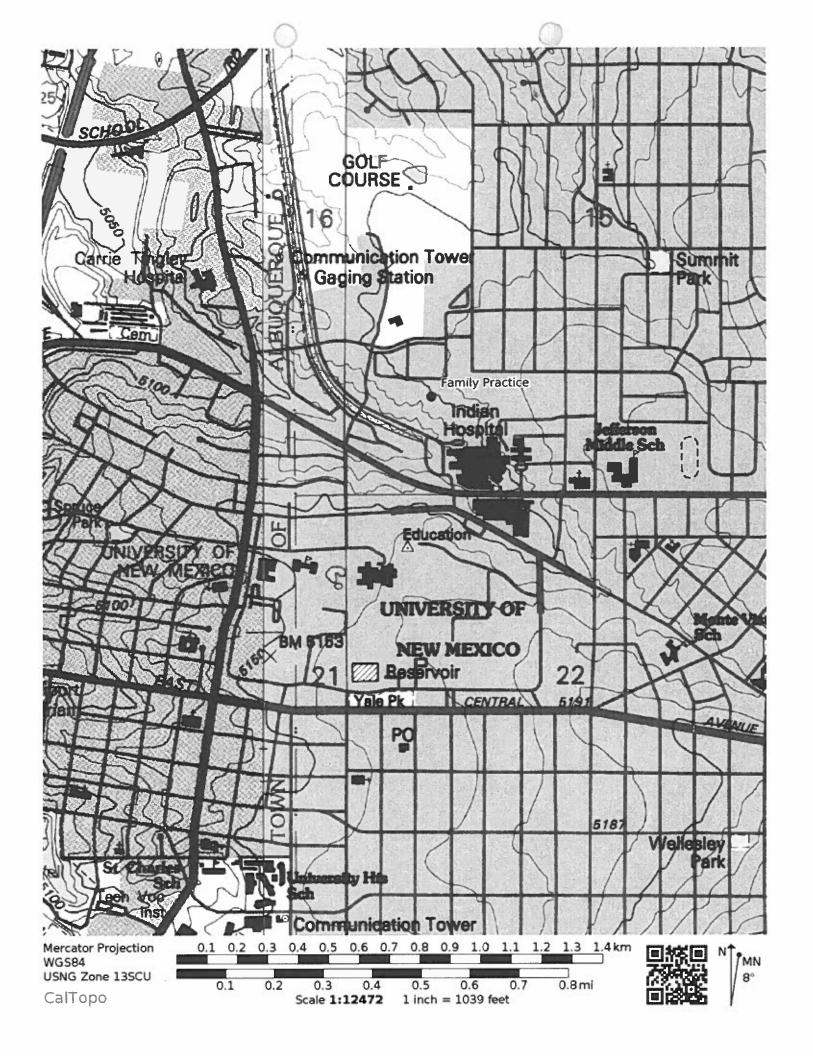
Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to submitting an application, the applicant shall post and maintain a weather-proof sign provided by the department. The applicant shall keep the sign posted until the department takes final action on the permit application; if an applicant can establish to the department's satisfaction that the applicant is prohibited by law from posting, at either location required, the department may waive the posting requirement and may impose different notification requirements. A copy of this form must be submitted with your application.

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

Contact: \$05- 277-0305
Company/Business: UNM
The sign must be posted at the more visible of either the proposed or existing facilit entrance (or, if approved in advance and in writing by the department, at another location on the property that is accessible to the public)
The sign shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times.
The lower edge of the sign board should be mounted a minimum of 2' above the existing ground surface to facilitate ease of viewing
Attach a picture of the completed, properly posted sign to this document
☐ Check here if the department has waived the sign posting requirement. Alternative public notice details:



	LITY OF ALBUQUERQUE RECEIP: , NO. 0946188
	P.O. BOX 1293
	RECEIVED FROM University OF New Mexico
-	ADDRESS
	I wo Thousand Iwo Handred Ninety Proclass 22920
-	FOR
	Finnily Practice Center
	FUND ACCT DEPT. ID
33	ACCOUNT CASH CHECK
1	AMT, OF ACCOUNT 40182563
	AMT, PAID
1	BALANCE DUE BY





Imagery @2019 Google, Map data @2019 Google





Diesel generator set

25 kW - 40 kW EPA emissions stationary Standby



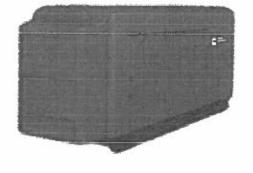
Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, liquid-cooled, industrial diesel engine delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.



Cooling system - Standard cooling package provides reliable running at up to 50 °C (122 °F) ambient temperature.

Enclosures - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminum material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7-10. The intelligent design has removable panels and service doors to provide easy access for service and maintenance.

Fuel tanks - Two dual wall sub-base fuel tank series are offered as optional features, providing economical and flexible solutions to meet extensive code requirements on diesel fuel tanks

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby rating 60 Hz		Prime rating 60 Hz		Data sheets 60 Hz
Model	k₩	kVA	kW	kVA	
C25 D6	25	31.25	22,7	28.4	NAD-5859
C30 D6	30	37.5	27	33.75	NAD-5860
C35 D6	35	43.75	32	40	NAD-5861
C40 D6	40	50	36	45	NAD-5862

Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G2			
Voltage regulation, no load to full load	± 1.0%			
Random voltage variation	± 0.5% - 3 Phase only			
Frequency regulation	Isochronous			
Random frequency variation	± 0.5%	0		
Radio frequency emissions compliance	FCC code Title 47 Part 15 Class B			

Engine specifications

Bore	95.0 mm (3.74 in.)				
Stroke	115,1 mm (4.53 in.)				
Displacement	3.3 litres (199 in ³)				
Configuration Configuration	Cast iron, in-line, 4 cylinder				
Battery capacity	550 amps at ambient temperature of 0 °F to 32 °F (-18 °C to 0 °C)				
Battery charging alternator	40 amps				
Starting voltage	12 volt, negative ground				
Fuel system	Indirect injection, number 2 diesel fuel, fuel filter, electric fuel shut off				
Fuel filter	Single element, 10 micron filtration, spin-on fuel filter with water separator				
Air cleaner type	Dry replaceable element				
Lube oil filter type(s)	Spin-on, full flow				
Standard cooling system	50 °C (122 °F) ambient cooling system				

Alternator specifications

Design	Brushless, 4 pole, drip proof, revolving field		
Stator	2/3 pitch 554555455		
Rotor	Direct coupled, flexible disc		
Insulation system	Class H per NEMA MG1-1.65		
Standard temperature rise	120 °C (248 °F) Standby		
Exciter type	Torque match (shunt) with PMG/EBS as option		
Alternator cooling	Direct drive centrifugal blower		
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic		
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43		
Telephone Harmonic Factor (THF)	0.03		

Available voltages

Single phase	3 phase			
• 120/240	• 120/208	• 120/240 delta	• 277/480	• 347/600

Note: Consult factory for other voltages.

Generator set options

Fuel system

- Basic fuel tanks
- Regional fuel tanks

Engine

- Engine air cleaner normal or heavy duty
- Shut down low oil pressure
- Extension oil drain

Alternator

- 120 °C (248 °F) temperature rise alternator
- 105 °C (221 °F) temperature rise alternator
- Excitation Boost System (EBS) or PMG
- Alternator heater, 120 V

Control

- AC output analog meters (bargraph)
- Stop switch emergency
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)

Electrical

- · Single circuit breaker
- Dual circuit breakers
- 80% rated circuit breakers
- 100% rated circuit breakers

Enclosure

- Aluminum enclosure sound level 1 or level 2, with muffler installed, sandstone or green color
- Open set

Cooling system

- · Shutdown low coolant level
- Warning low coolant level
- Extension coolant drain
- Cold weather option for operating at <4 °C (40 °F)

Exhaust system

- Exhaust connector NPT
- · Open set with muffler mounted

Generator set application

- Battery rack, larger battery
- · Radiator outlet duct adapter

Our energy working for you."

@2017 Cummins Inc | NAS-5872-EN (10/17)

Generator set data sheet



Model:

C25 D6

Frequency:

60 Hz

Fuel type:

Diesel

kW rating:

25 Standby

22.7 Prime

Emissions level:

EPA Emission Stationary Standby

Exhaust emission data sheet:	EDS-1182
Exhaust emission compliance sheet:	EPA-1251
Sound performance data sheet:	MSP-1180
Cooling performance data sheet:	MCP-262
Prototype test summary data sheet:	PTS-322

	Standb	Standby				Prime			
Fuel consumption	kW (kV	A)			kW (kV	kW (kVA)			
Ratings	25 (31.2	25 (31.25)			22.7 (28.325)				
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full	
US gph	0.94	1,42	1.91	2.42	0.85	1.29	1.74	2.20	
∐hr	3.56	5.37	7.23	9.16	3.22	4.88	6.59	8.33	

Engine	Standby rating	Prime rating			
Engine manufacturer	Cummins Inc.	Cummins Inc.			
Engine model	4BT3.3-G5				
Configuration	Cast iron, in-line, 4 cylir	nder			
Aspiration	Turbocharged				
Gross engine power output, kWm (bhp)	51 (69)	45 (60)			
BMEP at set rated load, kPa (psi)	634.31 (92.0)	576.40 (83.6)			
Bore, mm (in.)	95 (3.74)				
Stroke, mm (in.)	115 (4.53)				
Rated speed, rpm	1800				
Piston speed, m/s (ft/min)	6.9 (1359)				
Compression ratio	20.8:1				
Lube oil capacity, L (qt)	7.9 (8.35)				
Overspeed limit, rpm	2250				

Fuel flow

Maximum fuel flow, L/hr (US gph)	49.5 (13.1)
Maximum fuel inlet restriction with clean filter, mm Hg (in Hg)	58.42 (2.3)
Maximum return restriction, mm Hg (in Hg)	375.92 (14.8)

Air	Standby rating	Prime rating
Combustion air, m³/min (scfm)	3.42 (121)	3.34 (118)
Maximum air cleaner restriction with clean filter, kPa (in H ₂ O)	1.25 (5)	
Alternator cooling air, m³/min (cfm)	11.41 (403)	

Exhaust

Exhaust flow at set rated load, m³/min (cfm)	8,21 (290)	7.90 (279)	
Exhaust temperature, °C (°F)	440.5 (825)	427 (801)	
Maximum back pressure, kPa (in H ₂ O)	10.22 (41)	10.22 (41)	
Actual exhaust back pressure with CPG fitted muffler, kPa (in H ₂ O)	3.51 (14.1)	3.26 (13.1)	

Standard set-mounted radiator cooling¹

Ambient design, *C (*F)	50 (122)					
Fan load, kW _m (HP)	2.79 (3.8)					
Coolant capacity (with radiator), L (US gal)	14.8 (3.9)					
Cooling system air flow, m³/min (scfm)	93.2 (3290)					
Total heat rejection, MJ/min (Btu/min)	1.54 (1456.25)	1.435 (1359.38)				
Maximum cooling air flow static restriction, kPa (in H ₂ O)	0.12 (0.5)					

Weights²

recigiito	
Unit dry weight kgs (lbs)	554 (1219)
Unit wet weight kgs (lbs)	574 (1265)

Notes:

¹ For non-standard remote installations contact your local Cummins representative.

Derating factors

Standby	Engine power available up to 3050 m (10,000 ft) and ambient temperatures up to 50 °C (122 °F). Above these conditions, derate at 3% per 300 m (985 ft) and 6% per 10 °C (18 °F).
Prime	Engine power available up to 3050 m (10,000 ft) and ambient temperatures up to 50 °C (122 °F). Above these conditions, derate at 3% per 300 m (985 ft) and 6% per 10 °C (18 °F).

Ratings definitions

Emergency Standby Power (ESP):	Limited-Time Running Power (LTP):	Prime Power (PRP):	Base Load (Continuous) Power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

² Weights represent a set with standard features. See outline drawing for weights of other configurations.



Exhaust emission data sheet C25 D6

60 Hz Diesel generator set EPA emission

Engine information:

Model:

Cummins 4BT3.3-G5

Bore:

3.74 in. (95 mm)

Type

4 cycle, in-line, 4 cylinder diesel

Stroke:

4.53 in. (115 mm)

Aspiration:

Turbocharged

Displacement:

199 cu. in. (3.3 liters)

Compression ratio:

20.8:1

Emission control device:

	1/4	1/2	3/4	<u>Full</u>
Performance data	Standby	Standby	<u>Standby</u>	<u>Standby</u>
BHP @ 1800 RPM (60 Hz)	10.5	21	31.4	41.9
Fuel consumption (gal/Hr)	1.3	1,9	2.1	2 4
Exhaust gas flow (CFM)	129.8	177.4	216.6	262.1
Exhaust gas temperature (°F)	357.7	484.9	618.4	753,3
Exhaust emission data				
HC (Total unburned hydrocarbons)	2.93	2.38	1.19	0.1
NOx (Oxides of nitrogen as NO2)	4.67	3.28	2.77	2.7
CO (Carbon monoxide)	4.04	2.25	1.34	0.89
PM (Particular Matter)	0.36	0.17	0.12	0.09
SO2 (Sulfur dioxide)	0.25	0.21	0.18	0.17
Smoke (Bosch)	0.15	0.25	0.35	0.45
				All values are Grams per HP - Hour

Test conditions

Data is representative of steady-state engine speed (± 25 RPM) at designated genset loads. Pressures, temperatures, and emission rates were stabilized.

Fuel specification:

ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and

40-48 cetane number.

Fuel temperature:

99 ± 9 °F (at fuel pump inlet)

Intake air temperature:

77 ± 9 *F

Barometric pressure:

29.6 ± 1 in. Hg

Humidity:

NOx measurement corrected to 75 grains H2O/lb dry air

Reference standard:

ISO 8178

The NOx, HC, CO and PM emission data tabulated here are representative of test data taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may results in elevated emission levels.



2019 EPA Tier 3 Exhaust Emission **Compliance Statement** C25 D6

Stationary Emergency

60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with Tier 3 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII.

Engine Manufacturer:

Cummins Inc.

EPA Certificate Number:

KCEXL03.3BAA-047

Effective Date:

11/27/2018

Date Issued:

11/27/2018

EPA Engine Family (Cummins Emissions Family):

KCEXL03.3BAA

Engine Information:

4BT3.3-G5

Bore:

3.74 in. (95 mm)

Engine Nameplate HP:

Stroke:

4.53 in. (115 mm)

Type:

4 Cycle, In-line, 4 Cylinder Diesel

Displacement:

199 cu. in. (3.3 liters)

Aspiration:

Model:

Turbocharged

Compression ratio

20.8:1

Emission Control Device:

Exhaust stack diameter:

3 in. (76 mm)

Diesel Fuel Emission Limits

D2 Cycle Exhaust Emissions	Gran	ns per Bh	IP-hr	Grams per kWm-hr			
	NO _x +	<u>co</u>	<u>PM</u>	NOx +	co	<u>PM</u>	
Test Results	3.3	1.5	0.22	4.4	2.0	0.29	
EPA Emissions Limit	3.5	3.7	0.30	4.7	5.0	0.40	

Test methods: EPA nonroad emissions recorded per 40 CFR 89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E. Appendix A for constant speed engines (ref. ISO8178-4, D2)

Diesel fuel specifications: 40-48 Cetane number, Reference: ASTM D975 No. 2-D; <15 ppm Sulphur

Reference conditions: Air Inlet Temperature: 25 °C (77 °F), Fuel Inlet Temperature: 40 °C (104 °F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H2O/lb) of dry air; required for NOx correction, Restrictions: Intake Restriction set to a maximum allowable limit for clean filter, Exhaust Back Pressure set to a maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.



Department of Safety & Risk Services MSC07 4100, 1 University of New Mexico Phone: 505-277-2753 Fax: 505-277-9006 Website: srsweb@unm.edu

Date:

6/13/19

To:

Carina Munoz-Dyer, Environmental Health Supervisor, Environmental Health Department, CABQ

From:

Casey Hall, Mgr. Env. Health, Safety and Risk Services, UNM

Subject:

Emissions Calculations for Family Practice Center Emergency Generator

The anticipated emissions from the emergency generator replacement located at Family Practice Center were calculated as follows. All emission values were derived from the manufacturer spec sheet, included with the application. The following values were obtained from the Diesel Fuel Emission Limits on page EPA-1251e, the EPA Tier 3 Exhaust Emission Compliance Statement:

	$NO_x + NMHC (g/Hp-hr)$	CO (g/Hp-hr)	PM (g/Hp-hr)
Test Results	3.3	1.5	0.22
EPA Emissions Limit	3.5	3.7	0.30

For emissions not specifically listed in the EPA Tier 3 Exhaust Emission Compliance Statement the values were derived from the Exhaust emission data sheet, page EDS – 1182. Please note total unburned hydrocarbons were used as a proxy for non-methane hydrocarbons (NMHC). The highest values listed for NO_x (4.67 g/ Hp-hr) and hydrocarbons (2.93 g/Hp –hr) on page EDS-1186 were used for the calculation of emissions.

The below equations are examples of how the emissions were calculated using NO_x.

Equation 1:

$$4.67 \frac{g \ NO_x}{Hp \times hr} \times 69 \ Hp = 322.23 \frac{g \ NO_x}{hr}$$

Equation 2:

$$322.23 \frac{g NO_x}{hr} \times \frac{1 lb}{453.6 g} = 0.71 \frac{lb NO_x}{hr}$$

Equation 3:

$$0.71 \frac{lb \, NO_x}{hr} \times 8760 \, \frac{hr}{yr} \times \frac{1 \, ton}{2000 \, lb} = 3.11 \, \frac{ton \, NO_x}{yr}$$

Equation 4:

$$0.71 \frac{lb \ NO_x}{hr} \times 200 \frac{hr}{vr} = 142.08 \frac{lb \ NO_x}{vr}$$

Equation 5:

142.08
$$\frac{lb \ NO_x}{yr} \times \frac{1 \ ton}{2000 \ lb} = 0.071 \ \frac{ton \ NO_x}{yr}$$



Department of Safety & Risk Services MSC07-4100. I University of New Mexico Phone: 505-277-2753 Fax: 505-277-9006 Website: srsweb@unm.edu

Date:

6/13/19

To:

Carina Munoz-Dyer, Environmental Health Supervisor, Environmental Health Department, CABQ

From:

Casey Hall, Mgr. Env. Health, Safety and Risk Services, UNM

Subject:

Operations and Maintenance Plan for Family Practice Center Emergency Generator

The emergency generator replacement located at Family Practice Center will implement the following O&M strategy to mitigate emissions. Pursuant to 20.11.41.13.E.(5) NMAC UNM will:

- (a) In the case of a malfunction that causes excess emissions, Facilities Management reports the malfunction to Safety and Risk Services. The exceedance is then reported to the City of Albuquerque EHD in accordance with UNM's Title V permit 0536-RN1. A root cause of the exceedance will then be identified and repaired as quickly as practicable.
- (b) Emissions of particulate matter as seen through opacity are higher during startup and shutdown due to low engine temperature leading to incomplete combustion during the compression ignition cycle. This unit is not equipped with any control equipment.
- (c) The engine will be maintained in accordance with the manufacturer's requirements including weekly exercise and regular maintenance to reduce emissions during startup and shutdown.

Permit Application Folder Form

Due Date: Date: To: From: **ENVISION CONNECT** CDS Number: **Permit Number:** 2 - m2 Permit Site Name: Im Family Practice center EO **Assigned To: Billing Status: Permit Status:** ☐ Israel Tavarez Active □ None □ Paul Puckett ♥2 01 – Active, Billable ☐ Closed □ Regan Eyerman □ Denied □ 02 - Inactive, Non-Billable □ Pending □ 03 – Temporarily Inactive, Non-Billable □ Elizabeth Yepez □ 04 – Active, Exempt from Billing Carina Munoz-Dyer □ Reissued □ Vacant (Admin) □ 05 – Active, Exempt from Billing, Title V □ Unknown □ Vacant (Temp) □ Unknown /Never opened □ Vacant (Supervisor) □ Withdrawn □ No Permit Application Status: Received Permit Type: □ 20-Relocation □ 10-Courtesy □ 05-Extension □ 06- Emergency Permit □ 11-Renewal □ 30-Registration ☐ 41-AQN Initial □ 07-Initial Permit □ 12-Significant Mod ⊕ 08-Modification □ 13-Minor Mod ☐ 42-AQN Transf./Prev. Authorization □ 15-Technical Revision ☐ 43-AQN Admin. Amendment □ 09-Admin Revision □ 44-Admin. Revision Program/ Element: □ 1001-Operating Permit □1303-Minor NSR Gas Station ☐ 1601-Major NSR □ 1701-Synthetic Minor ☐ 1301-Minor NSR □1401-Registration 1302-Minor NSR EG □1501-Relocation ☐ 6000-AQN EG ☐ 6001-AQN GDF HARD COPY FILES Folder Color: □ Purple (Drycleaners) □ Green (GDF NSR/AQN) □ Blue (Source Registration) □ Brown (Title V) □ Red (EG AQNs) Yellow (Minor NSR/SM-80) File Folders: ☐ Enforcement (E) □ Compliance (C) Permitting □ Combined, Compliance and Enforcement Notes: Return to carinon



Department of Safety & Risk Services MSC07 4100, 1 University of New Mexico Phone: 505-277-2753 Fax: 505-277-9006 Website: srsweb@unm.edu

Date:

5/6/19

To:

Angelique Maldonado, Environmental Health Supervisor, Environmental Health Dept. CABQ

Regan Eyerman, Environmental Health Scientist, Environmental Health Dept. CABQ

From:

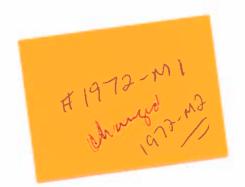
Casey Hall, Environmental Health Manager, Safety and Risk Services

Subject:

Emergency Generator Air Quality Permit Applications

Attached are four air quality permit applications. Please sign below to acknowledge receipt.

Drinted Name







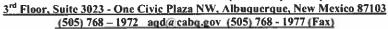
Example

Version: 02/14

18 feet - Height

City of Albuquerque **Environmental Health Department** Air Quality Program

Please mail this application to P.O. Box 1293, Albuquerque, NM 87103 or hand deliver between 8:00am - 5:00pm Monday - Friday to:





20.11.41 NMAC Air Quality Permit Application For

EMERGENCY DIESEL ENGINES

	SUBJEC	T TO FEDERAL (U	JSEPA) NEW SOU	RCE PERFORMA	NCE STANDAR	DS (NSPS)		
Section 1.	General Inf	ormation			Date S	ubmitted:/	/ 20	
1. Company Name: Ur	niversity of N	ew Mexico		Ph: (505)277	-7520 _{Em:}	_{ail:} _cbhall4@unr	n.edu	
2. Company Address:	Scholes Hall 1	60, Bldg. 10 1	800 Roma Ave	NE City: Albu	ıquerque	State: NM	_{Zip:} _87131	
3. Company Mailing Ad	ldress (if different	MSC05 335	0 1 University	of New Mexi	co Albuque	rque, NM	_{Zip:} _87131	
4. Company Contact: C	Craig White	Ti	Senior Vice President for F	inance and Administration	Ph: (505)277	7520 Email:	cwhite@unm.edu	
5. Facility Name: Fam	ily Practice (Center	Facility	y Hours: 12 : (00 am or pm	TO 12 : 00 a	ım or pm	
6. Facility Address: 24	OO LUCKELIN	a. INE blug #2	40	City:	abuquerque	State:	Zip: Of 101	
7. Local Business Maili	ng Address (if diff	erent): MSC07 4	100 1 University o	f New Mexico A	lbuquerque, N	M 87131 Email: Cl	bhall4@unm.edi	
9 Engility Engironment	al Contract. Case	ey Hall	Title: Environm	ental Health Manage	er _{ph:} ()27	7 0305 Fax:	⁵⁰⁵ , 277 ₋ 9006	
9. Email: cbhall4@	unm.edu	10. T	ype of Business:	eges, Universities, and	d Professional School	ols		
11. Environmental Cons				2.0				
12. North American Ind	ustry Classificatio	n System (NAICS):	611310	13. Standard	Industrial Classif	ication (SIC): 8221	<u> </u>	
14. UTM coordinates (r	equired): 35250	5 east 3	884270 no	orth 15. Facility Pl	1: (⁵⁰⁵) 272	3843 Fax:(508	⁵ ,277 ₉₀₀₆	
16. Billing Contact: Ca	asey Hall	Tit	le: Environmental H	lealth Manager P	h: (505) 277	0305 Fax:(50	5,277 9006	
17. Billing Address: M	SC07 4100	1 University of	New Mexico	City: Albue	querque	State: NM	Zip: 87131	
18. Is this an Initial Inst								
20. Is engine or genset i								
Provide an en	gine spec shee	t and a detailed	site plan or pla	t of the prope	rty where ens	gine or genset is t	o be installed.	
Section 2.	Compres	sion Ignition In	ternal Combust	ion Engine for	r Stationary	Emergency Engi	<u>nes</u>	
	Provide engi	e rating in hor	sepower (Hp) as	determined b	y manufactu	rer'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	Cummins	4BT3.3-G5	TBD TBD N/A 69 N/A					
Generator	Cummins	TBD	TBD	TBD	N/A	N/A	25	
Section 3.	Stack an	d Emissions Inf	ormation					
Stack	Height Above G	round & Stack Dia	imeter In Feet	1	Stack perature	Stack Flow Exit Dire		

0.42 feet - Diameter

625 °F

3,000 ft3/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)

Model Year	Pollutant	Emission Factors g/Hp-hr	T H M E S	Actual Engine Hp	E Q U A L S	Emission In Grams Per Hour	D 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 T V I D E	Pounds Per Ton	E Q U A L S	Emission In Tons Per Year
E	СО	2.6	X		=	975	+	13.92.5	=	2.15	X	8,760	+	2,000	=	9.4
X	NO,	0.3	X		=	112.5	+		=	0.25	X	8,760	+	2,000	=	1.1
M	NMHC	0.14	х	100	=	52.5	+		=	0.12	X	8,760	+	2,000	=	0.53
P L	*NOx + NMHC	3.0	Х	375 Hp	=	1,125	+	453.6	=	2.48	X	8,760	+	2,000	=	10.86
E	**SO _x	0.93	X		=	348.8	+		=	0.77	Х	8,760	+	2,000	=	3.37
2008	***PM	0.15	X		=	56.25	+		=	0.12	Х	8,760	+	2,000	=	0.53
2019	CO	1.5	Х	69	=	103.5	+	453.6	=	0.23	X	8,760	+	2,000	=	1.00
2013	NOx	2.77	Х	69	=)0	191.13	+	453.6	=	0.42	Х	8,760	+	2,000	-	1.85
	NMHC	1.19	X	69	=	82.11	+	453.6	=	0.18	х	8,760	+	2,000	=	0.79
	*NOx + NMHC	3.3	X	69	= A5 =	227.7	+	453.6	#	0.50	Х	8,760	+	2,000	=	2.20
	**SOx	0.25	X	69	=	12.42	+	453.6	=	0.03	X	8,760	+	2,000	=	0.12
	***PM	0.22	X	69	=	15.18	+	453.6	-	0.15	X	8,760	+	2,000	=	0.15

^{*} If the USEPA Emission Factor or manufacturer's data is given as combined NOx + NMHC, also provide individual emission factors for NOx and NMHC from the manufacturer or other approved methodology for estimating individual emission factors.

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 Your. 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		Х		=		+		=	
NMHC		X	AND YOUR	=	Mark 194	+	10 TH 10 ST	=	
*NOx + NMHC	2.48	Х	200	=	496	+	2,000	=	0.25
**SO _x	0.77	x	200	=	154	+	2,000	=	0.08
***PM	0.12	х	200	=	24	+	2,000	=	0.012
СО	0.23	X	200	=	45.63	+	2,000	=	0.023
NO _x	0.42	Х	200	=	84.27	+ 3	2,000	=	0.042
NMHC	0.18	Х	200	=	36.2	+	2,000	=	0.018
*NOx + NMHC	0.50	Х	200	=	100.4	+	2,000	=	0.050
**SO _x	0.03	X	200	=	5.48	+	2,000	=	0.0027
***PM	0.03	Х	200	=	6.69	+	2,000	=	0.0033

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.

So UP File. # 9/18/20/9

^{**} Manufacturer's SOx factor shall be used when larger than the USEPA Emission Factor.

^{***} Particulate Matter (PM) emissions are considered to be < 1 µm (micron). Therefore, PM emissions also reflect PM 10 & PM2.4.





Pre-Permit Application Meeting Request Form

Air Quality Program- Environmental Health Department

Please complete appropriate boxes and email to aqd@cabq.gov or mail to:

Environmental Health Department Air Quality Program P.O. Box 1293 Room 3047 Albuquerque, NM 87103

Name:	Casey Hall University of New Mexico, Safety and Risk Services		
Company/Organization:			
Point of Contact: (phone number and email):	Phone: 505-277-0305		
Preferred form of contact (circle one): Phone E-mail	Email: <u>cbhall4@unm.edu</u>		
Preferred meeting date/times:	4/5 – 9:00 AM, 4/8 9:00 AM, 4/10 9:00 AM		
Description of Project:	UNM is currently in the planning stages of a project to replace or remove of several emergency generators around campus. The generators being replaced are as follows: • REG# 1972: 12 KW diesel EG replaced with 25 KW diesel EG • ATC# 1971: 70 KW natural gas EG replaced with 50 KW diesel EG • REG# 1970: 55 KW diesel EG replaced with 50 KW diesel EG • REG# 1971: 90 KW diesel EG replaced with 60 KW diesel EG The following generators UNM plans to remove without replacement: • REG# 1973: 27 hp natural gas EG • REG# 1974: 27 hp natural gas EG		

City of Albuquerque- Environmental Health Department
Air Quality Program- Permitting Section

Phone: (505) 768-1972

Email: aqd@cabq.gov



City of Albuquerque

Environmental Health Department Air Quality Program



Pre-Permit Application Meeting Checklist

Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to submitting an application, the applicant shall contact the department in writing and request a pre-application meeting for information regarding the contents of the application and the application process. This checklist is provided to aid the applicant and a copy must be submitted with the application.

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

Name:	Casey	hall	
Contact:	505-	277-0305	
Company	/Business	: UNM	

Fill out and submit a Pre-Permit Application Meeting Request form ⇒ Available online at http://www.cabq.gov/airquality

Emission Factors and Control Efficiencies

Notes: On spec sheet from manufacturers

Air Dispersion modeling guidelines and protocol Notes: $\{(/ \triangle)\}$

Department Policies Notes:

Air quality permit fees Notes: \$2,292

Ver. 11/13

Public notice requirements

- Replacement Part 41 Implementation
 - o 20.11.41.13 B. Applicant's public notice requirements
 - Providing public notice to neighborhood association/coalitions

Neighborhood association: Sent in email

Coalition:
 Notes:

Posting and maintaining a weather-proof sign Notes:

Regulatory timelines

- 30 days to rule application complete
- 90 days to issue completed permit
- Additional time allotted if there is significant public interest and/or a significant air quality issue
 - o Public Information Hearing
 - o Complex permitting action

Notes:



City of Albuquerque

Environmental Health Department Air Quality Program



Permit Application Checklist

Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to ruling a submitted application complete each application submitted shall contain the required items listed below. This checklist must be returned with the application.

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

All applicants shall:

- Fill out and submit the Pre-permit Application Meeting Request form a. Attach a copy to this application
- Attend the pre-permit application meeting a. Attach a copy of the completed Pre-permit Application Meeting Checklist to this application

Provide public notice to the appropriate parties The regide b. Attach a copy of the completed Public Sign Notice Guideline form trature 4. Fill out and submit the Permit Application. All applications shall:

A. De made on a form provided by the Department. Add or clarifying information may also be attached to the formation of the state of application, include documentary proportion application review fees have been paid as required by to the attached permit application worksheet.

C. Contain the applicant's name, address, and the nam owners or operators of the emission sources. be made on a form provided by the Department. Additional text, tables, calculations or clarifying information may also be attached to the form.

contain the applicant's name, address, and the names and addresses of all other

at the time of application, include documentary proof that all applicable permit application review fees have been paid as required by 20 NMAC 11.02. Please refer

Application Checklist Revised November 13, 2013

contain the name, address, and phone number of a person to contact regarding D. questions about the facility. E. W indicate the date the application was completed and submitted V F. contain the company name, which identifies this particular site. contain a written description of the facility and/or modification including all G. .171 operations affecting air emissions. contain the maximum and standard operating schedules for the source after H. [1] completion of construction or modification in terms of hours per day, days per week, and weeks per year. provide sufficient information to describe the quantities and nature of any regulated I. air contaminant (including any amount of a hazardous air pollutant) that the source will emit during: Normal operation Maximum operation Abnormal emissions from malfunction, start-up and shutdown J. include anticipated operational needs to allow for reasonable operational scenarios to avoid delays from needing additional permitting in the future. 一フ K. contain a map, such as a 7.5-minute USGS topographic quadrangle, showing the exact location of the source; and include physical address of the proposed source. contain an aerial photograph showing the proposed location of each process equipment unit involved in the proposed construction, modification, relocation, or technical revision of the source except for federal agencies or departments involved in national defense or national security as confirmed and agreed to by the department in writing. M. 1 contain the UTM zone and UTM coordinates. N. Winclude the four digit Standard Industrialized Code (SIC) and the North American Industrial Classification System (NAICS). contain the types and potential emission rate amounts of any regulated air contaminants the new source or modification will emit. Complete appropriate sections of the application; attachments can be used to supplement the application, but not replace it.

contain the types and **controlled** amounts of any regulated air contaminants the new source or modification will emit. Complete appropriate sections of the application;

attachments can be used to supplement the application, but not replace it.

P.

- Q. contain the basis or source for each emission rate (include the manufacturer's specification sheets, AP-42 Section sheets, test data, or other data when used as the source). R. contain all calculations used to estimate potential emission rate and controlled emissions. S. contain the basis for the estimated control efficiencies and sufficient engineering data for verification of the control equipment operation, including if necessary, design drawings, test reports, and factors which affect the normal operation (e.g. limits to normal operation). contain fuel data for each existing and/or proposed piece of fuel burning equipment. T. U. contain the anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification. contain the stack and exhaust gas parameters for all existing and proposed emission V. stacks. provide an ambient impact analysis using a atmospheric dispersion model approved W. by the US Environmental Protection Agency (EPA), and the Department to demonstrate compliance with the ambient air quality standards for the City of Albuquerque and Bernalillo County (See 20.11.01 NMAC). If you are modifying an existing source, the modeling must include the emissions of the entire source to demonstrate the impact the new or modified source(s) will have on existing plant emissions. contain a preliminary operational plan defining the measures to be taken to mitigate
- source emissions during malfunction, startup, or shutdown.
- →> Y. contain a process flow sheet, including a material balance, of all components of the facility that would be involved in routine operations. Indicate all emission points, including fugitive points.
 - Z. contain a full description, including all calculations and the basis for all control efficiencies presented, of the equipment to be used for air pollution control. This shall include a process flow sheet or, if the Department so requires, layout and assembly drawings, design plans, test reports and factors which affect the normal equipment operation, including control and/or process equipment operating limitations.
 - AA. VI contain description of the equipment or methods proposed by the applicant to be used for emission measurement.
 - be signed under oath or affirmation by a corporate officer, authorized to bind the company into legal agreements, certifying to the best of his or her knowledge the truth of all information submitted.



Name: Casey Hall

City of Albuquerque

Environmental Health Department Air Quality Program

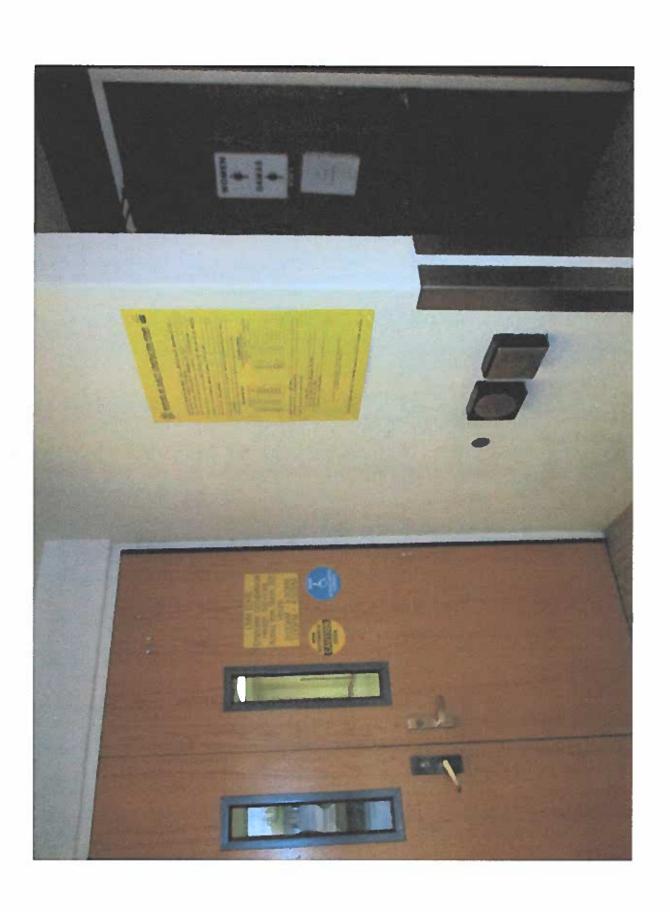


Public Notice Sign Guidelines

Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to submitting an application, the applicant shall post and maintain a weather-proof sign provided by the department. The applicant shall keep the sign posted until the department takes final action on the permit application; if an applicant can establish to the department's satisfaction that the applicant is prohibited by law from posting, at either location required, the department may waive the posting requirement and may impose different notification requirements. A copy of this form must be submitted with your application.

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

Contact: <u>315-885-8683 / 505-277-0305 / cbhall4@unm.edu</u>
Company/Business: University of New Mexico
The sign must be posted at the more visible of either the proposed or existing facility entrance (or, if approved in advance and in writing by the department, at another location on the property that is accessible to the public)
The sign shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times.
The lower edge of the sign board should be mounted a minimum of 2' above the existing ground surface to facilitate ease of viewing
Attach a picture of the completed, properly posted sign to this document
☐ Check here if the department has waived the sign posting requirement. Alternative public notice details:





Notice of Intent to Construct



Under 20.11.41.13B NMAC, the owner/operator is required to provide public notice by certified mail or electronic mail to the designated representative(s) of the recognized neighborhood associations and recognized coalitions that are with-in one-half mile of the exterior boundaries of the property on which the source is or is proposed to be located if they propose to construct or establish a new facility or make modifications to an existing facility that is subject to 20.11.41 NMAC - Construction Permits. A copy of this form must be included with the application.

Applicant's Name and Address: University of New Mexico, 1 University of New Mexico 87131

Owner / Operator's Name and Address: Same as above

Actual or Estimated Date the Application will be submitted to the Department: 4/30/2019

Exact Location of the Source or Proposed Source: Family Practice Center 2300 Tucker Ave. NE

Albuquerque, NM 87131

Description of the Source: Diesel Fired Emergency Generator

Nature of the Business: University/Higher Education

Process or Change for which the permit is requested: Emergency Power Generation

Preliminary Estimate of the Maximum Quantities of each regulated air contaminant the source will emit: Net Changes In Emissions

Initial Construction Permit

(Only for permit Modifications or Technical Revisions)

	Pounds Per Hour (lbs/hr)	Tons Per Year (tpy)		lbs/hr	tpy	Estimated TPY
СО	0.23	0.023	СО	-0.01	-0.001	
NOx	0.42	0.042	NOx	-0.25	-0.025	
NOx + NMHC	0.50	0.05	NOx + NMHC	-0.21	-0.021	
VOC	0.18	0.018	VOC	-0.05	-0.005	
SO ₂	0.03	0.003	SO ₂	-0.04	-0.004	
TSP	0.03	0.003	TSP	+/-0	+/-0	
PM10	0.03	0.003	PM10	+/-()	+/-0	
PM2.5	0.03	0.003	PM2.5	+/-0	+/-0	
VHAP	0.03	0.003	VHAP	+/-0	+/-0	

Maximum Operating Schedule: 200hrs/ yr

Normal Operating Schedule: 30 min/wk

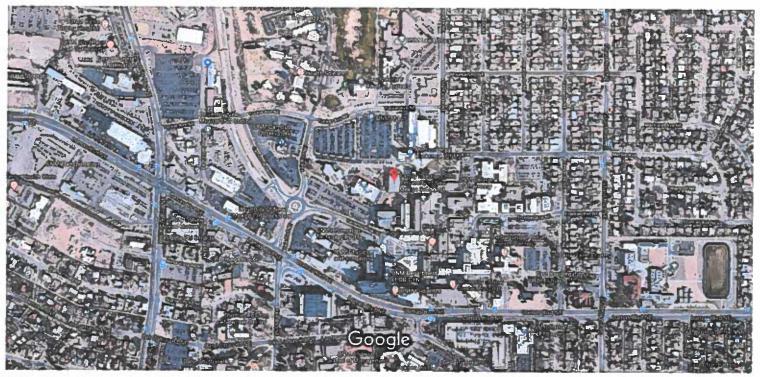
Last Revised 10/25/2018

City of Albuquerque- Environmental Health Department Air Quality Program- Permitting Division Email: aqd@cabq.gov

Phone: (505) 768-1972

Keg 7 17 + 2 **ンクィー**ク このとを クパンク Family practice





Imagery @2019 Google, Map data @2019 Google



Family Practice Clinic

 $3.2 \star \star \star (5)$

Family practice physician











Directions

Nearby

Send to your phone



You visited 1 year ago



2400 Tucker Ave NE, Albuquerque, NM 87131



GENERAL NOTES SYMBOL LEGEND SITE MAP

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PRACTICE CENTER PROJECT LOCATION







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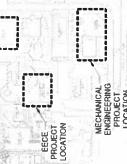




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LOGAN HALL PROJECT LOCATION











ELECTRICAL SHEET INDEX

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DENO AND NEW WORK ELECTRICAL PLANT-LOGAN HALL (34)

DEMO AND NEW MORK ELECTRICAL PLAN - MECHANICAL ENGINEERING (122) PARTIAL ELECTRICAL SITE PLAN - MECHANICAL ENGINEERING (122) PARTIAL ELECTRICAL SITE PLAN-LOGANHALL (14) PARTIAL ELECTRICAL SITE PLAN - EECE (46)

GENERATOR PAD DETAILS

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GET MU OR WALL BRACKET FINTURE, SEE FIXTURE SCHEDULE. FLUORESCENT OURET AND FIXTURE, SEE FIXTURE SCHEDIALE DULLES CHVENIENCE OF LET. GROUMDING TYPE, UP +15" UNLESS OTHERWISE INDICATED. SINGLE POLE WALL SWITCH UP -48". - J

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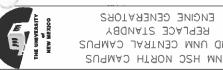
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KEYED NOTE SYMBOL



ENGINE CENERATORS REPLACE STANDBY AND UNM CENTRAL CAMPUS **СИМИ НЗС ИОВТН САМРИЯ**













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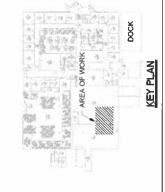
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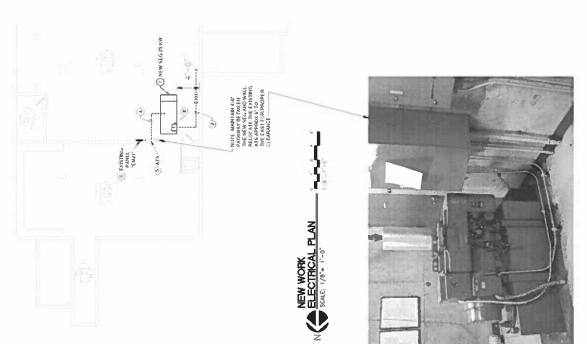
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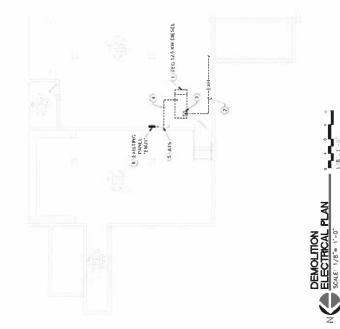
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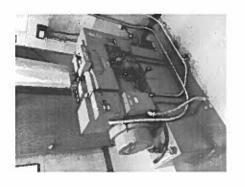
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SHEET KEYNOTES











AIR QUALITY TRACKING # 1972 REGISTRATION CERTIFICATE # NM/001/00141



Issued to: The University of New Mexico

Company Name

Certified Mail # 7007 1490 0003 5645 0434

Return Receipt Requested

Dept. SRS, MSC07 4100

Mailing Address

Albuquerque City NM State 87131 - 0001 Zip

Responsible Official: Vernon Hershberger, Environmental Health Manager

Authorized Representative

Pursuant to the New Mexico Air Quality Control Act, Chapter 74, Article 2 New Mexico Statutes Annotated 1978 (as amended); the Joint Air Quality Control Board Ordinance, 9-5-1 to 9-5-99 ROA 1994; the Bernalillo County Joint Air Quality Control Board Ordinance, Bernalillo County Ordinance 94-5; the Albuquerque-Bernalillo County Air Quality Control Board (AQCB) regulation, Title 20, New Mexico Administrative Code (NMAC), (20.11.40 Source Registration),

The University of New Mexico (Company) is hereby issued this REGISTRATION CERTIFICATE

as an Existing Source and is authorized to operate the following type of processes at:

Facility Name & Address	UTM Coordinates	Process Description	SIC	NAICS
University of New Mexico Family Practice Center 2300 Tucker Street Bldg. # 248 NE Albuquerque, NM 87131-0001	352505 Easting 3884270 Northing	1977 Onan 27 HP <u>Diesel Fired</u> Emergency Generator Engine Model Number: 120DX-18R/LAA Serial Number: L78019139 Annual Hours of Operation: 200	8221	611310

his REGISTRATION CERTIFICATE has been issued based on the review of the source registration application information received by the Albuquerque Environmental Health Department (Department), Air Quality Division (Division) on November 26, 2008 and on the National Ambient Air Quality Standards, New Mexico Ambient Air Quality Standards, and Air Quality Control Regulations for Albuquerque/Bernalillo County, as amended. As these standards and regulations are updated or amended, the applicable changes will be incorporated into this REGISTRATION CERTIFICATE and will apply to the facility.

Issued on the 18th day of	June 20 09
Isred L. Tavorez	Great 1 Javores
Print Name	Sign Name

Air Quality Protection Programs - Permitting Section
Air Quality Division
City of Albuquerque Environmental Health Department

- 1. SOURCE REGISTRATION THRESHOLD [74-2-5.C.(5), (6) NMSA; 74-2-5.1.D, G NMSA; 74-2-7.A.(1) NMSA]. Any commercial or industrial stationary source which emits more than two thousand pounds of any regulated air contaminant per year or any amount of a hazardous air pollutant.
- 2. CHANGES IN SOURCE OPERATIONS (20.11.40.13C NMAC). Whenever a change occurs in the information submitted in an application received by the Department, the person owning or operating such source shall, within 15 days, notify the Department in writing of the details and date of such change. Such person may be subject to Parts 20.11.2 NMAC, Fees and 20.11.41 NMAC, Authority to Construct.
- 3. FEES (20.11.2.18A NMAC). Every owner or operator of a source that is required to obtain a source registration shall pay an annual emissions fee pursuant to 20.11.2 NMAC.

4. COMPLIANCE ASSURANCE

a) The issuance of a Registration Certificate does not relieve the Company from responsibility of complying with the provisions of the Air Quality Control Act, and the laws and regulations in force pursuant to the Act; and

Version 4/20/09

- b) Whenever two or more parts of the Air Quality Control Act, or the laws and regulations in force pursuant to the Act, limit, control or regulate the emissions of a particular air contaminant, the more restrictive or stringent shall govern.
- INSPECTION (74-2-13 NMSA). The Department may conduct scheduled and unscheduled inspections, and, upon presentation of credentials:
 - a) shall have a right of entry to, upon, or through any premises on which an emission source is located or on which any records required to be maintained by regulations of the board or by any permit condition are located;
 - b) may, at reasonable times:
 - i. have access to and copy any records required to be established and maintained by regulations of the board or any permit condition;
 - ii. inspect any monitoring equipment and method required by regulations of the board or by any permit condition; and
 - iii. sample any emissions that are required to be sampled pursuant to regulation of the board or any permit condition.
- 6. Visible Air Contaminants, 20.11.5 NMAC Subsection 20.11.5.13C No person shall cause or allow visible air emissions from any stationary diesel powered engine to exceed 20 percent opacity for any six (6) minute timed average. During the first twenty (20) minutes of cold start-up, the visible emissions shall not exceed 40 percent opacity for any (6) minute timed average.
- 7. Emissions Inventory Requirements Applicability, 20.11.47 NMAC Subsection 20.11.47.14A.(2) an emission inventory is required for sources subject to 20.11.40 NMAC, Source Registration.
- Emissions Inventory Requirements Reporting, 20.11.47 NMAC Subsection 20.11.47.14B.(1) annual reporting is required for sources subject to 20.11.40 NMAC, Source Registration.
- 9. RESERVED
- 10. RESERVED
- 11. INFORMATION SUBMITTALS [Air Quality Division contact numbers: (505) 768-1972 (voice); 1-800-659-8331 (NM Relay)]
 - a) Forms are available at http://www.cabq.gov/airquality/businessapplicationspermitsandforms.html or at the Air Quality Division Office located at 1 Civic Plaza Room 3047 (8:00am 4:30pm Mon. Fri. except city holidays).
 - b) Completed forms can be hand delivered to 1 Civic Plaza Room 3047 (8:00am 4:30pm Mon. Fri. except city holidays) or can be mailed to:

Albuquerque Environmental Health Department Air Quality Division - Compliance Section P. O. Box 1293 Albuquerque, NM 87103





Diesel generator set

25 kW - 40 kW EPA emissions stationary Standby



Description

Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, liquid-cooled, industrial diesel engine delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.



Cooling system - Standard cooling package provides reliable running at up to 50 °C (122 °F) ambient temperature.

Enclosures - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminum material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7-10. The intelligent design has removable panels and service doors to provide easy access for service and maintenance.

Fuel tanks - Two dual wall sub-base fuel tank series are offered as optional features, providing economical and flexible solutions to meet extensive code requirements on diesel fuel tanks.

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

		Standby rating 60 Hz		rating Hz	Data sheets 60 Hz
Model	kW	kVA	kW	kVA	
C25 D6	25	31.25	22.7	28.4	NAD-5859
C30 D6	30	37.5	27	33.75	NAD-5860
C35 D6	35	43.75	32	40	NAD-5861
C40 D6	40	50	36	45	NAD-5862

Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G2
Voltage regulation, no load to full load	± 1.0%
Random voltage variation	± 0.5% - 3 Phase only
Frequency regulation	Isochronous
Random frequency variation	± 0.5%
Radio frequency emissions compliance	FCC code Title 47 Part 15 Class B

Engine specifications

Eligino opeomodione					
Bore	95.0 mm (3.74 in.)				
Stroke	115.1 mm (4.53 in.)				
Displacement	3.3 litres (199 in ³)				
Configuration	Cast iron, in-line, 4 cylinder				
Battery capacity	550 amps at ambient temperature of 0 °F to 32 °F (-18 °C to 0 °C)				
Battery charging alternator	40 amps				
Starting voltage	12 volt, negative ground				
Fuel system	Indirect injection, number 2 diesel fuel, fuel filter, electric fuel shut of				
Fuel filter Single element, 10 micron filtration, spin-on fuel filter separator					
Air cleaner type	Dry replaceable element				
Lube oil filter type(s)	Spin-on, full flow				
Standard cooling system 50 °C (122 °F) ambient cooling system					
					

Alternator specifications

Design	Brushless, 4 pole, drip proof, revolving field
Stator	2/3 pitch
Rotor	Direct coupled, flexible disc
Insulation system	Class H per NEMA MG1-1.65
Standard temperature rise	120 °C (248 °F) Standby
Exciter type	Torque match (shunt) with PMG/EBS as option
Alternator cooling	Direct drive centrifugal blower
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	0.03

Available voltages

Single phase	3 phase			
• 120/240	• 120/208	• 120/240 delta	• 277/480	• 347/600

Note: Consult factory for other voltages. Generator set options

Fuel system

- Basic fuel tanks
- Regional fuel tanks

Engine

- Engine air cleaner normal or heavy duty
- . Shut down low oil pressure
- Extension oil drain

Alternator

- 120 °C (248 °F) temperature rise alternator
- 105 °C (221 °F) temperature rise alternator
- Excitation Boost System (EBS) or PMG
- Alternator heater, 120 V

Control

- AC output analog meters (bargraph)
- Stop switch emergency
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)

Electrical

- · Single circuit breaker
- Dual circuit breakers
- 80% rated circuit breakers
- · 100% rated circuit breakers

Enclosure

- Aluminum enclosure sound level 1 or level 2, with muffler installed, sandstone or green color
- Open set

Cooling system

- Shutdown low coolant level
- Warning low coolant level
- Extension coolant drain
- Cold weather option for operating at <4 °C (40 °F)

Exhaust system

- Exhaust connector NPT
- · Open set with muffler mounted

Generator set application

- Battery rack, larger battery
- · Radiator outlet duct adapter

Generator set data sheet



Model:

C25 D6

Frequency:

60 Hz

Fuel type:

Diesel

kW rating:

25 Standby

22.7 Prime

Emissions level:

EPA Emission Stationary Standby

Exhaust emission data sheet:	EDS-1182
Exhaust emission compliance sheet:	EPA-1251
Sound performance data sheet:	MSP-1180
Cooling performance data sheet:	MCP-262
Prototype test summary data sheet:	PTS-322

	Standby				Prime kW (kVA) 22.7 (28.325)			
Fuel consumption	kW (kVA)							
Ratings	25 (31.25)							
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	0.94	1.42	1.91	2.42	0 85	1 29	1,74	2 20
∐hr	3 56	5.37	7.23	9_16	3.22	4.88	6 59	8.33

Engine	Standby rating	Prime rating			
Engine manufacturer	Cummins Inc.				
Engine model	4BT3.3-G5				
Configuration	Cast iron, in-line, 4 cylinder				
Aspiration	Turbocharged				
Gross engine power output, kWm (bhp)	51 (69)	45 (60)			
BMEP at set rated load, kPa (psi)	634.31 (92.0)	576.40 (83.6)			
Bore, mm (in.)	95 (3.74)				
Stroke, mm (in.)	115 (4.53)				
Rated speed, rpm	1800				
Piston speed, m/s (ft/min)	6.9 (1359)				
Compression ratio	20.8:1				
Lube oil capacity, L (qt)	7.9 (8.35)				
Overspeed limit, rpm	2250				

Fuel flow

Maximum fuel flow, L/hr (US gph)	49.5 (13.1)
Maximum fuel inlet restriction with clean filter, mm Hg (in Hg)	58.42 (2.3)
Maximum return restriction, mm Hg (in Hg)	375.92 (14.8)

Air	Standby rating	Prime rating
Combustion air, m³/min (scfm)	3.42 (121)	3.34 (118)
Maximum air cleaner restriction with clean filter, kPa (in H ₂ O)	1.25 (5)	
Alternator cooling air, m ³ /min (cfm)	11.41 (403)	

Exhaust

Exhaust flow at set rated load, m³/min (cfm)	8,21 (290)	7.90 (279)	
Exhaust temperature, °C (°F)	440.5 (825)	427 (801)	
Maximum back pressure, kPa (in H ₂ O)	10.22 (41)	10.22 (41)	
Actual exhaust back pressure with CPG fitted muffler, kPa (in H ₂ O)	3.51 (14.1)	3.26 (13.1)	

Standard set-mounted radiator cooling¹

Ambient design, °C (°F)	50 (122)			
Fan load, kW _m (HP)	2.79 (3.8)			
Coolant capacity (with radiator), L (US gal)	14.8 (3.9)			
Cooling system air flow, m ³ /min (scfm)	93.2 (3290)			
Total heat rejection, MJ/min (Btu/min)	1.54 (1456.25)	1.435 (1359.38)		
Maximum cooling air flow static restriction, kPa (in H ₂ O)	0.12 (0.5)			

Weights²

Unit dry weight kgs (lbs)	554 (1219)
Unit wet weight kgs (lbs)	574 (1265)

Notes:

¹ For non-standard remote installations contact your local Cummins representative,

Derating factors

Standby	Engine power available up to 3050 m (10,000 ft) and ambient temperatures up to 50 °C (122 °F). Above these conditions, derate at 3% per 300 m (985 ft) and 6% per 10 °C (18 °F).
Prime	Engine power available up to 3050 m (10,000 ft) and ambient temperatures up to 50 °C (122 °F). Above these conditions, derate at 3% per 300 m (985 ft) and 6% per 10 °C (18 °F).

Ratings definitions

Emergency Standby Power (ESP):			Base Load (Continuous) Power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

² Weights represent a set with standard features. See outline drawing for weights of other configurations.



Exhaust emission data sheet C25 D6

60 Hz Diesel generator set EPA emission

Engine information:

Model:

Cummins 4BT3 3-G5

Bore:

3.74 in. (95 mm)

Туре

4 cycle, in-line, 4 cylinder diesel

Stroke:

4.53 in. (115 mm)

Aspiration

Turbocharged

Displacement:

199 cu. in. (3.3 liters)

Compression ratio:

20.8:1

Emission control device:

	1/4	<u>1/2</u>	<u>3/4</u>	<u>Full</u>
Performance data	Standby	Standby	Standby	<u>Standby</u>
BHP @ 1800 RPM (60 Hz)	10.5	21	31.4	41.9
Fuel consumption (gal/Hr)	1.3	1.9	2.1	2.4
Exhaust gas flow (CFM)	129.8	177.4	216.6	262.1
Exhaust gas temperature (°F)	357.7	484.9	618.4	753.3
Exhaust emission data				
HC (Total unburned hydrocarbons)	2.93	2,38	1.19	0.1
NOx (Oxides of nitrogen as NO2)	4.67	3.28	2.77	2.7
CO (Carbon monoxide)	4.04	2.25	1:34	0.89
PM (Particular Matter)	0.36	0.17	0.12	0.09
SO2 (Sulfur dioxide)	0.25	0.21	0.18	0.17
Smoke (Bosch)	0.15	0.25	0.35	0.45
				All values are Grams per HP - Ho

Test conditions

Data is representative of steady-state engine speed (± 25 RPM) at designated genset loads. Pressures, temperatures, and emission rates were stabilized.

Fuel specification:

ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and

40-48 cetane number.

Fuel temperature:

99 ± 9 °F (at fuel pump inlet)

Intake air temperature:

77 ± 9 °F

Barometric pressure:

29.6 ± 1 in. Hg

Humidity:

NOx measurement corrected to 75 grains H2O/lb dry air

Reference standard:

ISO 8178

The NOx, HC, CO and PM emission data tribulated here are representative of test data taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may results in elevated emission levels.



2019 EPA Tier 3 Exhaust Emission Compliance Statement C25 D6

Stationary Emergency

60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with Tier 3 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII.

Engine Manufacturer:

Cummins Inc.

EPA Certificate Number:

KCEXL03.3BAA-047

Effective Date:

11/27/2018

Date Issued:

11/27/2018

EPA Engine Family (Cummins Emissions Family):

KCEXL03.3BAA

Engine Information:

Model:

4BT3.3-G5

Bore:

3.74 in. (95 mm)

Engine Nameplate HP:

69

Stroke:

4.53 in. (115 mm)

Type:

4 Cycle, In-line, 4 Cylinder Diesel

Displacement:

199 cu. in. (3.3 liters)

Aspiration:

Turbocharged

Compression ratio:

20.8.1

Emission Control Device:

Exhaust stack diameter:

diameter: 3 in (76 mm)

Diesel Fuel Emission Limits

D2 Cycle Exhaust Emissions	Gran	Grams per BHP-hr			Grams per kWm-hr		
	NOx+	<u>co</u>	<u>PM</u>	NOx + NMHC	<u>co</u>	<u>PM</u>	
Test Results	3.3	1.5	0.22	4.4	2.0	0.29	
EPA Emissions Limit	3.5	3.7	0.30	4.7	5.0	0.40	

Test methods: EPA nonroad emissions recorded per 40 CFR 89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E, Appendix A for constant speed engines (ref. ISO8178-4, D2)

Diesel fuel specifications: 40-48 Cetane number, Reference: ASTM D975 No. 2-D, <15 ppm Sulphur

Reference conditions: Air Inlet Temperature: 25 °C (77 °F), Fuel Inlet Temperature: 40 °C (104 °F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H2O/lb) of dry air; required for NOx correction, Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to a maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.