

Department of Energy



National Nuclear Security Administration
Sandia Field Office
P.O. Box 5400
Albuquerque, NM 87185

03/14/2022

Isreal Tavarez
Manager, Environmental Health Department
Air Quality Program
1 Civic Plaza NW, Room 3023
P.O. Box 1293
Albuquerque, New Mexico 87103

Subject: Application for a Construction Permit to install a New Emergency Generator at Sandia

National Laboratories/New Mexico - Building No. 814

Dear Mr. Tavarez:

In accordance with New Mexico Administrative Code (NMAC) 20.11.41.29, enclosed is the Subject application to install a new emergency generator at Sandia National Laboratories, New Mexico (SNL/NM). The request is for the installation of a 1490 hp emergency generator, which will operate for 500 hours or less per year, at SNL/NM's new building No. 814, Emergency Operations Center, which is owned by the Department of Energy.

If you have questions, please contact Carolyn Holloway of our staff at (505) 845-5248, or Carolyn.Holloway@nnsa.doe.gov.

Sincerely,

Conrad S.

Digitally signed by Conrad

S. Valencia

Valencia

Date: 2022.03.14 08:49:07

Conrad S. Valencia

Acting Assistant Manager for Engineering

Enclosure

Application for a Construction Permit at SNL/NM Building No. 814 for a 1490 hp Emergency Generator

cc w enclosure:

City of Albuquerque at aqd@cabq.gov Callan Pope, SNL/NM Carolyn Holloway, SFO/ENG

cc w/o enclosure: Rhett Zyla, SNL/NM Conrad Valencia, SFO/ENG Doris Sandoval-Tellez, SFO/ENG NNSA-2022-001791



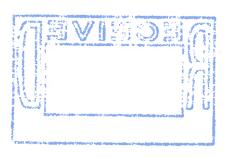


Table of Contents

- 1. Pre-Permit Application Meeting
 - a. Pre-permit Application Meeting Request
 - b. Pre-permit Application Meeting Agenda and Checklist

2. Public Notice

- a. Notice of Intent to Construct Forms:
 - i. Public Notice Email
 - ii. Notice of Intent
 - iii. List of Neighborhood Coalitions and Associations
- b. Public Sign Notice Guidelines
- c. Public Notice Sign Photograph

3. Air Permit Application

- a. Required Permit Application Forms:
 - i. Permit Application Checklist
 - ii. Permit Application Review Fee Checklist
 - iii. Short Permit Application Form
- b. Plot Pan identifying the location of the new emergency generator
 - i. USGS 7.5'- Quadrangle Map
 - ii. Google Map
- c. Process flow diagram
- d. Emission calculations and supporting information used to calculate emissions
- e. Regulatory Requirements
- f. Operational and Maintenance Strategy
- g. Air Dispersion Modeling Ambient Impact Analysis

EXECUTIVE SUMMARY

In accordance with 20.11.41.29 NMAC, the U.S. Department of Energy (DOE) is submitting this application to install a new 1490 hp emergency generator unit. The new unit will be located at Sandia National Laboratories/New Mexico's (SNL/NM's) new Emergency Operations Center (EOC), Building 814.

Per City of Albuquerque Air Quality Program's Internal Combustion Engine Permitting Policy, SNL/NM personnel and the DOE are requesting to operate the emergency generator for a maximum of 500 hours per year. The generator will only be operated during unavoidable loss of commercial power or during required maintenance/exercising.

1. PRE-PERMIT APPLICATION MEETING

SNL/NM personnel and the DOE met with the Department on 12/02/2021 from 2:00 - 2:45PM to discuss two separate upcoming applications, including this application to install a new emergency generator.

- a) Pre-permit Application Meeting Request
- b) Pre-permit Application Meeting Agenda and Checklist

1.a. Pre-permit Application Meeting Request





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:	Carolyn Holloway and/or Penny Avery
Company/Organization:	Department of Energy, Sandia Field Office (DOE/SFO)/Sandia National Laboratory/New Mexico (SNL/NM)
Point of Contact:	Phone: (505) 845-5248/(505) 273-1047
(phone number and email):	
Preferred form of contact (circle one):	Email: carolyn.holloway@doe.nnsa.gov
Phone (E-mail)	<u>rpavery@sandia.gov</u>
Preferred meeting date/times:	Nov 30th after 10AM,
	Dec 1st 9-10:30AM or between 12-3,
	Dec 2 nd 9-10:30AM or between 2-4PM
Description of Project(s):	Building 814/EOC: Installation of a 1000kW
	emergency diesel generator at the new
	Emergency Operations Center building. This generator will only be operated during
	unavoidable loss of commercial power or during
	required maintenance/testing for a maximum of
	500 hours per year.
	Building 963: Modifying the existing permit
	#1900 to install a 300kW emergency diesel generator at building 963. This generator will
	only be operated during unavoidable loss of
	commercial power or during required
	maintenance/testing for a maximum of 500
	hours per year.

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

1.b. Pre-Permit Application Meeting Agenda and Checklist



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.

Contac	Building 814 (EOC) — New Emergency Generator et: Carolyn Holloway (505) 845-5248/Penny Avery (505) 273-1047 eny/Business: Dept. of Energy/Sandia Field Office (DOE/SFO)/Sandia National Laboratories/New Mexico (SNL/NM)
	Fill out and submit a Pre-Permit Application Meeting Request form ⇒ Available online at http://www.cabq.gov/airquality ⇒ Pre-permit Application Meeting took place on 12/02/2021, 2:00 – 2:45 PM
	Emission Factors and Control Efficiencies Notes: None
	Air Dispersion modeling guidelines and protocol Notes: N/A, application is for an emergency generator.
	Department Policies Notes: None
	Air quality permit fees Notes: None

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:
• Coalition:
Notes: Neighborhood associations and coalitions were requested after the meeting and provided by the Department.
■ Posting and maintaining a weather-proof sign Notes: None
Regulatory timelines 30 days to rule application complete

Additional time allotted if there is significant public interest and/or a significant air

quality issue
o Public Information Hearing

90 days to issue completed permit

o Complex permitting action

Notes: N/A



Environmental Health Department Air Quality Program



Pre-Permit Application Meeting Agenda Template

Any person seeking a permit under 20.11.41 NMAC, Construction Permits, shall do so by filing a written application with the Air Quality Program (Program). Prior to submitting an application, per 20.11.41.13.A. NMAC the applicant (or their consultant) shall contact the Program in writing and submit a Pre-permit Application Meeting Request form requesting a pre-application meeting for information regarding the contents of the application and the application process. This form is available at https://www.cabq.gov/airquality/documents/FINALprepermitapplicationmeetingrequestform.doc

This template is provided to aid the Program in ensuring that in the pre-permit application meeting all information regarding the contents of the application and the application process are communicated to the applicant. This is because applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Program reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

Pre-application Meeting for Department of Energy, Sandia National Laboratory Meeting Agenda

Thursday, December 2, 2021 2:00 PM – 2:45 PM (MST)

Invitees: Carolyn Holloway, Penny Avery, Isreal Tavarez, Carina Munoz-Dyer, Paul Puckett, Elizabeth Pomo

Discuss Project:

Building 814/EOC: Installation of a 1000kW emergency diesel generator at the new Emergency Operations Center building. This generator will only be operated during unavoidable loss of commercial power or during required maintenance/testing for a maximum of 500 hours per year.

Building 963: Modifying the existing permit #1900 to install a 300kW emergency diesel generator at building 963. This generator will only be operated during unavoidable loss of commercial power or during required maintenance/testing for a maximum of 500 hours per year.

- a. Location
- b. Facility Description
- c. Main Processes
- d. Equipment
- e. Proposed Schedule
- II. If permit modification or revision, review current permit:
 - a. Review Process Equipment Table and Emissions Table and discuss changes

Ver. 4/30/21

- b. Request information about the replacement or new equipment (for example, if it is an engine, we need to know if it be new, what year, fuel type, etc...) to give them an idea of the changes that will be needed
- c. Discuss possible changes in permit conditions
- III. Air Dispersion modeling process, procedures and options:
 - a. When modeling is required and possibility of waivers
 - b. Protocol process, purpose, and time frame
 - c. Preliminary review, purpose, and time frame
 - d. Full review and time frame
 - e. Peer reviews
 - f. Assumptions in the modeling become permit conditions
 - g. NED data should be used instead of DEM data for assigning elevations to receptors, sources, buildings, etc.

IV. Applicant's public notice requirements

- a. During the same month application package will be submitted, ask Program for memo of neighborhood associations/coalitions within ½ mile of facility
- b. Fill out and send Notice of Intent to Construct form to neighborhood associations/coalitions listed in memo:

https://documents.cabq.gov/environmental-health/airquality/Forms/Notice%20of%20Intent%2003152021.pdf

c. Post and maintain a weather-proof sign. Signs are available in the downtown Program office:

https://www.cabq.gov/airquality/documents/FINALpublicnoticesignguidelines.doc

V. Regulatory timelines

- a. 30 days to rule application complete
- b. 90 days after ruled complete for permitting decision
- c. 30-day public comment period
- d. Public interest in application:
 - i. 30-day review of technical analysis
 - ii. 90-day extension for permitting decision
- e. Request for Public Information Hearing 90-day extension for permitting decision
- f. Complex technical issues in application 90-day extension for permitting decision
- g. If application ruled incomplete it stops timeline

VI. Department Policies

- a. Applications will be ruled incomplete if any parts from Permit Application Checklist missing
- b. Review fees paid in full are part of the application package
- c. Discuss payment format (by check, credit card or online)
- d. Use the most recent Permit Application Checklist, link below: https://www.cabq.gov/airquality/documents/FINALpermitapplicationchecklist.doc
- e. After three tries, permit application denied and application must start over including repayment of fees

VII. Additional Questions?

Ver. 4/30/21

2. PUBLIC NOTICE

Attached to this section are all completed public notice requirements including:

- a) Notice of Intent to Construct Forms:
 - o Public Notice Email
 - o Notice of Intent
 - o List of Neighborhood Coalitions and Associations
- b) Public Sign Notice Guidelines
- c) Public Notice Sign Photograph

2.a. Notice of Intent to Construct Forms

From:

Moore, Tami L.

To:

info@willsonstudio.com; mandy@theremedydayspa.com; "brasher@aps.edu"; dreikeja@comcast.net; jamesw.andrews01@gmail.com, "eastgatewaycoalition@gmail.com"; admin@eastmountaincoalition.org; ldavis@eastmountaincoalition.org; sp-wonderwoman@comcast.net; spbrugge@gmail.com; elkaleyah@aol.com; richtriple777@msn.com; dayna.mares76@gmail.com; idalialt@gmail.com; lamesainternationaldistrict@gmail.com;

mldarling56@yahoo.com; phnacommunications@gmail.com; kp-shna@centurylink.net;

siesta2na.pres@gmail.com; debsla@swcp.com; sdmartos91@gmail.com; notices@slananm.org; contact@slananm.org; khadijahasili@vizionz.org; zabdiel505@gmail.com; pmbdoc@yahoo.com; jpate@molzencorbin.com; alyceice@gmail.com; landry54@msn.com; mawsdf@comcast.net; pmeyer@sentrymgt.com; samijoster@gmail.com; donaldlove08@comcast.net; klove726@gmail.com; yalevillage@comcast.net; elderhomesteadna@gmail.com; ryanglar@gmail.com; mrkjous@aol.com;

siesta2napres@gmail.com

Cc:

Pope, Callan, Holloway, Carolyn (EGDS); Avery, Penny, Schuh, Paula

Subject:

[EXTERNAL] Public Notice of Proposed Air Quality Construction Permit Application

Date:

Tuesday, January 25, 2022 4:07:49 PM

Attachments:

Notice of Intent_EOC.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?

and proposed appareamon.		
Applicant Name United States Department of Energy (DOE) Site or Facility Name Building 814 (Emergency Operations Center)		
New Source		
February 28, 2022		
Installation of a new Tier 4 emergency diesel generator.		

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:

- Tami Moore DOE Public Affairs Director
- tami.moore@nnsa.doe.gov
- (505) 845-5264

For inquiries regarding the air quality permitting process, contact:

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

NOTICE FROM THE APPLICANT

Notice of Intent to Apply for Air Quality Construction Permit

You are receiving this notice because the New Mexico Air Quality Control Act (20.11.41.13B NMAC) requires any owner/operator proposing to construct or modify a facility subject to air quality regulations to provide public notice by certified mail or electronic mail to designated representatives of recognized neighborhood associations and coalitions within 0.5-mile of the property on which the source is or is proposed to be located.

This notice indicates that the <u>owner/operator intends to apply for an Air Quality Construction Permit</u> from the Albuquerque – Bernalillo County Joint Air Quality Program. Currently, <u>no application for this proposed project has been submitted</u> to the Air Quality Program. Applicants are required to include a copy of this form and documentation of mailed notices with their Air Quality Construction Permit Application.

Proposed Project Information

Applicant's name

and address: Department of Energy
Nombre y domicilio del Sandia Field Office (SFO)

solicitante: P.O. Box 5400, Albuquerque, NM, 87185

Owner / operator's name and address:

Nombre y domicilio del Sandia National Laboratories

propietario u operador: P.O. Box 5800 MS 1512, Albuquerque, NM 87185-1512

Contact for comments and inquires:

Datos actuales para comentarios y preguntas:

Name (Nombre): Tami Moore - DOE Public Affairs Director

Address (Domicilio): PO Box 5400, Albuquerque, NM 87185

Phone Number (Número Telefónico): (505) 845-5264

E-mail Address (Correo Electrónico): tami.moore@nnsa.doe.gov

Actual or estimated date the application will be submitted to the department:

Fecha actual o estimada en que se entregará la solicitud al departamento: February 28, 2022

Description of the source:

Descripción de la fuente: Emergency Generator

Exact location of the source or proposed source:

Ubicación exacta de la fuente o Building 814, Emergency Operations Center (Wyoming Blvd. SE and K St.

fuente propuesta: SE) UTM: 358763.00m E, 3879907.00m N

Nature of business:

Tipo de negocio: Research and Development

Process or change for which the

permit is requested:

Proceso o cambio para el cuál de solicita el

permiso: Addition of an emergency diesel generator

Maximum operating schedule:

Horario máximo de operaciones: 24 hrs/day, up to 500 hrs/yr

Normal operating schedule:

Horario normal de operaciones: Up to 1 hr/month for maintenance and testing; and as needed for loss of power

Albuquerque – Bernalillo County Joint Air Quality Program Phone: 505-768-1972 Email: aqd@cabq.gov

Preliminary estimate of the maximum quantities of each regulated air contaminant the source will emit:

Estimación preliminar de las cantidades máximas de cada contaminante de aire regulado que la fuente va a emitir:

Air Contaminant	Proposed Construction Permit Permiso de Construcción Propuesto		Net Changes (for permit modification or technical revision) Cambio Neto de Emisiones (para modificación de permiso o revisión técnica)	
Contaminante de aire	pounds per hour libras por hora	tons per year toneladas por año	pounds per hour libras por hora	tons per year toneladas por año
CO	8.58	2.15	N/A	N/A
NOx	1.64	0.41	N/A	N/A
VOC	0.47	0.12	N/A	N/A
SO2	0.015	0.004	N/A	N/A
PM10	0.07	0.02	N/A	N/A
PM2.5	0.07	0.02	N/A	N/A
HAP	N/A	N/A	N/A	N/A

Questions or comments regarding this Notice of Intent should be directed to the Applicant. Contact information is provided with the Proposed Project Information on the first page of this notice. <u>To check the status</u> of an Air Quality Construction Permit application, call 311 and provide the Applicant's information, or visit www.cabq.gov/airquality/air-quality-permits.

The Air Quality Program will issue a Public Notice announcing a 30-day public comment period on the permit application for the proposed project when the application is deemed complete. The Air Quality Program does not process or issue notices on applications that are deemed incomplete. More information about the air quality permitting process is attached to this notice.

Air Quality Construction Permitting Overview

This is the typical process to obtain an Air Quality Construction Permit for Synthetic Minor and Minor sources of air pollution from the Albuquerque – Bernalillo County Joint Air Quality Program.

Step 1: Pre-application Meeting: The Applicant and their consultant must request a meeting with the Air Quality Program to discuss the proposed action. If air dispersion modeling is required, Air Quality Program staff discuss the modeling protocol with the Applicant to ensure that all proposed emissions are considered.

Notice of Intent from the Applicant: Before submitting their application, the Applicant is required to notify all nearby neighborhood associations and interested parties that they intend to apply for an air quality permit or modify an existing permit. The Applicant is also required to post a notice sign at the facility location.

Step 2: Administrative Completeness Review and Preliminary Technical Review: The Air Quality Program has 30 days from the day the permit is received to review the permit application to be sure that it is administratively complete. This means that all application forms must be signed and filled out properly, and that all relevant technical information needed to evaluate any proposed impacts is included. If the application is not complete, the permit reviewer will return the application and request more information from the Applicant. Applicants have three opportunities to submit an administratively complete application with all relevant technical information.

Public Notice from the Department: When the application is deemed complete, the Department will issue a Public Notice announcing a 30-day public comment period on the permit application. This notice is distributed to the same nearby neighborhood associations and interested parties that the Applicant sent notices to, and published on the Air Quality Program's website.

During this 30-day comment period, individuals have the opportunity to submit written comments expressing their concerns or support for the proposed project, and/or to request a Public Information Hearing. If approved by the Environmental Health Department Director, Public Information Hearings are held after the technical analysis is complete and the permit has been drafted.

Step 3: Technical Analysis and Draft Permit: Air Quality Program staff review all elements of the proposed operation related to air quality, and review outputs from advanced air dispersion modeling software that considers existing emission levels in the area surrounding the proposed project, emission levels from the proposed project, and meteorological data. The total calculated level of emissions is compared to state and federal air quality standards and informs the decision on whether to approve or deny the Applicant's permit.

Draft Permit: The permit will establish emission limits, standards, monitoring, recordkeeping, and reporting requirements. The draft permit undergoes an internal peer review process to determine if the emissions were properly evaluated, permit limits are appropriate and enforceable, and the permit is clear, concise, and consistent.

Public Notice from the Department: When the technical analysis is complete and the permit has been drafted, the Department will issue a second Public Notice announcing a 30-day public comment period on the technical analysis and draft permit. This second Public Notice, along with the technical analysis documentation and draft permit, will be published on the Air Quality Program's website, and the public notice for availability of the technical analysis and draft permit will only be directly sent to those who requested further information during the first comment period.

Air Quality Construction Permitting Overview

During this second 30-day comment period, residents have another opportunity to submit written comments expressing their concerns or support for the proposed project, and/or to request a Public Information Hearing.

Possible Public Information Hearing: The Environmental Health Department Director may decide to hold a Public Information Hearing for a permit application if there is significant public interest and a significant air quality issue. If a Public Information Hearing is held, it will occur after the technical analysis is complete and the permit has been drafted.

Step 4: Public Comment Evaluation and Response: The Air Quality Program evaluates all public comments received during the two 30-day public comment periods and Public Information Hearing, if held, and updates the technical analysis and draft permit as appropriate. The Air Quality Program prepares a response document to address the public comments received, and when a final decision is made on the permit application, the comment response document is published on the Air Quality Program's website and distributed to the individuals who participated in the permit process. If no comments are received, a response document is not prepared.

Step 5: Final Decision on the Application: After public comments are addressed and the final technical review is completed, the Environmental Health Department makes a final decision on the application. If the permit application meets all applicable requirements set forth by the New Mexico Air Quality Control Act and the federal Clean Air Act, the permit is approved. If the permit application does not meet all applicable requirements, it is denied.

Notifications of the final decision on the permit application and the availability of the comment response document is published on the Air Quality Program's website and distributed to the individuals who participated in the permit process.

The Department must approve a permit application if the proposed action will meet all applicable requirements and if it demonstrates that it will not result in an exceedance of ambient air quality standards. Permit writers are very careful to ensure that estimated emissions have been appropriately identified or quantified and that the emission data used are acceptable.

The Department must deny a permit application if it is deemed incomplete three times, if the proposed action will not meet applicable requirements, if estimated emissions have not been appropriately identified or quantified, or if the emission data are not acceptable for technical reasons.

For more information about air quality permitting, visit www.cabq.gov/airquality/air-quality-permits

Timothy M. Keller, Mayor

Public Participation

List of Neighborhood Associations and Neighborhood Coalitions MEMORANDUM

To:

Penny Avery, Air Quality Compliance Program Lead

From:

Elizabeth Pomo, Environmental Health Scientist

Subject:

Determination of Neighborhood Associations and Coalitions

within 0.5 mile of Kirtland Air Force Base in Bernalillo County, NM

Date:

December 15, 2021

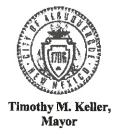
DETERMINATION:

On December 15, 2021 I used the City of Albuquerque Zoning Advanced Map Viewer (http://coagisweb.cabq.gov/) to verify which City of Albuquerque Neighborhood Associations (NA), Homeowner Associations (HOA) and Neighborhood Coalitions (NC) are located within 0.5 mile of Kirtland Air Force Base in Bernalillo County, NM.

I then used the City of Albuquerque Office (COA) of Neighborhood Coordination's Monthly Master NA List dated December 2021 and the Bernalillo County (BC) Monthly Neighborhood Association December 2021 Excel file to determine the contact information for each NA and NC located within 0.5 mile of Kirtland Air Force Base in Bernalillo County, NM.

The table below contains the contact information, which will be used in the City of Albuquerque Environmental Health Department's public notice. Duplicates have been deleted.

COA/BC Association or		
Coalition	Name	Email or Mailing Address*
District 6 Coalition of	Patricia Willson	info@willsonstudio.com;
Neighborhood Associations	Mandy Warr	mandy@theremedydayspa.com;
East Gateway Coalition	Michael Brasher	brasher@aps.edu;
	James Andrews	jamesw.andrews01@gmail.com;
	Julie Dreike	dreikeja@comcast.net;
	Association Email	eastgatewaycoalition@gmail.com;
East Mountain District 5	Lisa Davis	ldavis@eastmountaincoalition.org;
Coalition	Coalition Email	admin@eastmountaincoalition.org,
Elder Homestead Neighborhood	M. Ryan Kious	mrkious@aol.com;
Association	Sandra Perea	sp-wonderwoman@comcast.net;
	Association Email	elderhomesteadna@gmail.com;
Four Hills Village Association	Steve Brugge	spbrugge@gmail.com;
	Ellen Lipman	elkaleyah@aol.com;
Juan Tabo Hills Neighborhood	Ryan Giar	ryangiar@gmail.com
Association	Richard Lujan	richtriple777@msn.com;
La Mesa Community	Dayna Mares	dayna.mares76@gmail.com;
Improvement Association	Idalia Lechuga-Tena	idalialt@gmail.com;



Public Participation

List of Neighborhood Associations and Neighborhood Coalitions MEMORANDUM

	Association Email	lamesainternationaldistrict@gmail.com;
Parkland Hills Neighborhood	Mary Darling	mldarling56@yahoo.com;
Association	Robert Leming	phnapresident@gmail.com;
Siesta Hills Neighborhood	Rachel Baca	siesta2napres@gmail.com;
Association	Kathy Pierson	kp-shna@centurylink.net;
South Los Altos Neighborhood	Debbie Conger	notices@slananm.org;
Association		debsla@swcp.com;
	Stephen Martos-Ortiz	sdmartos91@gmail.com;
	Association Email	contact@slananm.org;
South San Pedro Neighborhood	Khadijah Bottom	khadijahasili@vizionz.org;
Association	Zabdiel Aldaz	zabdiel505@gmail.com;
Southeast Heights Neighborhood	Pete Belletto	pmbdoc@yahoo.com;
Association	John Pate	jpate@molzencorbin.com;
Trumbull Village Association	Alyce Ice	alyceice@gmail.com;
	Joanne Landry	landry54@msn.com;
Victory Hills Neighborhood	Melissa Williams	mawsdf@comcast.net,
Association	Patricia Wilson	info@willsonstudio.com;
Willow Wood Neighborhood	Pamela Meyer	pmeyer@sentrymgt.com;
Association	Samantha Martinez	samijoster@gmail.com;
Yale Village Neighborhood	Donald Love	donaldlove08@comcast.net;
Association	Kim Love	klove726@gmail.com;
· ·	Association Email	yalevillage@comcast.net;

^{*}If email address is not listed, provide public notice via certified mail and include a copy of each mail receipt with the application submittal.

Timothy M. Keller, Mayor

Public Participation

List of Neighborhood Associations and Neighborhood Coalitions MEMORANDUM

To: Callan Pope, Sandia National Laboratories

From: Elizabeth Pomo, Senior Environmental Health Scientist
Subject: Determination of Neighborhood Associations and Coalitions

within 0.5 mile of Kirtland Air Force Base in Bernalillo County, NM

Date: May 19, 2022

DETERMINATION:

On May 19, 2022 I used the City of Albuquerque Zoning Advanced Map Viewer (http://coagisweb.cabq.gov/) to verify which City of Albuquerque Neighborhood Associations (NA), Homeowner Associations (HOA) and Neighborhood Coalitions (NC) are located within 0.5 mile of Kirtland Air Force Base in Bernalillo County, NM.

I then used the City of Albuquerque Office (COA) of Neighborhood Coordination's Monthly Master NA List dated May 2022 and the Bernalillo County (BC) Monthly Neighborhood Association May 2022 Excel file to determine the contact information for each NA and NC located within 0.5 mile of Kirtland Air Force Base in Bernalillo County, NM.

The table below contains the contact information, which will be used in the City of Albuquerque Environmental Health Department's public notice. Duplicates have been deleted.

COA/BC Association or		
Coalition	Name	Email or Mailing Address*
District 6 Coalition of	Patricia Willson	info@willsonstudio.com;
Neighborhood Associations	Mandy Warr	mandy@theremedydayspa.com;
East Gateway Coalition	Michael Brasher	brasher@aps.edu;
	Julie Dreike	dreikeja@comcast.net;
	Association Email	eastgatewaycoalition@gmail.com;
East Mountain District 5	Lisa Davis	Idavis@eastmountaincoalition.org;
Coalition	Darci Roark	info@eastmountaincoalition.org;
	Coalition Email	admin@eastmountaincoalition.org;
Elder Homestead Neighborhood	M. Ryan Kious	mrkious@aol.com;
Association	Sandra Perea	sp-wonderwoman@comcast.net;
	Association Email	elderhomesteadna@gmail.com;
Four Hills Village Association	Steve Brugge	spbrugge@gmail.com;
	Ellen Lipman	elkaleyah@aol.com;
	Linda Martinez	<u>lam0426@msn.com;</u>
	Andrew Lipman	fhvapres@gmail.com;
Juan Tabo Hills Neighborhood	Ryan Giar	ryangiar@gmail.com;
Association	Richard Lujan	richtriple777@msn.com;

Timothy M. Keller, Mayor

Public Participation

List of Neighborhood Associations and Neighborhood Coalitions MEMORANDUM

La Mesa Community	Dayna Mares	dayna.mares76@gmail.com;
Improvement Association	Idalia Lechuga-Tena	idalialt@gmail.com;
	Association Email	lamesainternationaldistrict@gmail.com;
Parkland Hills Neighborhood	Mary Darling	mldarling56@yahoo.com;
Association	Janet Simon	phnacommunications@gmail.com;
	Association Email	phnapresident@gmail.com;
Siesta Hills Neighborhood	Rachel Baca	siesta2napres@gmail.com;
Association	Kathy Pierson	kp-shna@centurylink.net;
South Los Altos Neighborhood	Jim Ahrend	jimahrend@gmail.com,
Association	Stephen Martos-Ortiz	sdmartos91@gmail.com;
	Association Email	contact@slananm.org;
South San Pedro Neighborhood	Khadijah Bottom	khadijahasili@vizionz.org;
Association	Zabdiel Aldaz	zabdiel505@gmail.com;
Southeast Heights Neighborhood	Pete Belletto	pmbdoc@yahoo.com;
Association	John Pate	jpate@molzencorbin.com;
Trumbull Village Association	Alyce Ice	alyceice@gmail.com;
	Joanne Landry	landry54@msn.com;
Victory Hills Neighborhood	Melissa Williams	mawsdf@comcast.net;
Association	Patricia Wilson	info@willsonstudio.com;
Willow Wood Neighborhood	Pamela Meyer	pmeyer@sentrymgt.com;
Association	Samantha Martinez	samijoster@gmail.com;
Yale Village Neighborhood	Donald Love	donaldlove08@comcast.net;
Association	Kim Love	klove726@gmail.com;
	Association Email	yalevillage@comcast.net;

2.b. Public Sign Notice Guidelines



Name: <u>Department of Energy</u> Contact: <u>Tami Moore</u> (DOE)

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.

Company/Business: Address: PO Box 5400, Albuquerque, NM 87185 Phone Number: (505) 845-5264

Email Address: tami.moore@nnsa.doe.gov
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:

2.c. Public Notice Sign Photograph



Proposed Air Quality Construction Permit

Permiso de Construcción de Calidad del Aire Propuesto



	HIMSO GC GOILE			Davabata	
Applicant's Name:	Deportment	LAC CINEWALL SO	undia Field OFF	ica	
Nombre del solicitante Owner or Operato			<u>Laboratories</u>	TO.	
		will be Submitted to t			
Fecha Actual o Estima	da en que se Entragará la	Solicitud al Departamento	[UVC11]	pur 1, 202	
	he Source or Proposed Fuente o Fuente Propues		814. Wyomina RIV	waters center d. 56 e KST SE	
4. Description of the			urh: 358763	Gest, 3879907 W	
Descripcion del Fuente	<u>OTTUET GOT</u>	ncy Generato	<u> </u>	7.00	
Nature of Business Tipo de Negocio:	"Research ar	d Developmen	at		
Process or change	for which a permit is	an control.		l'and one and a	
Proceso o cambio para	a el cuál se solicita el perm	Haditoy	not emergency o	lese genurata	
Preliminary estimate	of the maximum arran	tities of each required	air contaminant the source	- mili omie.	
Estimación preliminar de l	as contidados máximos do	titles or each regulated	air contaminant the source regulado que la fuente va a emi	e will emit:	
samucion premimiai de i	us cuntidages moximas de	cada contaminante de aire i	regulado que la fuente va a emi	tir	
			Net Chang	e Emissions	
Air Contaminant	Proposed Con	struction Permit		Net Change Emissions (for permit modification or technical revision)	
Contaminante		trucción Propuesto	Campio Neto de Emisiones		
de Aire			(para modificación de permiso o revisión técnica)		
	Pounds per hour libros por hora	Tons per year	Pounds per hour	Tons per year	
со	Q C	tonelados por año 2.15	hbras por hara	toneladas por año	
NOX	144	041	ALID .	ALLO	
SO2	0.015	0.004	1 2/2	IVIFA	
PM10	0.07	0.07	ALL A	NIP	
PM2.5	0.07	0.02	MA	N/B	
HAP	NIA	Ola	NIA	ALL M	
VOC	0.47	0.12	ALIA	ALIZ	
5. Maximum Operat	ing Schedule: 20	o se lal-	NA	IVIN	
Horario Máximo de O		MSICION, UP.	to 500 hvalur	^	
Normal Operation	Schedule:	la almoste C		: As ruded	
Horario Normal de O	peraciones: UD to	nrimoniu for	mountanance etch	Will 1055 OF POW	
6. Current Contact In	formation for Comme	nts and Inquiries		37.	
Datos actuales para (omentarios y Preguntas	and inquiries			
Name (Nombre):	Jami Moore -	DOE Public A	iffairs Directo	V	
Address (Domici		400 , Albuque	MUR. 111 8713	3.5	
Phone Number	(Número Telefónico)	(s) 845-52.64			
Email Address	(Carreo Electrónico):	ami moore on	so doe on/		
	- Marian	THE PERSON NAMED IN	AND		

Call 311 for additional information concerning this project, the Air Quality Program, or to file a complaint.

Llome of 311 para obtener información adicional sobre este proyecto, del Programa de Calidad del Aire, a para presenter una quest.

Goi 311 de biét thêm thông tin hoặc để khiểu nại về dự án này, Chương Trình Chất Lượng Không Khi

City of Albuquerque, Environmental Health Department, Air Quality Program – Stationary Source Permitting
Ciudod de Albuquerque, Departamento de Salud Ambiental, Programa de Calidad del Aire - Permisos paro Fuentes Inmoviles
(505) 768-1972, aqd@cabq gov

THIS SIGN SHALL REMAIN POSTED UNTIL THE DEPARTMENT TAKES FINAL ACTION ON THE PERMIT APPLICATION OF PERMISO DEBERÁ DE MANTENERSE PUESTO HASTA QUE EL DEPARTAMENTO TOME UNA DECISIÓN SOBRE LA SOLICITUD DE PERMISO

3. AIR PERMIT APPLICATION

Attached to this section are as follows:

- a) Required Permit Application Forms:
 - o Permit Application Checklist
 - o Permit Application Review Fee Checklist
 - o Short Permit Application Form
- b) Plot Pan identifying the location of the new emergency generator
 - o USGS 7.5'- Quadrangle Map
 - o Google Map
- c) Process flow diagram
- d) Emission calculations and supporting information used to calculate emissions
- e) Regulatory Requirements
- f) Operational and Maintenance Strategy
- g) Air Dispersion Modeling Ambient Impact Analysis

3.a. Required Permit Application Forms



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.

 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. Neighborhood Association(s): See attached memo from Elizabeth Pomo

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.

 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. \boxtimes contain the applicant's name, address, and the names and addresses of all other owners or operators of the emission sources.

- E. indicate the date the application was completed and submitted
- F. \boxtimes contain the company name, which identifies this particular site.

- I. 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. \boxtimes 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.

 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.
- Q. \(\begin{align*} \begin{align*} \text{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. \(\times \) contain all calculations used to estimate <u>potential emission rate</u> and <u>controlled</u> emissions.
- S. \boxtimes 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. \boxtimes contain fuel data for each existing and/or proposed piece of fuel burning equipment.
- U. \(\omega\) contain the anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.
- V. \(\times \) 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.
- N/A Air dispersion modeling impact analysis requirement is waived for emergency generators (see Section 3.g.)
- X. \boxtimes contain a preliminary operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown.
- Y. \boxtimes 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. \(\) contain description of the equipment or methods proposed by the applicant to be used for emission measurement.
- BB. \(\omega \) 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.







Permit Application Review Fee Instructions

All source registration, authority-to-construct, and operating permit applications for stationary or portable sources shall be charged an application review fee according to the fee schedule in 20.11.2 NMAC. These filing fees are required for both new construction, reconstruction, and permit modifications applications. Qualified small businesses as defined in 20.11.2 NMAC may be eligible to pay one-half of the application review fees and 100% of all applicable federal program review fees.

Please fill out the permit application review fee checklist and submit with a check or money order payable to the "City of Albuquerque Fund 242" and either:

- 1. be delivered in person to the Albuquerque Environmental Health Department, 3rd floor, Suite 3023 or Suite 3027, Albuquerque-Bernalillo County Government Center, south building, One Civic Plaza NW, Albuquerque, NM or,
- 2. mailed to Attn: Air Quality Program, Albuquerque Environmental Health Department, P.O. Box 1293, Albuquerque, NM 87103.

The department will provide a receipt of payment to the applicant. The person delivering or filing a submittal shall attach a copy of the receipt of payment to the submittal as proof of payment. Application review fees shall not be refunded without the written approval of the manager. If a refund is requested, a reasonable professional service fee to cover the costs of staff time involved in processing such requests shall be assessed. Please refer to 20.11.2 NMAC (effective January 10, 2011) for more detail concerning the "Fees" regulation as this checklist does not relieve the applicant from any applicable requirement of the regulation.





Environmental Health Department Air Quality Program

Permit Application Review Fee Checklist Effective January 1, 2022 - December 31, 2022

Please completely fill out the information in each section. Incompleteness of this checklist may result in the Albuquerque Environmental Health Department not accepting the application review fees. If you should have any questions concerning this checklist, please call 768-1972.

I. COMPANY INFORMATION:

L. COMPANIA INFORMATION.				
Company Name	United States Department of Energy (DOE)			
Company Address	1515 Wyoming Boulevard SE, Albuquerque NM, 87116			
Facility Name	Sandia National Laboratories/New Mexico			
Facility Address	Wyoming Blvd. SE and K St SE (EOC, Building 814)			
Contact Person	Carolyn Holloway (SFO)/ Penny Avery (SNL/NM)			
Contact Person Phone Number	ntact Person Phone Number (505) 845-5248/(505) 273-1047			
Are these application review fees for an existing permitted source located within the City of Albuquerque or Bernalillo County?		Yes	No	
If yes, what is the permit number associated with this modification?		Permit #		
Is this application review fee for a Qualified Small Business as defined in 20.11.2 NMAC? (See Definition of Qualified Small Business on Page 4)		Yes	No	

II. STATIONARY SOURCE APPLICATION REVIEW FEES:

If the application is for a new stationary source facility, please check all that apply. If this application is for a modification to an existing permit please see Section III.

Check All That Apply	Stationary Sources	Review Fee	Program Element
	Air Quality Notifications		
	AQN New Application	\$599.00	2801
	AQN Technical Amendment	\$327.00	2802
	AQN Transfer of a Prior Authorization	\$327.00	2803
Х	Not Applicable	See Sections Below	
	Stationary Source Review Fees (Not Based on Proposed Allowable Emission	Rate)	
	Source Registration required by 20.11.40 NMAC	\$ 592.00	2401
	A Stationary Source that requires a permit pursuant to 20.11.41 NMAC or other board regulations and are not subject to the below proposed allowable emission rates	\$ 1,220.00	2301
X	Not Applicable	See Sections Below	
Stationa	ry Source Review Fees (Based on the Proposed Allowable Emission Rate for the single	highest fee pol	lutant)
X	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	\$915	2302
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	\$1,830	2303
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	\$3,661	2304
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	\$5,491	2305
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	\$7,321	2306
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	\$9,152	2307
	Not Applicable	See Section Above	

Federal Program Review Fees (In addition to the Stationary Source Application Review Fees above)				
X	40 CFR 60 - "New Source Performance Standards" (NSPS)	\$1,220	2308	
	40 CFR 61 - "Emission Standards for Hazardous Air Pollutants (NESHAPs)	\$1,220	2309	
	40 CFR 63 - (NESHAPs) Promulgated Standards	\$1,220	2310	
	40 CFR 63 - (NESHAPs) Case-by-Case MACT Review	\$12,202	2311	
	20.11.61 NMAC, Prevention of Significant Deterioration (PSD) Permit	\$6,101	2312	
	20.11.60 NMAC, Non-Attainment Area Permit	\$6,101	2313	
1	Not Applicable	Not		
		Applicable		

III. MODIFICATION TO EXISTING PERMIT APPLICATION REVIEW FEES:

If the permit application is for a modification to an existing permit, please check all that apply. If this application is for a new stationary source facility, please see Section II.

Check All That Apply	Modifications	Review Fee	Program Element
	Modification Application Review Fees (Not Based on Proposed Allowable Emissio	n Rate)	
	Proposed modification to an existing stationary source that requires a permit pursuant to 20.11.41 NMAC or other board regulations and are not subject to the below proposed allowable emission rates	\$ 1,220	2321
Х	Not Applicable	See Sections Below	
	Modification Application Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollu	tant)	
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	\$915	2322
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	\$1,830	2323
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	\$3,661	2324
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	\$5,491	2325
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	\$7,321	2326
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	\$9,152	2327
Х	Not Applicable	See Section Above	
	Major Modifications Review Fees (In addition to the Modification Application Review	Fees above)	
	20.11.60 NMAC, Permitting in Non-Attainment Areas	\$6,101	2333
	20.11.61 NMAC, Prevention of Significant Deterioration	\$6,101	2334
X	Not Applicable	Not Applicable	
(This see	Federal Program Review Fees ction applies only if a Federal Program Review is triggered by the proposed modification addition to the Modification and Major Modification Application Review Fees a		s are in
	40 CFR 60 - "New Source Performance Standards" (NSPS)	\$1,220	2328
	40 CFR 61 - "Emission Standards for Hazardous Air Pollutants (NESHAPs)	\$1,220	2329
	40 CFR 63 - (NESHAPs) Promulgated Standards	\$1,220	2330
	40 CFR 63 - (NESHAPs) Case-by-Case MACT Review	\$12,202	2331
	20.11.61 NMAC, Prevention of Significant Deterioration (PSD) Permit	\$6,101	2332
X	20.11.60 NMAC, Non-Attainment Area Permit Not Applicable	\$6,101 Not Applicable	2333

IV. ADMINISTRATIVE AND TECHNICAL REVISION APPLICATION REVIEW FEES:

If the permit application is for an administrative or technical revision of an existing permit issued 20.11.41 NMAC, please check one that applies.

pursuant to

Check One	Revision Type Review Fee	Program Element
	Administrative Revisions \$ 250.00	2340
	Technical Revisions \$ 500.00	2341
X	Not Applicable See Sections II, III or	r V

V. PORTABLE STATIONARY SOURCE RELOCATION FEES:

If the permit application is for a portable stationary source relocation of an existing permit, please check one that applies.

Check One	Portable Stationary Source Relocation Type	Review Fee	Program Element
	No New Air Dispersion Modeling Required	\$ 500.00	2501
	New Air Dispersion Modeling Required	\$ 750.00	2502
X	Not Applicable	See Sections II, III or V	

VI. Please submit a check or money order in the amount shown for the total application review fee.

Section Totals	Revie	w Fee Amount
Section II Total	\$	2,135.00
Section III Total	\$	0.00
Section IV Total	\$	0.00
Section V Total	6,0	0.00
Total Application Review Fee	\$	2,135.00

I, the undersigned, a responsible official of the applicant company, certify that to the best of my knowledge, the information stated on this checklist, give a true and complete representation of the permit application review fees which are being submitted. I also understand that an incorrect submittal of permit application reviews may cause an incompleteness determination of the submitted permit application and that the balance of the appropriate permit application review fees shall be paid in full prior to further processing of the application.

Signed this_	day of	20
Conrad S. Val Print Na Conrad S. Valencia	lencia ime Digitally signed by Conrad S. Valenda Date: 2022.03.14 08:46:20 -06'00'	Acting Assistant Manager for Engineering Print Title
Signatur	e	_

Definition of Qualified Small Business as defined in 20.11.2 NMAC:

"Qualified small business" means a business that meets all of the following requirements:

- (1) a business that has 100 or fewer employees;
- (2) a small business concern as defined by the federal Small Business Act;
- (3) a source that emits less than 50 tons per year of any individual regulated air pollutant, or less than 75 tons per year of all regulated air pollutants combined; and
- (4) a source that is not a major source or major stationary source.

Note: Beginning January 1, 2011, and every January 1 thereafter, an increase based on the consumer price index shall be added to the application review fees. The application review fees established in Subsection A through D of 20.11.2.18 NMAC shall be adjusted by an amount equal to the increase in the consumer price index for the immediately-preceding year. Application review fee adjustments equal to or greater than fifty cents (\$0.50) shall be rounded up to the next highest whole dollar. Application review fee adjustments totaling less than fifty cents (\$0.50) shall be rounded down to the next lowest whole dollar. The department shall post the application review fees on the city of Albuquerque environmental health department air quality program website.

Application	Review	Fees
January 202	22	174 (Spin (S



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 87103

(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)

Section 1.	General In	<u>formation</u>			Date S	ubmitted: 7.5.45	2022
1. Company Name: <u>U</u>	nited States Depar	iment of Energy (D	OE) Ph: (505) 84	<u>5-5178</u>	Email: conrad.va	alencia@nnsa.doe.gov	<u>L</u> .
2. Company Address: _	1515 Wyoming I	Boulevard S.E.	City	y: <u>Albuquerque</u>		State: <u>NM</u> Z	iip: <u>87123</u>
3. Company Mailing A	ddress (if different): _ <u>Sandia Field O</u>	ffice (SFO) Post Offi	ice Box 5400, Alb	uquerque, NM	Zip: 87185	
4. Company Contact: C	onrad S. Valencia	Title: Acting Assis	tant Manager, Engin	eering Ph: (505)	845-4776 Emai	il: conrad.valencia@n	nsa.doe.gov
5. Facility Name: Sand	ia National Labora	tories / New Mexic	o (SNL/NM) Fac	cility Hours:	<u>6:00</u> am TO _	<u>5:00</u> pm	
6. Facility Address: Bu	ilding 814 (Emerg	ency Operations Ce	nter, EOC) Wyomin	g Blvd. SE and K	St. SE City: Al	buquerque State: N	IM Zip: 87123
7. Local Business Maili	ng Address (if dif	ferent): Post Office	Box 5800, Mail Stop	1512, Albuquerq	ue, NM, 87185-1	512 Email: conrad.va	alencia@nnsa.doe.gov
8. Facility Environment Fax: <u>N/A</u>	tal Contact <u>: Caroly</u>	n Holloway/Penny	Avery Title: Gene	ral Engineer/AQC	Program Lead	Ph: <u>(505)845-5248/ (</u> .	505) 273-1047
9. Email: carolyn.hollo	way@nnsa.doe.go	v/rpavery@sandia.g	gov 10. Type of B	Business: Resear	ch and Developr	nent	
11. Environmental Con	sultant Name and l	Email Address (if a	pplicable):_ <u>N/A</u>				
12. North American Inc	lustry Classification	n System (NAICS)	:541712	13. St	andard Industrial	Classification (SIC):	<u>8733</u>
14. UTM coordinates (1	equired):_ <u>E - 358</u>	763 N –38799	07 15. Facility Ph	ı: <u>(505) 845-5248</u>	Fax: (505)	845 - 4710	
16. Billing Contact:I	Penny Avery	Title: _	Air Quality Compli	ance Program Lea	d Ph:	(<u>505) 273 - 1047</u>	Fax: <u>N/A</u>
17. Billing Address:	See "Local Busine	ss Mailing Address	<u>"above</u> Cit	y: <u>N/A</u>	State:	<u>N/A</u> Zip: N	<u>//A</u>
18. Is this an Initial Inst	allation; OR Modi	fication of an Exist	ing Unit: <u>X</u> Init	tial Modifie	cation 19. Curren	nt or requested operati	ing hrs/yr: <u>500</u>
20. Is engine or genset i	installed:Y	es X No I	f yes, date installed: _	7 7	_ If no, anticipa	ted installation date: _	07 / 01 / 2022
Provide an en	gine spec shee	t and a detailed	l site plan or pla	t of the proper	rty where eng	<u>ine or genset is t</u>	o be installed.
Section 2.	Compres	sion Ignition In	iternal Combust	ion Engine for	Stationary l	Emergency Engir	<u>1es</u>
	Provide engir	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	QST30-G17	TBD	*TBD	N/A	1490 Hp	N/A
	· .						
*Manufacture Date w	rill likely be 202	O or later.				MAY 2 6 202	ZEN

Section 3. Stack and Emissions Information

Stack Height Above Groun	d & Stack Diameter In Feet	Stack Temperature	Stack Flow Rate & Exit Direction
Example 18 feet – Height	0.42 feet - Diameter	625 °F	3,000 ft³/min – Flow Rate Exit - upward
17.5 feet – Height	1.5 feet - Diameter	869°F	7,469 ft ³ /min – Flow Rate Exit - upward

Section 4. Potential Emission Rate (Uncontrolled Emissions)

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

Model Year	Pollutant	Emission Factors g/Hp-hr	T I M E S	Actual Engine Hp	E Q U A L S	Emission In Grams Per Hour	D I V I D E	Grams Per Pound	E Q U A L S	Emission in Pounds Per Hour	T I M E S	Potential Operating Hours Per Year	D I V I D E	Pounds Per Ton	E Q U A L S	Emission In Tons Per Year	
E	CO	2.6	X		=	975	+		=	2.15	X	8,760	+	2,000	=	9.4	
X	NOτ	0.3	x		=	112.5	+		=	0.25	ж	8,760	+	2,000	=	1.1	
M	NMHC	9.14	X		=	52.5	+	1526	+	=	0.12	X	8,760	+	2,000	=	0.53
P L	NOx+ NMHC	3.0	ж	375 Hp	=	1,125	+		=	2,48	ж	8,760	+	2,000	=	10.86	
E	**SO _x	0.93	ж		=	348.8	+		=	0.77	x	8,760	+	2,000	=	3.37	
2008	***PM	0.15	X		=	56.25	+		=	0.12	ж	8,760	+	2,000	=	0.53	
	CO NOx NMHC *NOx+ NMHC **SOx ***PM						See	attached l	Emis	sion Calcula	ıtion	5					

^{*} 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 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	Q U A L S	Pounds Per Year	D I V I D E	Pounds Per Ton	E Q U A L S	Emission II Tons Per Year
EXAMPLE CO	2.15	Х	200	=	430	+	2,000	=	0.22
NO ₃		ж	15 5 51	=		+		=	
NMHC		x		=		+		=	
*NOx + NMHC	2.48	X	200	=	496	+	2,000	=	0.25
**SO _x	0.77	X	200	=	154	+	2,000	=	0.08
***PM	0.12	X	200	=	24	+	2,000	=	0.012
CO									
NOx									
NMHC									
*NOx + NMHC			See attac	hed	Emission Ca	alcul	ations		
**SOx									
***PM									

^{**} 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 & PM2.5.

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.

Conrad S. Valencia	Conrad 5. Valencia	Valencia Date: 2022.03.14 08:47:14 -66'00'	Acting Assistant Manager of Engineering	3 /	14 /20 22
Print Name	Sign	Name	Title	Date	

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

III CHAILIS I	er merschoi	rci iloui	(S) mp m.	, ioi Eile	IIICS WILLIA GES	braccinette or -	TO EMECIS I OF CHIE	444
Tier (CFR Section)	Year Of Manufacture	CO (g/hp-hr)	NOx ¹ (g/hp-hr)	NMHC ¹ (g/hp-hr)	NOx + NMHC ¹ (g/hp-hr)	SOx ² (g/hp-hr)	Particulate Matter (PM) (g/hp-hr)	Notes
1 (60.4205)	Pre 2007 ³	6.0			7.8	0.93*	0.75	*Use AP-42 Section 3.3 SOx factors if <600Hp and Section 3.4 if >600Hp, as shown on this table, or manufacturer's factors, Manufacturer's factors shall be used when larger than AP-42 factors.
2 (60,4202) - (89,112)	2007	6.0			5.6	0.93*	0.6	
4 (60,4202)	2008+	6.0			5.6	0.93*	0.3	
1 (60 (205)	Pre 2007 ³	40			71			
					5.6	0.93*	0.3	
or many figures and the contract of	1 94 He HATE	THE RESERVE		90 4 . 4 . 5	granten terrain andri			erigatio eter terilidade <u>d'</u>
				_				
4 (50.4202)	2 1 4 M 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Richard Andread		ALTERNATION STREET	200	· · · · · · · · · · · · · · · · · · ·		restriction and are reported that the control of the second
1 (60.4205)			6.9	1.12**				
2 (60.4202) - (89.112)								** Use AP-42 Section 3.3 factors for
3 (60,4202) - (89,112)	2008+	3.7	<u> </u>		3.5	0.93*	. 0.3	CO, NMHC, and PM as shown on this table, or manufacturer's factors.
1 (60.4205)	Pre 2007 ³	3.03**	6.9	1.12**		0.93*	1,0**	Manufacturer's factors shall be used
3 (60.4202) - (89.112)	2007+	3.7			3,0	0.93*	0.22	when larger than AP-42 factors.
1 (60.4205)	Pre 2007 ³	8.5	6.9	1.0		0.93*for < 600Hp	0.4	
3 (60.4202) - (89.112)	2007+	2.6	***		3.0	or 3.67* for > 600Hp	0.15	a seria de la compañía de estada de esta
1 (60.4205)		8.5	69	1.0	and the state of t	Page 1 (1982 - 1982 Page 1 2 2 2 1982 Page 1 1	0.4	
	2007***	2.6			4.8	3.67	0.15	
> 560 kW *** 2007 – 2010 Model Year Engines > 3,000 Hp shall meet the Pre 2007 standards and beginning with the 2011 model year, Engines > 3,000 Hp shall meet the 2007 standards								
	Tier (CFR Section) 1 (60.4205) 2 (60.4202) - (89.112) 4 (60.4202) 1 (60.4202) 4 (60.4202) 1 (60.4205) 2 (60.4202) - (89.112) 4 (60.4205) 2 (60.4202) - (89.112) 4 (60.4205) 1 (60.4205) 1 (60.4205) 3 (60.4202) - (89.112) 1 (60.4205) 3 (60.4202) - (89.112) 1 (60.4205)	Tier (CFR Section) Year Of Manufacture 1 (60.4205) Pre 2007 ³ 2 (60.4202) - (89.112) 2 (60.4202) 4 (60.4203) 2 (60.4202) 2 (60.4202) 4 (60.4203) 2 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 4 (60.4203) 2 (60.4202) 2 (60.4202) 3 (60.4202) 1 (60.4205) Pre 2007 ² 2 (60.4202) 2 (60.4202) 3 (60.4202) 3 (60.4202) 1 (60.4205) Pre 2007 ³ 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 1 (60.4205) Pre 2007 ³ 3 (60.4202) 3 (60.4202) 1 (60.4205) Pre 2007 ³ 3 (60.4202) 3 (60.4202) 4 (89.112) 2 (907 + 1 (60.4205) Pre 2007 ³ 3 (60.4202) - (89.112) 2 (907 + 1 (60.4205) Pre 2007 ³ 3 (60.4202) - (89.112)	Tier (CFR Section) Year Of Manufacture 1 (60.4205) Pre 2007 ³ 6.0 2 (60.4202) - (89.112) 2 (60.4202) 4 (60.4202) 2 (00.4202) 2 (00.4202) 4 (60.4203) 4 (60.4203) 2 (60.4202) 2 (008 + 4.9 4 (60.4202) 2 (008 + 4.9 1 (60.4205) Pre 2007 ³ 4.1 2 (60.4202) - (89.112) 2 (007 4.1 4 (60.4205) Pre 2007 ³ 4.1 1 (60.4205) Pre 2007 ³ 3 (60.4202) - (89.112) 2 (008 + 4.1 1 (60.4205) Pre 2007 ³ 3 (60.4202) - (89.112) 2 (007 3 (00.4202) - (89.112) 2 (007 + 3.7 1 (60.4205) Pre 2007 ³ 3 (60.4202) - (89.112) 2 (007 + 2.6 1 (60.4205) Pre 2007 ³ 8.5 3 (60.4202) - (89.112) 2 (007 + 2.6 1 (60.4205) Pre 2007 ³ 8.5 3 (60.4202) - (89.112) 2 (007 + 2.6	Tier (CFR Section) Year Of Manufacture 1 (60.4205) Pre 2007 ³ 6.0 2 (60.4202) - (89.112) 4 (60.4205) 1 (60.4205) Pre 2007 ³ 4.9 2 (60.4202) - (2007 4.9 4 (60.4202) 2 008 + 4.9 1 (60.4205) Pre 2007 ³ 4.9 2 (60.4202) - (2007 4.9 4 (60.4202) 2 008 + 4.9 1 (60.4205) Pre 2007 ³ 4.1 2 (60.4202) - (2007 4.1 4 (60.4205) Pre 2007 ³ 4.1 1 (60.4205) Pre 2007 ³ 3 .03** 6.9 2 (60.4202) - (89.112) 2 007 3 .7 3 (60.4202) - (89.112) 2 008 + 3.7 1 (60.4205) Pre 2007 ³ 3 .03** 6.9 3 (60.4202) - (89.112) 2 007 + 3.7 1 (60.4205) Pre 2007 ³ 8.5 6.9 3 (60.4202) - (89.112) 2 007 + 2.6 1 (60.4205) Pre 2007 ³ 8.5 6.9 3 (60.4202) - (89.112) 2 007 + 2.6 1 (60.4205) Pre 2007 ³ 8.5 6.9 3 (60.4202) - (89.112) 2 007 + 2.6	Tier (CFR Section) Year Of Manufacture 1 (60.4205) Pre 2007 ³ 6.0 2 (60.4202) - (89.112) 2 (60.4202) 4 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4203) Pre 2007 ³ 4.9 1 (60.4205) Pre 2007 ³ 4.1 2 (60.4202) 4 (60.4202) 2 (60.4202) 2 (60.4202) 2 (60.4202) 3 (60.4202) 1 (60.4205) Pre 2007 ³ 4.1 2 (60.4202) 4 (60.4202) 2 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 4 (60.4203) Pre 2007 ³ 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 3 (60.4202) 4 (60.4203) Pre 2007 ³ 3 (60.4202) 3 (60.4202) 4 (60.4203) Pre 2007 ³ 3 (60.4202) 3 (60.4202) 4 (60.4203) Pre 2007 ³ 4 (60.4203) 4 (60.4203)	Tier (CFR Section) Year Of Manufacture (g/hp-hr) (g/hp-hr) (g/hp-hr) (g/hp-hr) (g/hp-hr) (g/hp-hr) (g/hp-hr) (g/hp-hr) (1 (60.4205) Pre 2007 ³ 2 (60.4202) - (89.112) 2 007 4 (60.4202) 2 008 + 6.0 1 (60.4205) Pre 2007 ² 4 (60.4202) 2 008 + 4.9 1 (60.4205) Pre 2007 ³ 4 (60.4202) 2 008 + 4.9 1 (60.4205) Pre 2007 ³ 4 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	Tier (CFR Section) Year Of Manufacture (g/hp-hr) (g/hp-hr) (g/hp-hr) NOx+NMHC¹ (g/hp-hr) (g/hp-hr) (g/hp-hr) 1 (60.4205) Pre 2007³ 6.0 7.8 0.93* 2 (60.4202) - (89.112) 2007 4.0 1 (60.4205) Pre 2007³ 4.9 2 (60.4202) 2008 + 6.0 5.6 0.93* 1 (60.4205) Pre 2007³ 4.9 1 (60.4205) Pre 2007³ 4.9 5.6 0.93* 1 (60.4205) Pre 2007³ 4.1 2007 4.1 5.6 0.93* 2 (60.4202) - (89.112) 2007 4.1 5.6 0.93* 1 (60.4205) Pre 2007³ 3.03** 6.9 1.12** 1.2** 0.93* 1 (60.4205) Pre 2007³ 3.03** 6.9 1.12** 0.93* 3 (60.4202) - (89.112) 2007 3.7 3.0 0.93* 1 (60.4205) Pre 2007³ 3.03** 6.9 1.12** 0.93* 3.60.4202) - (89.112) 2007 + 3.7 3.0 0.93* 1 (60.4205) Pre 2007³ 3.03** 6.9 1.12** 0.93* 3.60.4202) - (89.112) 2007 + 3.7 3.0 0.93* 3 (60.4202) - (89.112) 2007 + 2.6 3.0 3.67* for or > 600Hp 1 (60.4205) Pre 2007³ 8.5 6.9 1.0 4.8 3.67 **** 2007 - 2010 Model Year Engines > 3,000 Hp shall meet the Pre 2007 standards and beginning year. Engines > 3,000 Hp shall meet the Pre 2007 standards and beginning year. Engines > 3,000 Hp shall meet the Pre 2007 standards beginning year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp shall meet the Pre 2007 standards seed year. Engines > 3,000 Hp sha	Tier (CFR Section) Year Of Manufacture (g/hp-hr) (g/hp-hr)

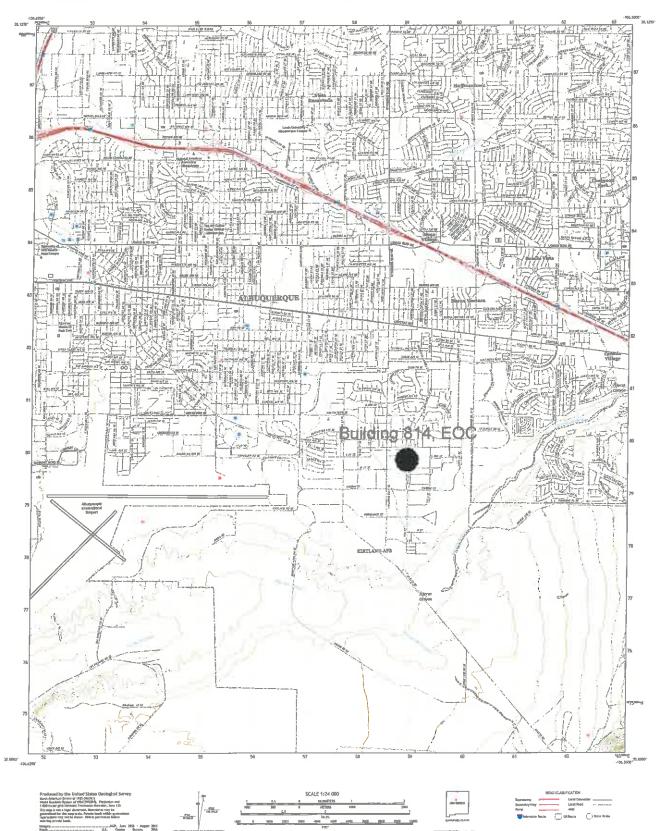
¹ When an emission factor is given for combined NOx + NMHC, individual emission factors for NOx and NMHC must be obtained from the manufacturer.

Version 02/14

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

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

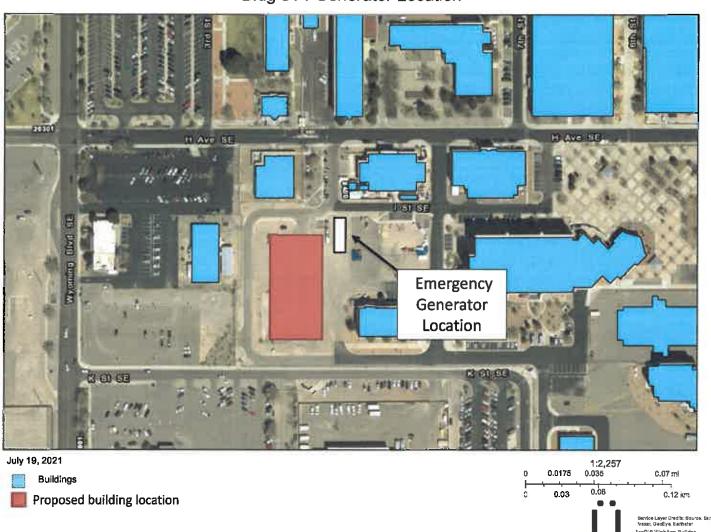
3.b. Plot Pans identifying the location of the new emergency generator

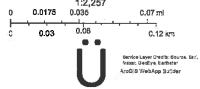


SS Malarai didd (SSS) - Poligare C

ALBUQUERQUE EAST, NM 2020

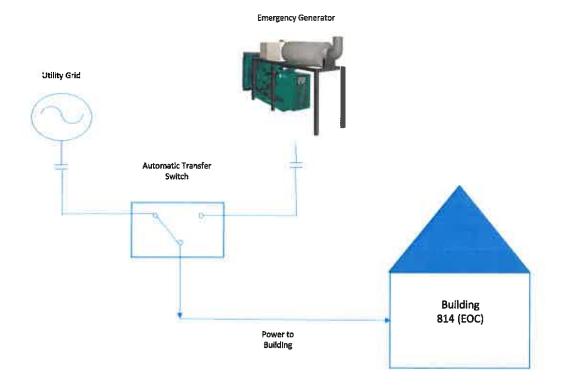
Bldg 814 Generator Location





3.c. Process flow diagram

Building 814 (EOC) Process Flow Diagram



3.d. Emission calculations and supporting information used to calculate emissions

Emissions Calculations Cummins QST30-G17

Syste	m Information	
Charlet 1	- Virginit	Line
	1112.00	kW
Engine Specifications	1490.00	hp
Engine specificacións	10.43	MMBtu/hr
	70.70	gal/hr
Uncontrolled Runtime	8,76C	hrs
Controlled Runtime	500	hrs
Mass Conversion -	453.6	g/lb
Masa Conversion	2.205	lb/kg
BSFC	7,000	Btu/hp-br
Concentration	15.00	ppm(wt)
CONCENTRATION	0.0015%	-
Density	7.10	ib/ga!
MW S02	54.06	ib SO2 / lb-mol
MWS	32.06	lbS/lb-mol

Note: Calculated maximum engine output, not electrical output from the generator

			ollutant Emission			
Poliutant Emission		on Factors	Factors Uncontrolled Emissions		Controlled Emissions	
PONUEIN	EF	Units	lb/hr	tpy	lb/hr	tpy
NOX*	6.70E-C1	g/kW-hr	1.54	7.19	1.64	C.41
CO*	3.50E+00	g/kW-hr	8,58	37.58	8.58	2.15
PM*	3.00E-02	g/kW-hr	0.07	შ.32	0.07	0.02
502**	2.13E-04	lb/gal	0.015	0.07	0.015	0.004
HC*	1.90E-C1	g/kW-hr	0.47	2.04	0.47	0.12

* Emissions factors are	based EPA Tier 4 sta	inderds as that is the mo	st conservative es	timate. A sample	calculation is provided below	for NOx:	
NOx (lb/hr)=	0.67 g	1112 kW	1 fb		1.64 lb/hr		
:vox (m/m)=	kW-hr		453.6 g		= 1.04 lD/fil		
NOx (tpv)=	1.64 ib	8760 hr	ton	. =	7.19 tov		
ποπ (φ)/-	hr	yr	2000 lb	-	7.15 tpy		
** SO2 emissions are ba	sed on 15 ppm wei	ght% of sulfur. A sample	calculation is prov	ided below for S	02:		
50 , (lb/hr)=	15 ppm \$	1 wt%5	70.7 gc/	7.1 %	64.06 to SO2/lb-mol	-	0.015 lp/hr
20 5 (17411)-		2 man 0000001	hr	na'	32 OF h 5 /lb-mo!		O'OTO ID\U.

SO 2 (lb/hr)=	15 ppm 5	1 3/0% 3	70.7 gc)	7.1/0	64.05 to 502/lb-mol	_
20 2 (12) 11.7-		1000000 ppm S	hr	gai	32.06 b S /lb-mo!	
50 ₂ (tpy)=	0.02 lb	8760 hr	ton	2.	0.07 4	
30 2 LPY/-	hr	75	2000 fb	7.5	0.07 tpy	



Tier4 certified diesel generator set QST30 series engine

900 - 1000 kW 60 Hz



Description

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

Features

Cummins heavy-duty engine - Rugged 4cycle, industrial diesel 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.

Cummins aftertreatment system - Fully integrated power generation systems that are certified to EPA Tier 4 standards. They provide optimum performance, reliability and versatility for stationary Standby, Prime Power and Continuous duty applications.

Permanent Magnet Generator (PMG) - Offers enhanced motor starting and fault clearing short-circuit capability.

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

Cooling system - Standard integral set-mounted radiator system, designed and tested for rated ambient temperatures, simplifies facility design requirements for rejected heat.

NFPA - The genset 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.

Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G3
Voltage regulation, no load to full load	+/- 0.5%
Random voltage variation	+/- 0.5%
Frequency regulation	Isochronous
Random frequency variation	+/- 0.25%
Radio frequency emissions compliance	IEC 61000-4-2 : Level 4 Electrostatic discharge IEC 61000-4-3 : Level 3 Radiated susceptibility

Engine specifications

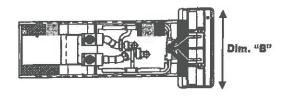
Bore	140 mm (5.51 in)
Stroke	165.0 mm (6.5 in)
Displacement	30.5 litres (1860 in³)
Configuration	Cast iron, V, 12 cylinder
Battery capacity	1800 amps minimum at ambient temperature of -18 °C to 0 °C (0 °F to 32 °F)
Battery charging alternator	35 amps
Starting voltage	24 volt, negative ground
Fuel system	Direct injection: number 2 diesel fuel, fuel filter, automatic electric fuel shutoff
Fuel filter	Triple element, 10 micron filtration, spin-on fuel filters with water separator
Air cleaner type	Dry replaceable element
Lube oil filter type(s)	Four spin-on, combination full flow filter and bypass filters
Standard cooling system	High ambient radiator

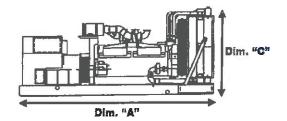
Aftertreatment specifications

Model	CA451
Emissions certification	Tier4F certified
Duct diameter	1143 mm (45 in)
Duct quantity	1
Components included	Insulated aftertreatment ducts, saddle supports for aftertreatment, control panel, DEF tank, heater with ILB, harness from control panel to engine and AFT, lifting tool. Assembly required at site.

Alternator specifications

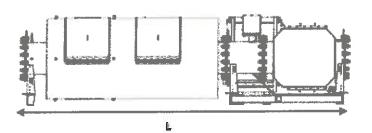
Design	Brushless, 4 pole, drip proof, revolving field				
Stator	2/3 pitch				
Rotor	Single bearing, flexible disc				
Insulation system	Class H on low and medium voltage, Class F on high voltage				
Standard temperature rise	150 °C Standby at 40 °C ambient				
Exciter type	Permanent Magnet Generator (PMG)				
Phase rotation	A (U), B (V), C (W)				
Alternator cooling	Direct drive centrifugal blower fan				
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)	< 3%				

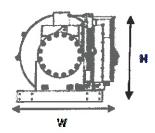




Generator set weights and dimensions
* Weights represent a set with standard features. See outline drawings for weights of other configurations.

Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Set weight* dry kg (lbs)	Set weight* wet kg (lbs)
DQFAH	4239 (167)	2000 (79)	2353 (93)	7631 (16824)	7929 (17480)





Aftertreatment weights and dimensions
* Due to multiple configurations of the CA451 model, maximum weight of the model is shown.
Note: Dimension and weights are subject to change. See submittal data for exact details.

Aftertreatment model number*	Genset model	L (Length) mm (in.)	W (Width) mm (in.)	H (Height) mm (in.)	Weight of aftertreatment system (lbs)
CA451	DQFAH	4651 (183)	1480 (58)	1260 (50)	4367

Codes and standards

Codes or standards compliance may not be available with all model configurations - consult factory for availability.

Codco or otaliadido com	pliantee may not be available with an	The die to thing and the time	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(1) ·	All low and medium voltage models are CSA certified to product class 4215-01.	ISO8528	The generator set has been rated in accordance with ISO8528.
U.S. EPA	Engine certified to US EPA Nonroad 40CFR1039 and Stationary (Emergency and Non-Emergency) US EPA NSPS, 60CFR Subpart IIII Tier4 Emissions Standards.	ISO 9001	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.
International Building Code	The genset package is certified for seismic application in accordance with the following International Building Code: IBC2012.	o us inbertek	The Aftertreatment System bears the ETL ListedMark as proof of conformity to NFPA 79, UL 61010C-1, and CSA 22.2 No. 61010-1-12.
COTING FIS ES COLUMN	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	(UL)	The generator set is available listed to UL 2200 for all 60 Hz low voltage models, Stationary Engine Generator Assemblies. The PowerCommand control is Listed to UL 508 - Category NITW7 for U.S. and Canadian usage. Circuit breaker assemblies are UL 489 Listed for 100% continuous operation and also UL 869A Listed Service Equipment.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

Our energy working for you."



©2018 Cummins Inc. All rights reserved. Cummins is a registered trademark of Cummins Inc. PowerCommand, AmpSentry, InPower and "Our energy working for you." are trademarks of Cummins Inc. Other company, product, or service names may be trademarks or service marks of others. Specifications are subject to change without notice.

S-1671.PDF (01/18)

Generator Set Data Sheet



Model: DQFAH

Frequency: 60 Hz

Fuel Type: Ultra Low Sulphur Diesel (15 ppm sulphur)

kW Rating: 1000 Standby

Emissions level: EPA Stationary Non-Emergency Tier 4

Exhaust emission data sheet Tier 4F:	EDS-1156	
Exhaust emission compliance sheet Tier4F	EPA-1195	
Sound performance data sheet:	MSP-1119	
Cooling performance data sheet:	MCP-217	
Prototype test summary data sheet:	PTS-304	
Standard set-mounted radiator cooling outline:	A034N275	
After-treatment outline drawing Tier 4F	A041V017	

Fuel Consumption	Standby				
i dei Consumption	kW (kVA)				
Ratings	1000 (1250)				
Load	1/4	1/2	3/4	Full	
US gph	21.2	36.6	53.3	70.7	
L/hr	80.4	138.6	201.9	267.6	

DEF Consumption	Standby			
	kW (kVA)			
Ratings	1000 (1250)			
Load	1/4 1/2 3/4 Fuil			
US gph	0.94	1.41	2.17	3.03
L/hr	3.55	5.34	8.21	11.47

Engine	Standby rating
Engine manufacturer	Cummins Inc.
Engine model	QST30-G17
Configuration	Cast iron, V 12 cylinder
Aspiration	Turbocharged and low temperature after-cooled
Gross engine power output, kWm (bhp)	1112 (1490)
BMEP at set rated load, kPa (psi)	2427 (351)
Bore, mm (in.)	140 (5.51)
Stroke, mm (in.)	165 (6.5)
Rated speed, rpm	1800
Piston speed, m/s (ft/min)	9.91 (1950)
Compression ratio	14.7:1



Lube oil capacity, L (qt)	132 (140)
Overspeed limit, rpm	2070
Regenerative power, kW	82

Fuel Flow

Maximum supply fuel flow, L/hr (US gph)	570 (150)
Maximum return fuel flow, L/hr (US gph)	550 (145)
Maximum fuel inlet restriction with clean filter, kPa (in Hg)	13.5 (4.0)
Maximum fuel inlet temperature, ℃ (°F)	71 (160)
Maximum fuel inlet restriction, kPa (in Hg)	68 (20)

Air

Combustion air, m³/min (scfm)	87 (3067)
Maximum air cleaner restriction with clean filter, kPa (in H₂O)	3.7 (15)
Alternator cooling air, m³/min (cfm)	204 (7300)

Exhaust

Exhaust flow at rated load, m³/min (cfm)	212 (7469)
Exhaust temperature, °C (°F)	465 (869)
Maximum back pressure, kPa (in H₂O)	6.8 (27)

Standard Set-Mounted Radiator Cooling

Ambient design at 0.5 in H₂O, °C (°F)	50 (122)
Fan load, kW _m (HP)	33.1 (44.4)
Coolant capacity (with radiator), L (US gal)	167 (44)
Cooling system air flow, m³/min (scfm)	1097.5 (38753)
Total heat rejection, MJ/min (Btu/min)	48.9 (46455)
Maximum cooling air flow static restriction, kPa (in H2O)	0.12 (0.5)
Maximum fuel return line restriction kPa (in Hg)	67.5 (20)

Derating Factors²

Sta	ndl	w	

Engine power available up to 701 m (2300 ft) at ambient temperatures up to 40 $^{\circ}$ C (104 $^{\circ}$ F). Above these elevations, derate at 3.5% per 305 m (1000 ft) and 7% per 10 $^{\circ}$ C (18 $^{\circ}$ F).

Ratings Definitions

Emergency Standby Power (ESP):

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.



Aftertreatment System	T4F 6.2 (25)		
Pressure drop across after-treatment, kPa (in H ₂ O)			
Available back pressure for exhaust system piping, kPa (in H ₂ O)	0.5 (2)		
Exhaust heater rating (kW)	250		
Exhaust heater input requirements (Amps at 480 V)	300		
DEF tank capacity (usable) L (gal)	765 (202)		
Heat radiated from aftertreatment, Btu/min (MJ/min)	1820 (1.92)		

DEF Flow

Maximum supply flow, L/hr (US gph)	98 (26)
Maximum return flow, L/hr (US gph)	87 (23)
Maximum static head (from pump to injector), m (ft)	6.4 (21)

Alternator Data

Voltage	Connection ¹	Temp rise degrees C	Duty ²	Single phase factor ³	Max surge kVA ⁴	Surge kW	Alternator data sheet	Feature code
120/208-139/240	12-lead	125/105	S/P		4234	1019	ADS-312	B252
240/416-277/480	12-lead	125/105	S/P		4234	1019	ADS-312	R252
277/480	Wye, 3-phase	125/105	S/P		3866	1018	ADS-311	B276
220/380-27//480	vvye, 3-pnase	125/105	5/1		4602	1018	ADS-330	B282
220/380-277/480	Wye, 3-phase	105/80	S/P		4602	1018	ADS-330	B283
210/380-277/480	Wye, 3-phase	80	S		5521	1024	ADS-331	B284
240/416-277/480	Wye	125/105	S/P		4234	1019	ADS-312	B288
347/600	3-phase	125/105	S/P		3866	1021	ADS-311	B300
347/600	3-phase	105/80	S/P		4234	1024	ADS-312	B301
347/600	3-phase	80	S		4602	1004	ADS-330	B604

Notes:

Formulas for calculating full load currents:

Three phase output	Single phase output
kW x 1000	kW x SinglePhaseFactor x 1000
Voltage x 1.73 x 0.8	Voltage

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.



¹ Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the Single Phase Factor3. All single phase ratings are at unity power factor.

Standby (S), Prime (P) and Continuous ratings (C).

Factor for the Single phase output from Three phase alternator formula listed below.

⁴ Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.



Exhaust emission data sheet DQFAH

60 Hz Diesel generator set EPA emission

Engine information:

Model:

Cummins Inc. QST30-G17

Воге:

5.51 in. (140 mm)

Туре:

4 Cycle, 50° V 12 cylinder diesel

Stroke:

6.50 in. (165 mm)

Aspiration:

Turbocharged and low temperature after-cooled

Displacement:

1860 cu. in. (30.5 liters)

Compression ratio:

14.7:1

Emission control device:

SCR & DPF

Emission level:

Stationary non-emergency,

Tier4 final (with DPF)

	<u>1/4</u>	1/2	3/4	<u>Full</u>	<u>Full</u>		
Performance data	<u>Standby</u>	Standby	Standby	Standby	<u>Prime</u>		
BHP @ 1800 RPM (60 Hz)	371	741	1112	1482	1322		
Fuel consumption (Gal/Hr)	19	36	54	72	64		
Exhaust gas flow (CFM)	2780	4500	6370	7540	6950		
Exhaust gas temperature (°F)	620	760	814	890	873		
Exhaust emission data							
HC (Total unburned hydrocarbons)	0.02	0.01	0.03	0.04	0.03		
NOx (Oxides of nitrogen as NO2)	0.72	0.40	0.35	0.42	0.39		
CO (Carbon monoxide)	1.06	0.64	0.60	0.61	0.60		
PM (Particular matter)	0.00	0.00	0.00	0.00	0.00		
SO2 (Sulfur dioxide)	0.00	0.00	0.00	0.00	0.00		
Smoke (Bosch)	0	0	0	0	0		
	All values are Grams/HP-Hour, Smoke is Boso						

Test conditions

Data is representative of steady-state engine speed (± 36 RPM) at designated genset loads. Pressures, temperatures, and emission rates were stabilized.

Fuel specification:

ASTM D975 No. 2-D diesel fuel with ULSD, 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.



2021 EPA Tier4 Certified Exhaust Emission Compliance Statement 1000DQFAH

Stationary Non-Emergency,

60 Hz Diesel generator set

Compliance Information:

The engine used in this generator set complies with Tier 4 emissions limit of U.S. EPA New Source Performance Standards for stationary non-emergency engines under the provisions of 40 CFR 60 Subpart IIII when tested per ISO8178 D2.

Engine Manufacturer:

Cummins Inc.

EPA Certificate Number:

MCEXL78.0AAA-036

Effective Date:

07/09/2020

Date Issued:

07/09/2020

EPA Engine Family (Cummins Emissions Family):

MCEXL78.0AAA

Engine Information:

Model:

QST30-G17

Bore:

5.51 in. (140 mm)

Engine Nameplate HP:

1490

Stroke:

6.50 in. (165 mm)

Type:

4 Cycle, 50°V, 12 Cylinder Diesel

Displacement:

1860 cu. in. (30.5 liters)

Aspiration:

Turbocharged & Low Temperature Aftercooled

Compression Ratio:

14.7:1

Emission Control Device:

SCR & DPF

Diesel Fuel Emissions Limits

	Grams per BHP-hr				Grams per kWm-hr			
D2 cycle exhaust emissions	<u>NOx</u>	NMHC	co	<u>PM</u>	<u>NO</u> _X	NMHC	CO	<u>PM</u>
Test Results	0.40	0.01	1.0	0.00	0.54	0.02	1.4	0.00
EPA T4F Emissions Limit	0.50	0.14	2.6	0.02	0.67	0.19	3.5	0.03

Test methods: EPA emissions recorded per 40 CFR Part 60, 89, 1039, 1065 and weighted at load points prescribed in the regulations for constant speed engines.

Diesel fuel specifications: Cetane number: 40-50. Reference: ASTM D975 No. 2-D, 7-15 ppm Sulfur.

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.



Cooling System Data DQFAH QST30-G17

Enhanced Ambient Air Temperature Radiator Cooling System

				Max cooling @ air flow static restriction, unhoused (inches water/mm water)						Housed in free alr, no air discharge restriction		
				0.0/0.0	0.25/6,4	0.5/12.7	0.75/19.1	1.0/25.4	1.5/38.1	Weather	Sound level 1	Sound level 2
	Fuel Type	Duty	Rating (kW)	Maximum allowable ambient temperature, degree C								
60 Hz	Diesel	Standby	1000	61.5	58.6	55.4	52.1	49.9	40.7	53.4	52.4	52.3
		Prime	900	60.0	57.1	54.1	51.4	48.0	39.6	53.0	52.1	52.0

Notes:

- 1. Data shown are anticipated cooling performance for typical generator set.
- 2. Cooling data is based on 1000 ft (305 m) site test location.
- 3. Generator set power output may need to be reduced at high ambient conditions. Consult generator set data sheet for derate schedules.
- Cooling performance may be reduced due to several factors including but not limited to: Incorrect installation, improper operation, fouling of the cooling system, and other site installation variables.

CERTIFICATE OF COMPLIANCE

Certificate Number E336241

Report Reference E336241-20110316

Issue Date 2020-JUNE-02

Issued to: Cummins Rocky Mountain LLC

8213 E 96th Ave

Henderson, CO 80640

This certificate confirms that representative samples of

Engine Generator Enclosures, Construction Only

Stationary engine generator enclosure for Outdoor use,

Model Series 40 and 80, followed by a two digit number that ranges from 5-95, followed by three digit number ranging

from 000-999.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 2200, Stationary Engine Generators

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information.

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



UL LLC

Any Information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutublocations/



3.e. Regulatory Requirements

The emergency diesel generator that will be installed had not been ordered at the time of this application submittal. The unit will be a new purchase and meet the requirements of 40 CFR 63 Subpart ZZZZ (MACT ZZZZ) and 40 CFR 60 Subpart IIII (NSPS IIII) specified here.

40 CFR 63 Subpart ZZZZ (MACT ZZZZ)

Per 63.6590(C)(1), the unit is a new stationary RICE located at an area source and meets the requirements of MACT ZZZZ by meeting the requirements of NSPS IIII. No further requirements apply for the unit under MACT ZZZZ.

40 CFR 60 Subpart IIII (NSPS IIII)

The new emergency generator has a displacement of 2.5 liters per cylinder, a maximum horsepower of 1,490.00, and is a Tier 4 certified engine. The unit meets the definition of emergency stationary ICE under §60.4211(f).

Per §60.4202 (a)(2), 2007 model year and later emergency stationary CI ICE, must certify emissions standards for new emergency nonroad CI engine to emission standards in 40 CFR Part §1039.101. The engine has been certified to 40 CFR Part §1039.101 as the engine is a Tier 4 certified engine.

The owner or operator is not required to submit an initial notification.

3.f. Operational and Maintenance Strategy

The emergency generator will have the capability to detect faulty operations that would result in higher than normal emissions and alert the operator at the control panel, who would simply shut the unit down and service it.

At all times, the source will be operated in a manner consistent with good practices for minimizing emissions. During the first few moments of starting the engine, there is the possibility of a slight increase of emissions until the engine has warmed up and reached a more efficient compression ratio. The operator will minimize the engine's time spent at idle during startups and shutdowns to a period needed for appropriate and safe loading and cool down of the engine.

The generator will be maintained and operated in accordance with manufacturer's specifications and the facility's standard operating procedures.

3.g. Air Dispersion Modeling Ambient Impact Analysis

Note: Per the Air Quality Program's Internal Combustion Engine Permitting Policy and the Air Dispersion Modeling Guidelines for Air Quality Permitting, "internal combustion engines permitted for emergency use do not require an air dispersion modeling analysis. Therefore, no modeling analysis is provided.