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

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

Subject: Response to City of Albuquerque Air Quality Program for Permit Application to Modify Construction Permit No. 415-M2-RV1, 1st Administrative Incomplete Determination

Dear Mr. Tavarez:

In the City of Albuquerque Environmental Health Department Air Quality Program's letter dated October 22, 2021, the Subject application was deemed incomplete. The application was for an emergency generator at Building 6920 - Radioactive and Mixed Waste Management Unit, located at Sandia National Laboratories, New Mexico, which is owned by the Department of Energy. Responses to the identified items from the deemed incomplete application have been included in the enclosure, along with the updated application package for the modification of Construction Permit No. 415-M2-RV1.

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

Sincerely,

CONRAD VALENCIA

Digitally signed by CONRAD VALENCIA
Date: 2021.11.19 10:40:25 -07'00'

Conrad S. Valencia
Acting Assistant Manager for Engineering

Enclosure

cc w/enclosure:
City of Albuquerque, aqd@cabq.gov and epomo@cabq.gov
Jane Romero Kotovsky, SNL/NM
Carolyn Holloway, SFO/ENG

cc w/o enclosure:
Paula Schuh, SNL/NM
Conrad Valencia, SFO/ENG
Doris Sandoval-Tellez, SFO/ENG
NNSA-2021-006505

Response to Air Quality Construction Permit Application to Modify #0415-M2-RV1
1st Administrative Incomplete Determination

Item 1: Submittal date

"The submittal date was not included in the top-right hand corner on the first page of the application form (pp. 29 in submittal). Please include the submittal date in the application."

Response: The application form has been updated to include the submittal date. (See Section 3.a.)

Item 2: Generator Location

"The location of the replacement engine in attachment 3.b. (pp. 34 in the submittal) does not match the UTM coordinates listed in the application form (pp. 29 in the submittal). Please update the UTM coordinates accordingly."

Response: The UTM coordinates have been updated in the application form. (See section 3.a.)

Item 3: Operational and Maintenance Strategy

"The application did not include an operational maintenance plan for the new proposed engine. Please include an operational maintenance plan detailing the steps the applicant will take to minimize emissions during routine startup and shutdown."

Response: The operational and maintenance strategy has been updated to reflect the steps SNL/NM personnel will take to minimize emissions during routine startup and shutdown. The strategy conforms to the operational and maintenance strategy requirements under 20.11.41.13.E.(5) NMAC (See section 3.f.)

Item 4: Memo containing list of neighborhood association/coalition

"The application did not include a copy of the contact information for neighborhood association and coalitions that the Program provided to the applicant. Please include the original memo the Program provided to the applicant containing neighborhood association and coalition contact information."

Response: Memo dated 9/9/21 containing the list of neighborhood associations/coalitions provided to SNL/NM and DOE/SFO personnel by the COA is now included in the attached application. (See section 2.d.)

Item 5: Notice of Intent

"The application did not include a Notice of Intent to Apply for an Air Quality Construction Permit form (NOI). The NOI was referred to in an email from Ms. Jane Romero Kotovsky to nearby neighborhood associations on August 4, 2021 in the application, but the email attachment was not included in the application (pp. 13 in the submittal)."

Response: The pages in the attached application have been updated to include the NOI attachment. (See section 2.a.)

Item 6: Emission Calculations

"The emissions calculations in the application relied on using the engine's listed 125 kW rating, resulting in inaccurate emissions listed throughout the application and weather-proof sign. It is unknown what emissions were listed in the NOI because it was not included in the application submittal. The application also includes the engine's HP rating. Please update the emissions calculations using the engine's listed 229 HP rating and include the updated emissions in the application, applicant's public notice, NOI, and weather-proof sign."

Response: The emission calculations in the attached application have been updated to be based on the engine's brake kilowatt power (bkW) of 171.1. (See section 3.d.)

Item 7: NOx+NMHC emissions

"The application form (pp. 30-31 in the submittal) implies that NOx+NMHC emissions were calculated by adding individual NOx and HC emissions together. The application did not contain a separate calculation for NOx+NMHC emissions combined (pp. 38 in the submittal). Please include another line for combined NOx+NMHC emissions in the updated emissions calculations attachment."

Response: The NOx+NMHC emissions calculation has been included in the attached application. (See section 3.d.)

Item 8: Exact Location

"The weather-proof sign and applicant's public notice did not list the exact location of the proposed source. General cross streets were listed in both the weather-proof sign and applicant's public notice. Please provide UTM coordinates reflecting the source's exact location on the weather-proof sign and in the applicant's public notice."

Response: The public notice section in the attached application has been updated to include UTM coordinates of the facility. (See section 2)

Attachment 1

Corrected application forms

(Two hard copies of the corrected forms will be sent to the City of Albuquerque, Air Quality Program via FedEx.)

EXECUTIVE SUMMARY

In accordance with 20.11.41.29 NMAC, the U.S. Department of Energy (DOE) is submitting this application to modify Construction Permit No. 415-M2-RV1 to replace an existing emergency generator (Unit 1) located at Sandia National Laboratories/New Mexico (SNL/NM) Building 6920 - Radioactive and Mixed Waste Management Unit (RMWMU).

. The replacement generator will:

- Serve the same function as the existing generator.
- Have the same output capacity (125 kW) but the engine horsepower (hp) will be increasing from 192 to 229.

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.

Please note the purchase of the engine is still in process which means the stack parameters have not been finalized. These parameters will be provided to the City once they are known.

1. PRE-PERMIT APPLICATION MEETING

Per email dated July 21, 2021, Carina G. Munoz-Dyer granted a waiver from performing a pre-permit application meeting to SNL/NM personnel and the DOE (see attached email) for this modification to replace the existing the emergency generator. The Pre-permit Application Meeting Checklist is attached to this section.

1.a. Pre-Permit Application Meeting Waiver

From: Munoz-Dyer, Carina G.
To: Avery, Penny; Pomo, Elizabeth
Cc: Holloway, Carolyn (EGDS); Romero Kotovsky, Jane Catherine; Tavarez, Isreal L.
Subject: RE: [EXTERNAL] RE: Technical Revision for 415-M2-RV1?
Date: Wednesday, July 21, 2021 8:13:23 AM
Attachments: image007.png
image008.jpg
image009.png
image010.jpg
image011.png
image012.jpg
image013.jpg

Good morning Penny,

Based on the project description provided before, a pre-application meeting is not required at this time.

Let us know if you have any questions.

Respectfully,
Carina

CARINA G. MUNOZ-DYER
environmental health supervisor | environmental health department
o 505.768.1948
cabq.gov/environmentalhealth/

The Four-Way Test of the Things We Think, Say or Do:

1. Is it the **TRUTH**?
2. Is it **FAIR** to all concerned?
3. Will it build **GOODWILL** and **BETTER FRIENDSHIPS**?
4. Will it be **BENEFICIAL** to all concerned?

From: Avery, Penny <rpavery@sandia.gov>
Sent: Tuesday, July 20, 2021 5:13 PM
To: Pomo, Elizabeth <epomo@cabq.gov>
Cc: Holloway, Carolyn (EGDS) <carolyn.holloway@nnsa.doe.gov>; Romero Kotovsky, Jane Catherine <janrome@sandia.gov>; Tavarez, Isreal L. <ITavarez@cabq.gov>; Munoz-Dyer, Carina G. <cmunoz-dyer@cabq.gov>
Subject: RE: [EXTERNAL] RE: Technical Revision for 415-M2-RV1?

External

Thank you, Elizabeth!
We'll be working with SFO to send the Public Notice out as soon as possible and get the sign posted

(Jane will probably be coming by your offices this week to pick up some PN signs).

Will we need to schedule a pre-application meeting for this modification? I think we're clear on what will be needed for the application process, but happy to meet with you virtually or in person.

On another note, we would greatly appreciate it if you could email Construction Permits 3436 and 3435 to us when they're issued. Our Facilities groups are anxiously awaiting the permits and regular mail takes a while to get to any of us even when we're not working from home.

Thanks again for your help and I'm looking forward to working with you!
Penny

From: Pomo, Elizabeth <epomo@cabq.gov>
Sent: Tuesday, July 20, 2021 2:22 PM
To: Avery, Penny <rpavery@sandia.gov>; Tavarez, Isreal L. <ITavarez@cabq.gov>; Munoz-Dyer, Carina G. <cmunoz-dyer@cabq.gov>
Cc: Holloway, Carolyn (EGDS) <carolyn.holloway@nnsa.doe.gov>; Romero Kotovsky, Jane Catherine <janrome@sandia.gov>
Subject: RE: [EXTERNAL] RE: Technical Revision for 415-M2-RV1?

Good afternoon Penny,

Attached is a list of emails of the neighborhood associations and coalitions within 0.5 miles of the KAFB fenceline. Please let me know if you have questions.

Thank you,

Elizabeth M. Pomo, MPH
environmental health scientist | environmental health department
o 505.768.2638
m 505.239.7094
cabq.gov/environmentalhealth/

From: Avery, Penny <rpavery@sandia.gov>
Sent: Wednesday, July 14, 2021 04:14 PM
To: Tavarez, Isreal L. <ITavarez@cabq.gov>; Munoz-Dyer, Carina G. <cmunoz-dyer@cabq.gov>
Cc: Holloway, Carolyn (EGDS) <carolyn.holloway@nnsa.doe.gov>; Romero Kotovsky, Jane Catherine <janrome@sandia.gov>; Pomo, Elizabeth <epomo@cabq.gov>
Subject: RE: [EXTERNAL] RE: Technical Revision for 415-M2-RV1?

External

Mr. Tavarez and Ms. Munoz-Dyer,

Thank you for the information.

Since emergency generators are exempt from dispersion modeling requirements (October 2019 City of Albuquerque Air Quality Program's Air Dispersion Modeling Guidelines for Air Quality Permitting) and we're familiar with the permitting process including timelines, fees, and public notice, I'm thinking we won't need to schedule a pre-application meeting.

On behalf of Carolyn Holloway (DOE/NNSA/SFO) I would like to request that the Air Quality Program waive the requirement for pre-application meetings for the installation of a replacement emergency generator for the RMWMF/Bldg 6920.

If this is acceptable and when you get a chance, please provide us with a current list of emails of the neighborhood associations and coalitions within 0.5 miles of the KAFB fenceline for us to notify prior to our application submittal.

Thanks!
Penny

1.b. Pre-Permit Application Meeting Checklist

City of Albuquerque

Environmental Health Department
Air Quality Program

Pre-Permit Application Meeting Checklist

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

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

Name: Building 6920 - Radioactive and Mixed Waste Management Unit – Replace Generator
Contact: Carolyn Holloway (5050) 845-5248/ Penny Avery (505) 273-1047
Company/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
- ⇒ The department waived the pre-application meeting requirement in an email from Carina G. Munoz-Dyer on July 21, 2021.

☐ Emission Factors and Control Efficiencies
Notes: N/A

☐ Air Dispersion modeling guidelines and protocol
Notes: N/A

☐ Department Policies
Notes: N/A

☐ Air quality permit fees
Notes: N/A

☐ Public notice requirements
- ☐ Replacement Part 41 Implementation
  - ☐ *20.11.41.*13 B. Applicant's public notice requirements
    - ☐ Providing public notice to neighborhood association/coalitions
      - Neighborhood association: _____
      - Coalition: _____
      Notes: N/A

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

- ☐ Posting and maintaining a weather-proof sign

  Notes: N/A

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

Notes: N/A

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

2. PUBLIC NOTICE

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

a) Notice of Intent to Construct Form
b) Public Sign Notice Guidelines
c) Public Notice Sign Photograph

2.a. Notice of Intent to Construct Form

Romero Kotovsky, Jane Catherine

From: Moore, Tami L. <tami.moore@nnsa.doe.gov>
Sent: Wednesday, November 3, 2021 5:41 PM
To: info@willsonstudio.com; mandy@theremedydayspa.com; 'brasher@aps.edu'; dreikeja@comcast.net; jamesw.andrews01@gmail.com; 'eastgatewaycoalition@gmail.com'; info@eastmountaincoalition.org; ldavis@eastmountaincoalition.org; sp-wonderwoman@comcast.net; marianjor@aol.com; spbrugge@gmail.com; elkaleyah@aol.com; richtriple777@msn.com; 'catcochrane1@gmail.com'; dayna.mares76@gmail.com; idalialt@gmail.com; lamesainternationaldistrict@gmail.com; mldarling56@yahoo.com; phnapresident@gmail.com; rbaca@bizjournals.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; info@willsonstudio.com; mansdf@comcast.net; pmeyer@sentrymgt.com; samijoster@gmail.com; donaldlove08@comcast.net; klove726@gmail.com; yalevillage@comcast.net; elderhomesteadna@gmail.com; ryangiar@gmail.com; siesta2na.pres@gmail.com; kp-shna@centurylink.net; mansdf@comcast.net
Cc: Avery, Penny; Schuh, Paula; Holloway, Carolyn (EGDS); Romero Kotovsky, Jane Catherine
Subject: [EXTERNAL] FW: Public Notice of Proposed Air Quality Construction Permit Application
Attachments: 2 - Notice of Intent 07212021.pdf; 2 - Notice of Intent 03152021.docx

SUBJECT: Amendment to Public Notice of Proposed Air Quality Construction Permit Application

Dear Neighborhood Association/Coalition Representative(s),

This is an amended version of the public notice sent to you on 8/4/2021. The coordinates of the facility have been added and the emissions recalculated based on engine capacity rather than generator output.

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

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

What do I need to know about this proposed application?

Applicant Name	United States Department of Energy (DOE)
Site or Facility Name	Building 6920 - Radioactive and Mixed Waste Management Unit
Site or Facility Address	TA3 Access Road and Borrow Site Road 359525 m E, 3870931 m N
New or Existing Source	Existing Source
Anticipated Date of Application Submittal	August 13, 2021
Summary of Proposed Source to Be Permitted	The application is to modify existing Construction Permit #415-M2-RV1. The modification is to replace an existing 125 kW emergency 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

From: NNSA.Albuquerque <NNSA.Albuquerque@nnsa.doe.gov>
Sent: Wednesday, August 4, 2021 4:51 PM
To: info@willsonstudio.com; mandy@theremedydayspa.com; 'brasher@aps.edu' <brasher@aps.edu>; jamesw.andrews01@gmail.com; 'eastgatewaycoalition@gmail.com' <eastgatewaycoalition@gmail.com>; dreikeja@comcast.net; info@eastmountaincoalition.org; ldavis@eastmountaincoalition.org; sp-wonderwoman@comcast.net; marianjor@aol.com; spbrugge@gmail.com; elkaleyah@aol.com; richtriple777@msn.com; 'catcochrane1@gmail.com' <catcochrane1@gmail.com>; dayna.mares76@gmail.com; idalialt@gmail.com; lamesainternationaldistrict@gmail.com; mldarling56@yahoo.com; phnapresident@gmail.com; rbaca@bizjournals.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; info@willsonstudio.com; mansdf@comcast.net; pmeyer@sentrymgt.com; samijoster@gmail.com; donaldlove08@comcast.net; klove726@gmail.com; yalevillage@comcast.net
Subject: [EXTERNAL] Public Notice of Proposed Air Quality Construction Permit Application

Dear Neighborhood Association/Coalition Representative(s),

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

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

What do I need to know about this proposed application?

Applicant Name	United States Department of Energy (DOE)
Site or Facility Name	Building 6920 - Radioactive and Mixed Waste Management Unit
Site or Facility Address	TA3 Access Road and Borrow Site Road
New or Existing Source	Existing Source
Anticipated Date of Application Submittal	August 13, 2021
Summary of Proposed Source to Be Permitted	The application is to modify existing Construction Permit #415-M2-RV1. The modification is to replace an existing 125 kW emergency 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 owner/operator intends to apply for an Air Quality Construction Permit from the Albuquerque – Bernalillo County Joint Air Quality Program. Currently, no application for this proposed project has been submitted 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:
Nombre y domicilio del solicitante: Department of Energy Sandia Field Office (SFO) P.O. Box 5400, Albuquerque, NM, 87185

Owner / operator's name and address:
Nombre y domicilio del propietario u operador: Sandia National Laboratories 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: August 13, 2021

Description of the source:
Descripción de la fuente: Emergency Generator

Exact location of the source or proposed source:
Ubicación exacta de la fuente o fuente propuesta: 359525 m E, 3870931 m N
Building 6920 - Radioactive and Mixed Waste Management Unit
(TA3 Access Road and Borrow Site Road)

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: Replacement of a 125 kW generator

Maximum operating schedule:
Horario máximo de operaciones: 365 days/yr, 24 hours a day, 7 days a week

Normal operating schedule:
Horario normal de operaciones: 6 am to 5 pm

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 *Contaminante de aire*	**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)*	
	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	0.38	0.09	-0.92	-0.21
NOx	1.43	0.36	-4.47	-1.14
VOC	0.08	0.02	-0.42	-0.08
SO2	0.002	0.001	-0.40	-0.10
PM10	0.08	0.02	-0.32	-0.08
PM2.5	0.08	0.02	-0.32	-0.08
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. To check the status 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

2.b. Public Sign Notice Guidelines

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.

Name: Department of Energy
Contact: Tami Moore (DOE)
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:

Ver. 11/13

2.c. Public Notice Sign Photograph

Proposed Air Quality Construction Permit
Permiso de Construcción de Calidad del Aire Propuesto

1. **Applicant's Name:**
   Nombre del solicitante: Department of Energy Sandia Field Office
   Owner or Operator's Name:
   Nombre del Propietario u Operador: Sandia National Laboratories
2. **Actual or Estimated Date the Application will be Submitted to the Department:**
   Fecha Actual o Estimada en que se Entregará la Solicitud al Departamento: August 13, 2021
3. **Exact Location of the Source or Proposed Source:** Building 6920 - Radioactive & mixed waste
   Ubicación Excata de la Fuente o Fuente Propuesta: Management Unit (TA3 Access Road & Borrow Site Road)
   UTM: 359525 East, 3870931 North
4. **Description of the Source:**
   Descripción del Fuente: Emergency Generator
   Nature of Business:
   Tipo de Negocio: Research and Development
   Process or change for which a permit is requested:
   Proceso o cambio para el cuál se solicita el permiso: Replacement of a 125 kW generator

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 *Contaminante de Aire*	Proposed Construction Permit *Permiso de Construcción Propuesto*		Net Change Emissions (for permit modification or technical revision) *Cambio Neto de Emisiones (para modificación de permiso o revisión técnica)*	
	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	0.38	0.09	-0.92	-0.21
NOX	1.43	0.36	-4.47	-1.14
SO2	0.002	0.001	-0.40	-0.10
PM10	0.08	0.02	-0.32	-0.08
PM2.5	0.08	0.02	-0.32	-0.08
HAP	N/A	N/A	N/A	N/A
VOC	0.08	0.02	-0.42	-0.08

5. **Maximum Operating Schedule:**
   Horario Máximo de Operaciones: 365 days/yr, 24 hours a day, 7 days a week
   Normal Operation Schedule:
   Horario Normal de Operaciones: 6am to 5pm
6. **Current Contact Information for Comments and Inquiries**
   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
   Email Address *(Correo Electrónico):* tami.moore@nnsa.doe.gov

Call 311 for additional information concerning this project, the Air Quality Program, or to file a complaint.
Llame al 311 para obtener información adicional sobre este proyecto, del Programa de Calidad del Aire, o para presentar una queja.
Gọi 311 để biết thêm thông tin hoặc để khiếu nại về dự án này, Chương Trình Chất Lượng Không Khí

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

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

2.d. Memo from the COA Containing Neighborhood Associations and Coalitions

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: September 9, 2021

DETERMINATION:

On September 9, 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 September 2021 and the Bernalillo County (BC) Monthly Neighborhood Association September 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 Neighborhood Associations	Patricia Wilson Mandy Warr	info@willsonstudio.com; mandy@theremedydayspa.com;
East Gateway Coalition of Associations	Michael Brasher James Andrews Julie Dreike Association Email	brasher@aps.edu; jamesw.andrews01@gmail.com; dreikeja@comcast.net; eastgatewaycoalition@gmail.com;
East Mountain District 5 Coalition	Paul Butler Lisa Davis	info@eastmountaincoalition.org; ldavis@eastmountaincoalition.org;
Elder Homestead Neighborhood Association	Sandra Perea Association Email	sp-wonderwoman@comcast.net; elderhomesteadna@gmail.com ;
Four Hills Village Association	Steve Brugge Ellen Lipman	spbrugge@gmail.com; elkaleyah@aol.com;
Juan Tabo Hills Neighborhood Association	Richard Lujan Ryan Giar	richtriple777@msn.com; ryangiar@gmail.com;
La Mesa Community Improvement Association	Dayna Mares Idalia Lechuga-Tena Association Email	dayna.mares76@gmail.com; idalialt@gmail.com; lamesainternationaldistrict@gmail.com;

Timothy M. Keller,
Mayor

Public Participation

List of Neighborhood Associations
and Neighborhood Coalitions
MEMORANDUM

Parkland Hills Neighborhood Association	Mary Darling Robert Leming	mldarling56@yahoo.com; phnapresident@gmail.com;
Siesta Hills Neighborhood Association	Rachel Baca Kathy Pierson	siesta2na.pres@gmail.com; kp-shna@centurylink.net;
South Los Altos Neighborhood Association	Debbie Conger Stephen Martos-Ortiz Association Emails	debsla@swcp.com; sdmartos91@gmail.com; notices@slananm.org; contact@slananm.org;
South San Pedro Neighborhood Association	Khadijah Bottom Zabdiel Aldaz	khadijahasili@vizionz.org; zabdiel505@gmail.com;
Southeast Heights Neighborhood Association	Pete Belletto John Pate	pmbdoc@yahoo.com; jpate@molzencorbin.com;
Trumbull Village Association	Alyce Ice Joanne Landry	alyceice@gmail.com; landry54@msn.com;
Victory Hills Neighborhood Association	Patricia Wilson Melissa Williams	info@willsonstudio.com; mansdf@comcast.net;
Willow Wood Neighborhood Association	Pamela Meyer Samantha Martinez	pmeyer@sentrymgt.com; samijoster@gmail.com;
Yale Village Neighborhood Association	Donald Love Kim Love Association Email	donaldlove08@comcast.net; klove726@gmail.com; yalevillage@comcast.net;

3. AIR PERMIT APPLICATION

Attached to this section are as follows:

a) Required Permit Application Forms:
   - Permit Application Checklist
   - Permit Application Review Fee Checklist
   - Emergency Generator Application – NSPS IIII

b) Plot Pan identifying the location of the new emergency generator
   - USGS 7.5'- Quadrangle Map
   - 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

City of Albuquerque

Environmental Health Department
Air Quality Program

Permit Application Checklist

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

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

All applicants shall:

1. ☐ Fill out and submit the *Pre-permit Application Meeting Request* form

   N/A – Approval to waive the Pre-permit Application Meeting is attached (see Section 1.a.)

   a. ☐ Attach a copy to this application

2. ☐ Attend the pre-permit application meeting

   N/A – Approval to waive the Pre-permit Application Meeting is attached (see Section 1.a.)

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

D. ☒ contain the name, address, and phone number of a person to contact regarding questions about the facility.

E. ☒ indicate the date the application was completed and submitted

F. ☒ contain the company name, which identifies this particular site.

G. ☒ contain a written description of the facility and/or modification including all operations affecting air emissions.

H. ☒ contain the maximum and standard operating schedules for the source after completion of construction or modification in terms of hours per day, days per week, and weeks per year.

I. ☒ provide sufficient information to describe the quantities and nature of any regulated air contaminant (including any amount of a hazardous air pollutant) that the source will emit during:

- Normal operation
- Maximum operation
- Abnormal emissions from malfunction, start-up and shutdown

J. ☒ include anticipated operational needs to allow for reasonable operational scenarios to avoid delays from needing additional permitting in the future.

K. ☒ contain a map, such as a 7.5-minute USGS topographic quadrangle, showing the exact location of the source; and include physical address of the proposed source.

L. ☒ contain an aerial photograph showing the proposed location of each process equipment unit involved in the proposed construction, modification, relocation, or technical revision of the source except for federal agencies or departments involved in national defense or national security as confirmed and agreed to by the department in writing.

M. ☒ contain the UTM zone and UTM coordinates.

N. ☒ include the four digit Standard Industrialized Code (SIC) and the North American Industrial Classification System (NAICS).

O. ☒ 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.

P. ☒ contain the types and **controlled** amounts of any regulated air contaminants the new source or modification will emit. Complete appropriate sections of the application; attachments can be used to supplement the application, but not replace it.

Q. ☒ contain the basis or source for each emission rate (include the manufacturer's specification sheets, AP-42 Section sheets, test data, or other data when used as the source).

R. ☒ contain all calculations used to estimate **potential emission rate** and **controlled** emissions.

S. ☒ contain the basis for the estimated control efficiencies and sufficient engineering data for verification of the control equipment operation, including if necessary, design drawings, test reports, and factors which affect the normal operation (e.g. limits to normal operation).

T. ☒ contain fuel data for each existing and/or proposed piece of fuel burning equipment.

U. ☒ contain the anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.

V. ☒ contain the stack and exhaust gas parameters for all existing and proposed emission stacks.

W. ☐ provide an ambient impact analysis using a atmospheric dispersion model approved by the US Environmental Protection Agency (EPA), and the Department to demonstrate compliance with the ambient air quality standards for the City of Albuquerque and Bernalillo County (See 20.11.01 NMAC). If you are modifying an existing source, the modeling must include the emissions of the entire source to demonstrate the impact the new or modified source(s) will have on existing plant emissions.

N/A – Air dispersion modeling impact analysis requirement is waived for emergency generators (see Section 3.g.)

X. ☒ contain a preliminary operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown.

Y. ☒ contain a process flow sheet, including a material balance, of all components of the facility that would be involved in routine operations. Indicate all emission points, including fugitive points.

Z. ☒ contain a full description, including all calculations and the basis for all control efficiencies presented, of the equipment to be used for air pollution control. This shall include a process flow sheet or, if the Department so requires, layout and assembly drawings, design plans, test reports and factors which affect the normal equipment operation, including control and/or process equipment operating limitations.

AA. ☒ contain description of the equipment or methods proposed by the applicant to be used for emission measurement.

BB. ☒ 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.

City of Albuquerque

Environmental Health Department
Air Quality Program

Permit Application Review Fee Checklist Effective January 1 - December 31, 2021

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:

Company Name	United States Department of Energy (DOE)		
Company Address	1515 Wyoming Boulevard SE		
Facility Name	Sandia National Laboratories/New Mexico Building 6920 - Radioactive and Mixed Waste Management Unit		
Facility Address	TA3 Access Road and Borrow Site Road		
Contact Person	Carolyn Holloway (SFO)/ Penny Avery (SNL/NM)		
Contact 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 #415-M2-RV1**		
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	$581.00	2801
	AQN Technical Amendment	$318.00	2802
	AQN Transfer of a Prior Authorization	$318.00	2803
X	*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	$ 1,185.00	2301
X	*Not Applicable*	*See Sections Below*	
	Stationary Source Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollutant)		
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	$ 889.00	2302
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	$1,777.00	2303
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	$3,554.00	2304
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	$5,331.00	2305
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	$7,108.00	2306
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	$8,885.00	2307

X	*Not Applicable*	*See Section Above*	

Federal Program Review Fees (In addition to the Stationary Source Application Review Fees above)			
	40 CFR 60 - "New Source Performance Standards" (NSPS)	$1,185.00	2308
	40 CFR 61 - "Emission Standards for Hazardous Air Pollutants (NESHAPs)	$1,185.00	2309
	40 CFR 63 - (NESHAPs) Promulgated Standards	$1,185.00	2310
	40 CFR 63 - (NESHAPs) Case-by-Case MACT Review	$11,847.00	2311
	20.11.61 NMAC, Prevention of Significant Deterioration (PSD) Permit	$5,924.00	2312
	20.11.60 NMAC, Non-Attainment Area Permit	$5,924.00	2313
X	*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 Emission Rate)			
X	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	$ 1,185.00	2321
	Not Applicable	*See Sections Below*	
Modification Application Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollutant)			
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	$889.00	2322
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	$1,777.00	2323
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	$3,554.00	2324
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	$5,331.00	2325
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	$7,108.00	2326
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	$8,885.00	2327
X	*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	$5,924.00	2333
	20.11.61 NMAC, Prevention of Significant Deterioration	$5,924.00	2334
X	*Not Applicable*	*Not Applicable*	
Federal Program Review Fees (This section applies only if a Federal Program Review is triggered by the proposed modification) (These fees are in addition to the Modification and Major Modification Application Review Fees above)			
X	40 CFR 60 - "New Source Performance Standards" (NSPS)	$1,185.00	2328
	40 CFR 61 - "Emission Standards for Hazardous Air Pollutants (NESHAPs)	$1,185.00	2329
	40 CFR 63 - (NESHAPs) Promulgated Standards	$1,185.00	2330
	40 CFR 63 - (NESHAPs) Case-by-Case MACT Review	$11,847.00	2331
	20.11.61 NMAC, Prevention of Significant Deterioration (PSD) Permit	$5,924.00	2332
	20.11.60 NMAC, Non-Attainment Area Permit	$5,924.00	2333

	Not Applicable	*Not Applicable*	

IV. ADMINISTRATIVE AND TECHNICAL REVISION APPLICATION REVIEW FEES:

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

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 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	Review Fee Amount
Section II Total	$ 0
Section III Total	$ 2,370
Section IV Total	$ 0
Section V Total	$ 0
Total Application Review Fee	**$2,370**

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 19 **day of** November **20** 21

Conrad Valencia
Print Name

Acting Assistant Manager for Engineering
Print Title

CONRAD VALENCIA Digitally signed by CONRAD VALENCIA Date: 2021.11.19 12:46:21 -07'00'
Signature

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.

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 Information

Date Submitted (Original): 09 / 20 / 21

1. Company Name: United States Department of Energy (DOE) Ph: (505) 845-5178 Email: william.wechsler@nnsa.doe.gov
2. Company Address: 1515 Wyoming Boulevard S.E. City: Albuquerque State: NM Zip: 87123
3. Company Mailing Address (if different): Sandia Field Office (SFO) Post Office Box 5400, Albuquerque, NM Zip: 87185
4. Company Contact: William V. Wechsler Title: Assistant Manager, Engineering Ph: (505)845-5201 Email: william.wechsler@nnsa.doe.gov
5. Facility Name: Sandia National Laboratories/New Mexico - Building 6920 - Radioactive and Mixed Waste Management Unit
Facility Hours: 6:00 am TO 5:00 pm
6. Facility Address: TA3 Access Road and Borrow Site Road City: Albuquerque State: NM Zip: 87185-5400
7. Local Business Mailing Address (if different): Sandia Field Office (SFO), Post Office Box 5400, Albuquerque, NM 87185
Email: william.wechsler@nnsa.doe.gov
8. Facility Environmental Contact: Carolyn Holloway/Penny Avery Phone: (505)845-5248/ (505) 273-1047 Title: General Engineer/AQC Program Lead
9. Email: carolyn.holloway@nnsa.doe.gov/rpavery@sandia.gov 10. Type of Business: Research and Development
11. Environmental Consultant Name and Email Address (if applicable): N/A
12. North American Industry Classification System (NAICS): 54171 13. Standard Industrial Classification (SIC): 8733
14. UTM coordinates (required): 359525 m east 3870931 m north 15. Facility Ph: (505) 273-1047 Fax:N/A
16. Billing Contact: Penny Avery Phone: (505) 273-1047 Title: SNL AQC Program Lead Fax: N/A
17. Billing Address: SNL/NM P.O. Box 5800 MS 1512 City: Albuquerque State: NM Zip: 87185-1512
18. Is this an Initial Installation; OR Modification of an Existing Unit: ___ Initial __X__ Modification 19. Current or requested operating hrs/yr: 500
20. Is engine or genset installed: _____ Yes __X__ No If yes, date installed: ____/____/____ If no, anticipated installation date: Upon receipt of permit

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

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

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

Process Equipment Unit	Manufacturer	Model Number	Serial Number	Manufacturer Date	Modification Date	Engine Size In Horsepower (Hp)	Size of Generator In kilowatts (kW)
Example Engine	Unigen	B-2500	A56732195C-222	02/2008	N/A	375	N/A
Example Generator	Gentor	A56789B234	XYZ13247586	02/2008	N/A	N/A	280 kW
Engine	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	Caterpillar	D125 GC	TBD	TBD	N/A	229	125

Section 3. Stack and Emissions Information

Stack Height Above Ground & Stack Diameter In Feet		Stack Temperature	Stack Flow Rate & Exit Direction
Example 18 feet – Height	0.42 feet – Diameter	625 °F	3,000 ft³/min – Flow Rate Exit - upward
*TBD	*TBD	843 °F	1056 ft³/min – Flow Rate Exit - upward

*Once the parameters have been finalized, Sandia SNL/NM personal will provide the information to the City.

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	TIMES	Actual Engine Hp	EQUALS	Emission In Grams Per Hour	DIVIDE	Grams Per Pound	EQUALS	Emission in Pounds Per Hour	TIMES	Potential Operating Hours Per Year	DIVIDE	Pounds Per Ton	EQUALS	Emission In Tons Per Year
EXAMPLE 2008	CO	2.6	x	375 Hp	=	975	+	453.6	=	2.15	x	8,760	+	2,000	=	9.4
	NO_x	0.3	x		=	112.5	+		=	0.25	x	8,760	+	2,000	=	1.1
	NMHC	0.14	x		=	52.5	+		=	0.12	x	8,760	+	2,000	=	0.53
	*NOx + NMHC	3.0	x		=	1,125	+		=	2.48	x	8,760	+	2,000	=	10.86
	**SO_x	0.93	x		=	348.8	+		=	0.77	x	8,760	+	2,000	=	3.37
	***PM	0.15	x		=	56.25	+		=	0.12	x	8,760	+	2,000	=	0.53
	CO	See attached Emission Calculations									x	8,760	+	2,000	=	1.65
	NO_x										x	8,760	+	2,000	=	6.28
	NMHC										x	8,760	+	2,000	=	0.33
	*NOx + NMHC										x	8,760	+	2,000	=	6.61
	**SO_x										x	8,760	+	2,000	=	0.01
	***PM										x	8,760	+	2,000	=	0.33

* 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.
** Manufacturer's SOx factor shall be used when larger than the USEPA Emission Factor.
*** Particulate Matter (PM) emissions are considered to be < 1μm (micron). Therefore, PM emissions also reflect PM_{10} & $PM_{2.5}$.

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

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

Pollutant	Emission in Pounds Per Hour	TIMES	Requested Operating Hours Per Year	EQUALS	Pounds Per Year	DIVIDE	Pounds Per Ton	EQUALS	Emission In Tons Per Year
EXAMPLE CO	2.15	x	200	=	430	+	2,000	=	0.22
NO_x		x		=		+		=	
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	See attached Emission Calculations								0.09
NO_x									0.36
NMHC									0.02
*NOx + NMHC									0.38
**SO_x									0.001
***PM									0.02

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 Valencia	CONRAD VALENCIA Digitally signed by CONRAD VALENCIA Date: 2021.11.19 12:46:56 -07'00'	Acting Assistant Manager for Engineering	11/19/2021
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 Horsepower Hour (g/hp-hr) for Engines with a displacement of < 10 Liters Per Cylinder

Horsepower / kW	Tier (CFR Section)	Year Of Manufacture	CO (g/hp-hr)	NOx[1] (g/hp-hr)	NMHC[1] (g/hp-hr)	NOx + NMHC[1] (g/hp-hr)	SOx[2] (g/hp-hr)	Particulate Matter (PM) (g/hp-hr)	Notes
< 11 Hp < 8 kW	1 (60.4205)	Pre 2007[3]	6.0			7.8	0.93*	0.75	* Use AP-42 Section 3.3 SOx factors if <600Hp and Section 3.4 if >600Hp, as shown on this table, or manufacturer's factors. Manufacturer's factors shall be used when larger than AP-42 factors.
	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	
≥ 11 Hp < 25 Hp	1 (60.4205)	Pre 2007[3]	4.9			7.1	0.93*	0.6	
	2 (60.4202) - (89.112)	2007	4.9			5.6	0.93*	0.6	
≥ 8 kW < 19 kW	4 (60.4202)	2008 +	4.9			5.6	0.93*	0.3	
≥ 25 Hp < 50 Hp	1 (60.4205)	Pre 2007[3]	4.1			7.1	0.93*	0.6	
	2 (60.4202) - (89.112)	2007	4.1			5.6	0.93*	0.45	
≥ 19 kW < 37 kW	4 (60.4202)	2008 +	4.1			5.6	0.93*	0.22	
≥ 50 Hp < 100 Hp	1 (60.4205)	Pre 2007[3]	3.03**	6.9	1.12**		0.93*	1.0**	** Use AP-42 Section 3.3 factors for CO, NMHC, and PM as shown on this table, or manufacturer's factors. Manufacturer's factors shall be used when larger than AP-42 factors.
	2 (60.4202) - (89.112)	2007	3.7			5.6	0.93*	0.3	
≥ 37 kW < 75 kW	3 (60.4202) - (89.112)	2008 +	3.7			3.5	0.93*	0.3	
≥ 100 Hp < 175 Hp	1 (60.4205)	Pre 2007[3]	3.03**	6.9	1.12**		0.93*	1.0**	
≥ 75 kW < 130 kW	3 (60.4202) - (89.112)	2007 +	3.7			3.0	0.93*	0.22	
≥ 175 Hp ≤ 750 Hp	1 (60.4205)	Pre 2007[3]	8.5	6.9	1.0		0.93* for < 600Hp or 3.67* for > 600Hp	0.4	
≥ 130 kW ≤ 560 kW	3 (60.4202) - (89.112)	2007 +	2.6			3.0		0.15	
> 750 Hp	1 (60.4205)	Pre 2007[3]	8.5	6.9	1.0			0.4	
	3 (60.4202) - (89.112)	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							

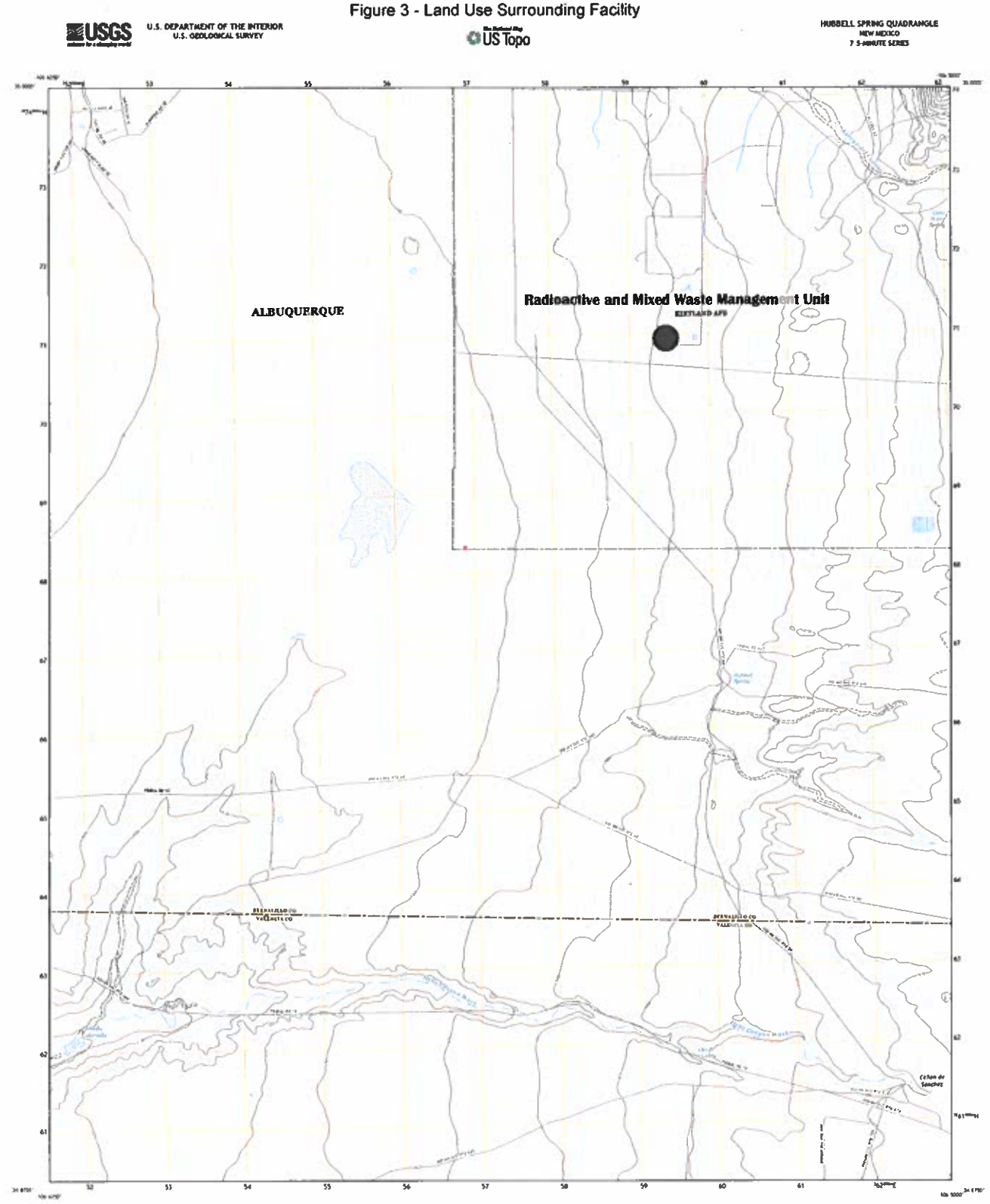
[1] When an emission factor is given for combined NOx + NMHC, individual emission factors for NOx and NMHC must be obtained from the manufacturer.

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

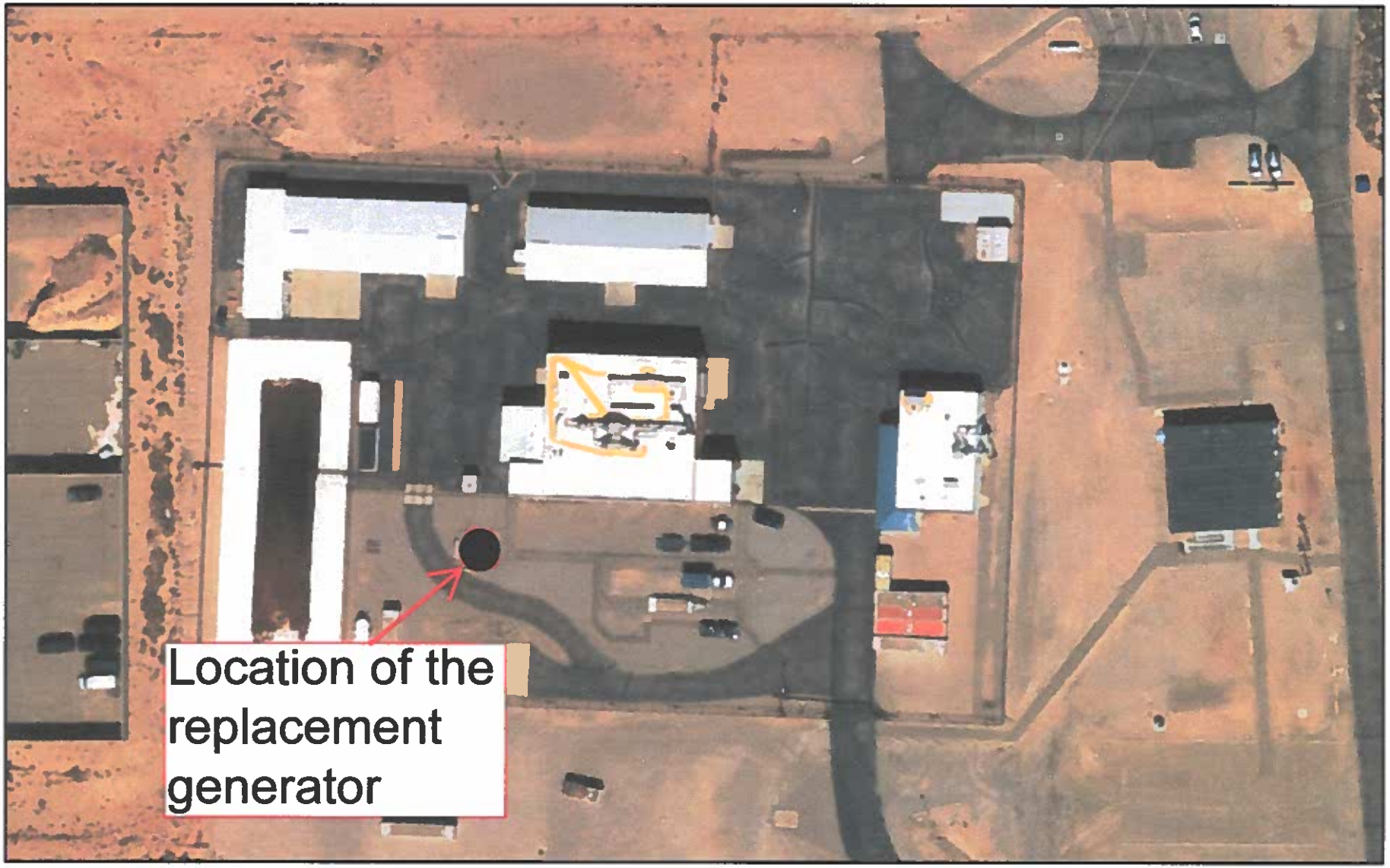
[3] Pre 2007 means each stationary Compression Ignition Internal Combustion Engine (CI ICE) whose construction, modification or reconstruction commenced after July 11, 2005. The date of construction is the date the engine is ordered by the owner or operator. Stationary CI ICE manufactured prior to April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

3.b. Plot Pan identifying the location of the replacement emergency generator

Figure 3 - Land Use Surrounding Facility



ArcGIS WebMap



July 19, 2021

HealthCheckLocations

Parking

Mask Free Zone

1:1,128

0 0.0075 0.015 0.03 mi

0 0.015 0.03 0.06 km

N

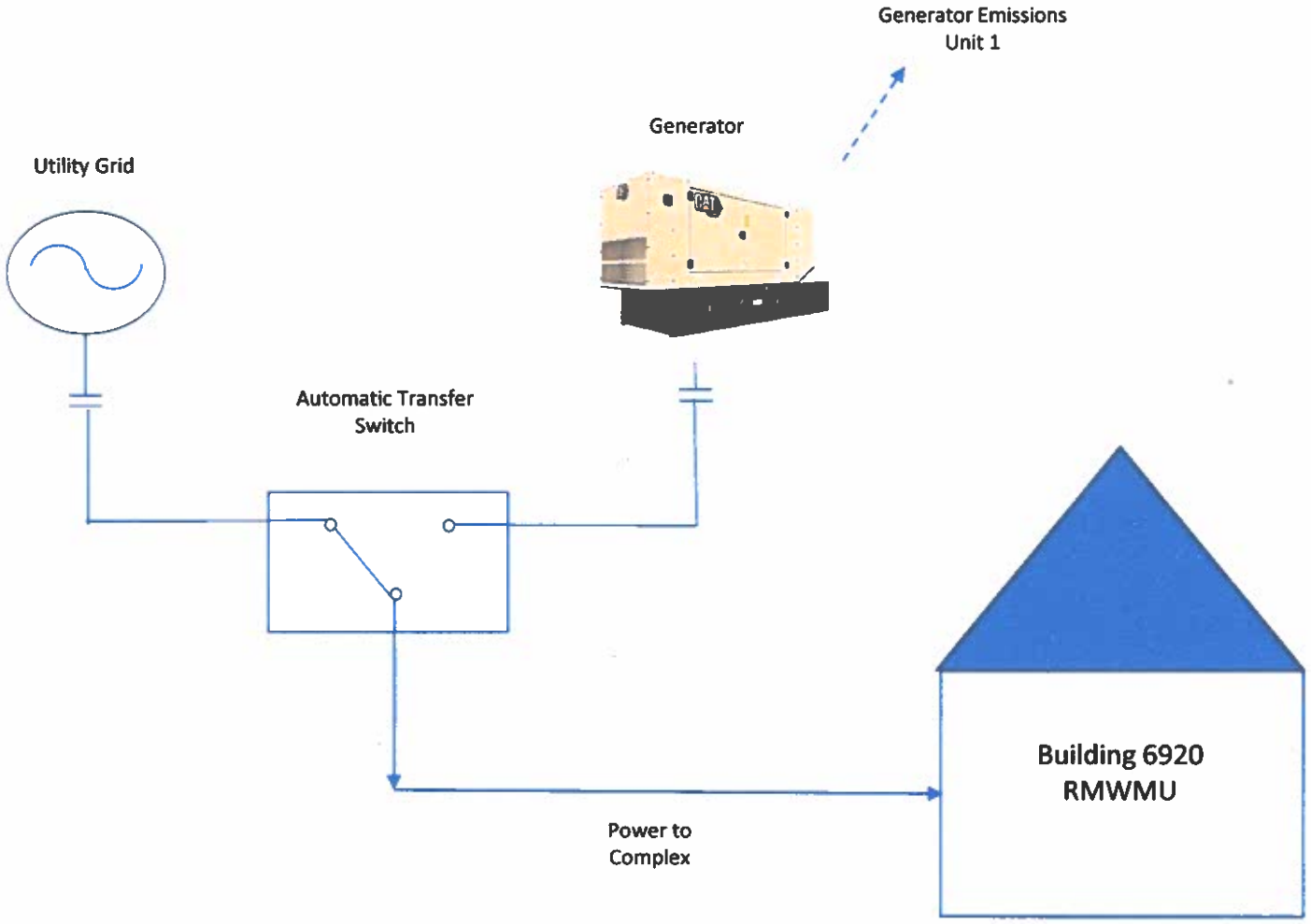
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar

ArcGIS WebApp Builder

3.c. Process flow diagram

Note: Attached is the process flow diagram for the generator engine.

Building 6920 - Radioactive and Mixed Waste Management Unit Process Flow Diagram



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

Emissions Calculations

Caterpillar D125 GC
Diesel Generator

System Information		
Quantity	*Value*	*Units*
Engine Specifications	171.1	kW
	229.00	hp
	1.60	MMBtu/hr
	10.00	gal/hr
Uncontrolled Runtime	8,760	hrs
Controlled Runtime	500	hrs
Mass Conversion	453.6	g/lb
	2.205	lb/kg
BSFC	7,000	Btu/hp-hr
Concentration	15.00	ppm(wt)
	0.0015%	---
Density	7.10	lb/gal
MW SO2	64.06	lb SO2 / lb-mol
MW S	32.06	lb S / lb-mol

Pollutant Emissions						
Pollutant	**Emission Factors**		**Uncontrolled Emissions**		**Controlled Emissions**	
	EF	**Units**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
Nox +HC	4.00E+00	g/kW-hr	1.51	6.61	1.51	0.38
NOX*	3.80E+00	g/kW-hr	1.43	6.28	1.43	0.36
CO*	1.00E+00	g/kW-hr	0.38	1.65	0.38	0.09
PM*	2.00E-01	g/kW-hr	0.08	0.33	0.08	0.02
SO2**	2.13E-04	lb/gal	0.002	0.01	0.002	0.001
HC*	2.00E-01	g/kW-hr	0.08	0.33	0.08	0.02

*** Emissions factors are based on the manufacture guarantee. A sample calculation is provided below for NOx:**
The standard listed as NOX + NMHC, the emissions factors will be based on a NOX fraction of 0.95 and a VOC fraction of 0.05 for diesel engines. This is based on a guidance document for CARB Emission Factors for CI Diesel Engines.

$$NOx\ (lb/hr) = \frac{3.8\ g}{kW\text{-}hr} \times 171.1\ kW \times \frac{1\ lb}{453.6\ g} = 1.43\ lb/hr$$

$$NOx\ (tpy) = \frac{1.43\ lb}{hr} \times \frac{8760\ hr}{yr} \times \frac{ton}{2000\ lb} = 6.28\ tpy$$

**** SO2 emissions are based on 15 ppm weight% of sulfur. A sample calculation is provided below for SO2:**

$$SO_2\ (lb/hr) = \frac{15\ ppm\ S}{} \times \frac{1\ wt\%\ S}{1000000\ ppm\ S} \times \frac{10\ gal}{hr} \times \frac{7.1\ lb}{gal} \times \frac{64.06\ lb\ SO2/lb\text{-}mol}{32.06\ lb\ S\ /lb\text{-}mol} = 0.002\ lb/hr$$

$$SO_2\ (tpy) = \frac{0.002\ lb}{hr} \times \frac{8760\ hr}{yr} \times \frac{ton}{2000\ lb} = 0.01\ tpy$$

Cat® D125 GC
Diesel Generator Sets

Standby : 60 Hz

Image shown might not reflect actual configuration.

Engine Model	Cat® C7.1 In-line 6, 4-cycle diesel
Bore x Stroke	105 mm x 135 mm (4.1in x 5.3 in)
Displacement	7.01 L (428 in³)
Compression Ratio	16.7:1
Aspiration	Turbocharged Air-to-Air-Aftercooled
Fuel Injection System	Electronic, Common Rail
Governor	Electronic

Model	Standby	Emission Strategy
D125 GC	**125 ekW**	**EPA TIER III**

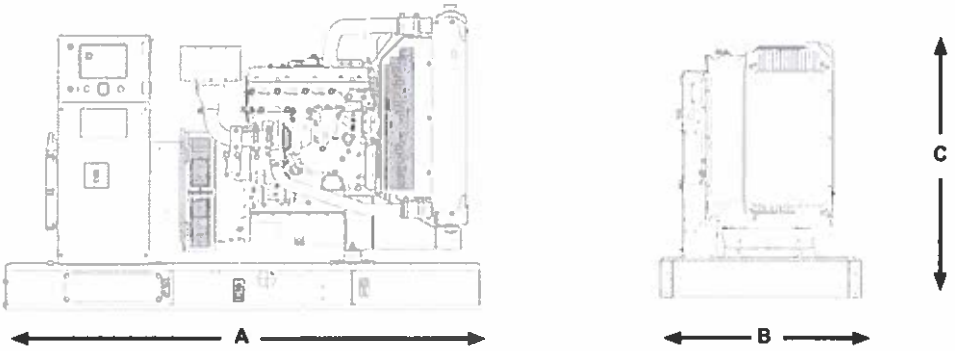
PACKAGE PERFORMANCE

Performance	Standby
Frequency	60 Hz
Genset Power Rating	156.3 kVA
Genset power rating with fan, 3p@ 0.8 & 1p@1.0 power factor	125 ekW
Performance Number	P4392A-00
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	37.8 (10.0)
75% load with fan, L/hr (gal/hr)	30.3 (8.0)
50% load with fan, L/hr (gal/hr)	21.9 (5.8)
Cooling System[1]	
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)
Engine coolant capacity, L (gal)	9.5 (2.5)
Radiator coolant capacity, L (gal)	11.5 (3.0)
Total coolant capacity, L (gal)	21.0 (5.5)
Inlet Air	
Combustion air inlet flow rate, m³/min (cfm)	14.4 (508.5)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	51 (124)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	450 (843)
Exhaust gas flow rate, m³/min (cfm)	29.9 (1056)
Exhaust system backpressure (maximum allowable) kPa (in. water)	15.0 (60.2)
Heat Rejection	
Heat rejection to exhaust (total) kW (Btu/min)	128.0 (7496)
Heat rejection to aftercooler, kW (Btu/min)	32.0 (2138)
Heat rejection to atmosphere from engine, kW (Btu/min)	28.0 (1649)

D125 GC Diesel Generator Sets
Electric Power

Emissions (Nominal)[2]	Standby		
NOx + HC, g/kW-hr	4.0		
CO, g/kW-hr	1.0		
PM, g/kW-hr	0.2		
Alternator[3]			
Voltages	480V	208V	600V
Motor starting capability @ 30% Voltage Dip, skVA	235	199	326
Current Amps	188	434	150
Frame Size	M2254L4	M2256L4	M2254L4
Excitation	SE	SE	AREP
Temperature Rise, °C	130	105	130

WEIGHTS & DIMENSIONS



Note: General configuration not to be used for installation. See general dimension drawings for detail.

Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
2634 (103.7)	1300 (51.2)	1402 (52.2)	1406 (3099)

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.
Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME: Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

DEFINITIONS AND CONDITIONS

[1] For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

[2] Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

[3] UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

LET'S DO THE WORK.™

LEHE2664-01 (01/21)

Policy: CARB Emission Factors for CI Diesel Engines – Percent HC in Relation to NMHC + NOx

Policy

When the non-methane hydrocarbon (NMHC) and nitrogen oxide (NOx) emission factor is combined, assume a breakdown of 5% and 95%, respectively.

Effective date

June 28, 2004

Definitions

The following is a list of associated definitions.

- ***CI Engine*** – Compression Ignition Engine is an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle.
- ***HC*** – Organic compound consistently entirely of hydrogen and carbon.
- ***NMHC*** – Non-Methane Hydrocarbon is the sum of all hydrocarbon air pollutants except methane.
- ***NOx*** – Nitrogen Oxides are compounds of nitric oxide (NO), nitrogen dioxide (NO_2), and other oxides of nitrogen, which are typically created during combustion processes.

Contact

Randy Frazier, x4672

Document Control

Version	Revised By	Description	Date
1.1	HL	New Policy: CARB Emission Factors – Percent HC in Relation to NMHC + NOx	06/28/04
1.2	MCL	Mapping of Policy	3/13/08

Approval

Name & Title	Signature	Date
Brian Bateman, Director of Engineering	**Signed by Brian Bateman**	2/28/2008

3.e. Regulatory Requirements

The emergency diesel generator that will be installed has not been ordered at this time. The unit will be a new purchase and will 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 replacement emergency generator will have a displacement of less than 10 liters per cylinder, a maximum horsepower of 229, and will be a Tier 3 certified engine. The unit will meet the definition of emergency stationary ICE under §60.4211(f).

Per §60.4202 (a)(2), for engines with a maximum engine power greater than or equal to 37 KW (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007. The engine meets Table 2 of Appendix I standards under 40 CFR §1039 and is a Tier 3 certified engine.

Per 60.4214(b), 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.