



**KIRTLAND AIR FORCE BASE**

20.11.41 NMAC CONSTRUCTION PERMIT APPLICATION  
EMERGENCY GENERATOR

**FIRE STATION NO. 3**

377 MSG/CEIEC Environmental  
Kirtland AFB, New Mexico 87117

January 2023

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# 1. INTRODUCTION AND EXECUTIVE SUMMARY

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## 1.0 Introduction

Attached is a Construction Permit Application (20.11.41 NMAC) for a proposed emission source located at Kirtland Air Force Base (Kirtland AFB) Fire Station No. 3 (Replace Building #28100). The proposed source is a new Cummins Emergency Generator (Unit #1446048) consisting of a 324 horsepower diesel-fired internal combustion engine associated with a 150 kW generator. The applicable requirements of the New Mexico Administrative Code (NMAC) Title 20, Chapter 11, Part 41 are addressed in this application.

Certification by the applicant's official representative that the information in this application is accurate (as required by 20.11.41.13E.(13) NMAC) is included with the Air Quality Program (AQP) Environmental Health Department (EHD) permit application forms in Attachment A. Attachment A also contains the complete pre-application meeting requirements as well as the EHD permit application checklist and permit application review fee checklist to ensure that the required elements have been included in this application. Attachment B includes all public notice and zoning requirements. Attachment C contains the site location and project vicinity for the proposed generator.

Detailed emission estimation methodologies, a summary of calculated emissions, and relevant data from the emergency engine manufacturer as well as a process flow diagram for the proposed unit can be found in Section 2.

## 1.1 Executive Summary

The proposed diesel generator will be located at Fire Station 3, KAFB, Building 28100 and will be used to provide emergency power to the building in the event that normal electrical service is disrupted. The unit has a maximum power rating of 324-hp and is equipped with a 374 gallon sub-base fuel tank which will be filled by mobile fueling equipment.

As shown in the supporting documentation in Section 2.7, the engine is equipped with a silencer routed through the generator body and the combustion exhaust is routed through a 5 inch header into a 4 inch reducer flange.

Startup, shutdown, and maintenance (SSM) emissions from the proposed unit are expected to be different from those during normal operations and total unit runtime is proposed at 500 hours per year. The generator's operational maintenance strategy is included in Section 3 and includes routine preventative maintenance to ensure proper operation. The operators will be responsible for shutting down the generator if there is a malfunction, such as a vacuum loss, low oil pressure, overheating, or overly high revolutions per minute.

In accordance with 20.11.41.13.E NMAC, this application submittal includes all of the requirements set forth by the department including:

- (1) Application Forms
- (2) Owner and Operator's Name and Mailing Address
- (3) Application Date
- (4) Sufficient Attachments: Calculations, Potential Emission Rate, Nature of All Regulated Contaminants, and Actual emissions
- (5) Operational and Maintenance Strategy
- (6) Topographical Map
- (7) Aerial Photograph of Proposed Location
- (8) Complete Description of all Sources of Regulated Air Contaminants and Process Flow Diagram
- (9) Full Description of Air Pollution Control Equipment
- (10) Description of Equipment or Methods used for Emission Measurement
- (11) Maximum and Normal Operating Time Schedules of the Source
- (12) Other Relevant Information
- (13) Applicant Signature
- (14) Accompanied by a Registration Fee
- (15) Proof of Public Notice Requirements

Equipment to be authorized at this facility after issuance of the Construction Permit is detailed below:

- One (1) diesel-fired 150 kW Cummins QSB7 series generator (Unit EG-1)

The uncontrolled emissions are based on 8,760 hours. There is a reduction of operational hours for controlled emissions and calculations are based on 500 hours. These emissions are included in the department's application forms.

## **2. DESCRIPTION OF FACILITY AND EMISSIONS INFORMATION**

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The following section summarizes the source of emissions, process description, methodology, and emission factors used to estimate air pollutant emissions from this source.

### **2.1 Description of the Facility**

The new backup generator's main function is to provide backup power to support operations in the event that primary power is interrupted. There are comparatively minor actual emissions from the infrequent and intermittent emergency backup operations inherent to the proposed source.

To comply with 40 CFR 60 Subpart IIII [New Source Performance Standards (NSPS) for Compression Ignition Stationary Reciprocating Internal Combustion Engines (RICE)] requirements, Unit EG-1 will be restricted to less than 100 hours of non-emergency operations annually and will be in compliance with EPA's Tier 3 Emission Standards. No additional add-on controls are proposed for this unit as emissions are already in compliance with applicable standards.

### **2.2 Proposed Reporting and Recordkeeping**

Kirtland AFB proposes to perform the following reporting, recordkeeping, and compliance activities:

- Kirtland AFB will maintain monthly organization-required maintenance logs to keep track of engine operating hours and to show that the emergency engine is in good working condition;
- Kirtland AFB will estimate and report annual emissions from the engine using appropriate emission factors and actual operating data;
- Kirtland AFB will report any change in ownership, any equipment substitution, and any excess emission events; and
- Kirtland AFB will notify the EHD of any compliance tests conducted on the unit, provide a written test protocol for their approval, and submit test results.

### **2.3 Regulatory Applicability**

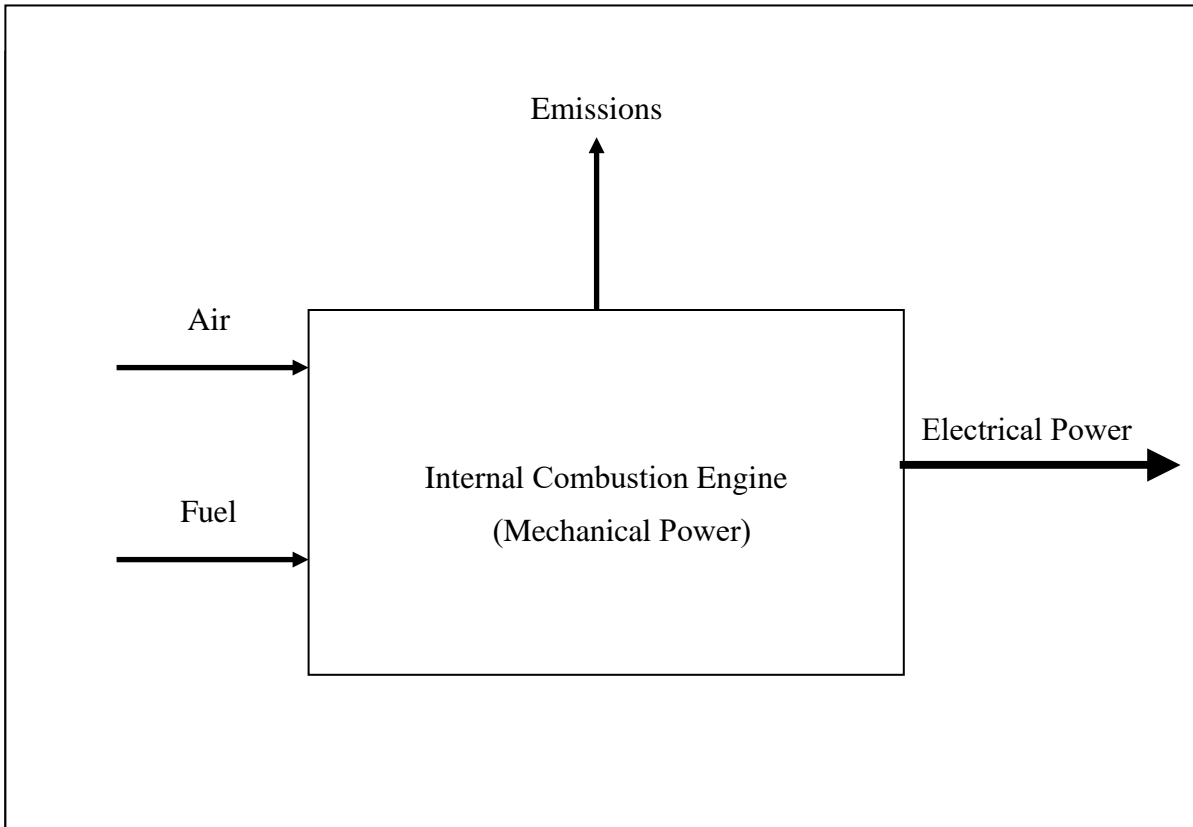
Based on the manufacturer date of the proposed unit, it is subject to New Source Performance Standards (NSPS), Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines as well as National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines.

Per 40 CFR 63.6590(c)(1), the unit is considered a new stationary RICE located at an area source and satisfies the requirements of NESHAP ZZZZ by complying with NSPS IIII. The applicant will ensure that all compliance requirements set forth in NSPS IIII including monitoring, reporting, recordkeeping and emission standards are satisfied.

## **2.4 Process Flow Sheets**

There is no specific process for this facility as the only source at this facility is the generator which provides power in the event of a PNM outage. As such, a simple process flow diagram (PFD) is included in this Construction permit application.

## Process Flow Diagram for an Emergency Generator



## **2.5 Air Pollutant Emissions and Calculation Methodology**

### **2.5.1 Diesel-Fired Engine Associated with Emergency Generator (Unit EG-1)**

Emissions from the new generator are a result of the combustion of diesel fuel. NO<sub>x</sub>, CO, VOC (NMHC), and PM combustion emissions are compliant with NSPS IIII emission standards for compression ignition internal combustion engines and are provided by the manufacturer (in compliance with EPA Tier 3 limits). SO<sub>2</sub> and HAPs are based on AP-42 Table 3.3-1 and 3.3-2 respectively.

To calculate lb/hr emissions for NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, and PM, the emission factor (g/hp-hr) was multiplied by the engine's maximum hp rating and grams were converted to pounds. For HAP emissions, the heat value of 137,000 Btu/gal (from AP-42 Appendix A) and the manufacturer-provided fuel usage of 27 gal/hr were used to calculate a maximum heat rate (MMBtu/hr) for the unit. This was then multiplied by the lb/MMBtu HAP emission factor from AP-42 Table 3.3-2 to calculate all HAP lb/hr emissions. To calculate the potential emission rate in tons per year, the lb/hr rate was multiplied by 8,760 hr/yr and converted to tons (1 ton = 2,000 lb). Uncontrolled emissions were based on 8,760 operational hours and controlled emissions on 500 hours.



**2.6 Emission Calculations**

## KAFB - Fire Station No. 3 Emergency Generator

### *Uncontrolled Emissions (8,760 hours of Operation)*

Unit	Description	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>		PM <sub>2.5</sub>		HAP	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
EG-1	Emergency Generator	2.04	8.92	1.86	8.13	0.11	0.47	0.66	2.91	0.11	0.47	0.11	0.47	0.014	0.061
<b>Total</b>		2.04	8.92	1.86	8.13	0.11	0.47	0.66	2.91	0.11	0.47	0.11	0.47	0.014	0.061

### *Controlled Emissions (500 hours of Operation)*

Unit	Description	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM <sub>10</sub>		PM <sub>2.5</sub>		HAP	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
EG-1	Emergency Generator	2.04	0.51	1.86	0.464	0.11	0.0268	0.66	0.17	0.11	0.027	0.11	0.027	0.014	0.0035
<b>Total</b>		2.04	0.51	1.86	0.464	0.11	0.0268	0.66	0.17	0.11	0.027	0.11	0.027	0.014	0.0035

## KAFB - Fire Station No. 3 Emergency Generator

Unit:	EG-1	
Generator Make:	Cummins	
Generator Model:	C150 D6D	
Engine Make:	Cummins	
Engine Model:	QSB7-G5 NR3	
Annual Hours of Operation:	8,760	hr/yr
Requested Hours of Operation:	500	hr/yr
Generator Standby Rating:	150	kW
Engine Nameplate Horsepower:	324	hp
Maximum Fuel Flow:	27	gal/hr
Diesel Heat Value (AP-42):	137,000	Btu/gal
Engine Heat Input:	3.70	MMBtu/hr
Fuel:	Diesel	

### Criteria Pollutant and VOC Emissions

Pollutant	Diesel Emission Factor (g/hp-hr)	Potential Emissions (g/hr)	Potential Emissions (lb/hr)	Uncontrolled Emissions (lb/yr)	Uncontrolled Emissions (tpy)	Controlled Emissions (lb/yr)	Controlled Emissions (tpy)	Emission Factor Source
NOx <sup>1</sup>	2.85	923.40	2.04	17832.86	8.92	1017.86	0.51	EPA Tier 3
NOx + NMHC	3.00	972.00	2.14	18771.43	9.39	1071.43	0.54	EPA Tier 3
CO	2.60	842.40	1.86	16268.57	8.13	928.57	0.46	EPA Tier 3
PM <sub>10</sub>	0.15	48.60	0.11	938.57	0.47	53.57	0.027	EPA Tier 3
PM <sub>2.5</sub>	0.15	48.60	0.11	938.57	0.47	53.57	0.027	EPA Tier 3
NMHC (VOC) <sup>1</sup>	0.15	48.60	0.11	938.57	0.47	53.57	0.027	EPA Tier 3
Pollutant	Diesel Emission Factor (lb/hp-hr)	Potential Emissions (g/hr)	Potential Emissions (lb/hr)	Uncontrolled Emissions (lb/yr)	Uncontrolled Emissions (tpy)	Controlled Emissions (lb/yr)	Controlled Emissions (tpy)	Emission Factor Source
SO <sub>2</sub> <sup>2</sup>	2.05E-03	301.32	0.66	5818.39	2.91	332.10	0.17	AP-42, Table 3.3-1 (10/96) <sup>2</sup>

Notes:

<sup>1</sup> Based on California Air Resource Board (CARB) Guidance, NOx+ NMHC was assumed to be 95% NOx and 5% NMHC.

<sup>2</sup> Taken from AP-42 Section 3.3, Table 3.3-1 (applicable for diesel engines less than 600 hp). Emission factor is for SO<sub>x</sub> - assumes that all SO<sub>x</sub> is SO<sub>2</sub>. Equal to 0.93 g/hp-hr

### HAP Emissions

Pollutant	Diesel Emission Factor (lb/MMBtu)	Potential Emissions (lb/hr)	Uncontrolled Emissions (tpy)	Controlled Emissions (tpy)	Emission Factor Source
Benzene	9.33E-04	3.45E-03	0.015	8.63E-04	AP-42 Table 3.3-2
Toluene	4.09E-04	1.51E-03	0.0066	3.78E-04	AP-42 Table 3.3-2
Xylenes	2.85E-04	1.05E-03	0.0046	2.64E-04	AP-42 Table 3.3-2
1,3-Butadiene	3.91E-05	1.45E-04	0.00063	3.62E-05	AP-42 Table 3.3-2
Formaldehyde	1.18E-03	4.36E-03	0.019	1.09E-03	AP-42 Table 3.3-2
Acetaldehyde	7.67E-04	2.84E-03	0.012	7.09E-04	AP-42 Table 3.3-2
Acrolein	9.25E-05	3.42E-04	0.0015	8.55E-05	AP-42 Table 3.3-2
Naphthalene	8.48E-05	3.14E-04	0.0014	7.84E-05	AP-42 Table 3.3-2
<b>Total</b>	<b>3.79E-03</b>	<b>0.014</b>	<b>0.061</b>	<b>0.0035</b>	-

Exhaust Parameters		
Stack Height	10.00	ft
Exit Diameter	0.33	ft
Stack Area	0.087	ft <sup>2</sup>
Exhaust Flow	1258.00	ft <sup>3</sup> /min
Exhaust Flow	20.97	ft <sup>3</sup> /s
Exit Velocity	240.26	ft/s
Temperature	872.00	°F

## **2.7 Supporting Information**

AP-42 Tables 3.3-1 and 3.3-2: Gasoline and Diesel Industrial Engines

Manufacturer Specifications for Cummins QSB7-G5 engine and Cummins C150 D6D generator

AP-42 Appendix A: Miscellaneous Data and Conversion Factors

Tier 3 Emission Standards for Stationary CI RICE

Table 3.3-1. EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES<sup>a</sup>

Pollutant	Gasoline Fuel (SCC 2-02-003-01, 2-03-003-01)		Diesel Fuel (SCC 2-02-001-02, 2-03-001-01)		EMISSION FACTOR RATING
	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	
NO <sub>x</sub>	0.011	1.63	0.031	4.41	D
CO	6.96 E-03 <sup>d</sup>	0.99 <sup>d</sup>	6.68 E-03	0.95	D
SO <sub>x</sub>	5.91 E-04	0.084	2.05 E-03	0.29	D
PM-10 <sup>b</sup>	7.21 E-04	0.10	2.20 E-03	0.31	D
CO <sub>2</sub> <sup>c</sup>	1.08	154	1.15	164	B
Aldehydes	4.85 E-04	0.07	4.63 E-04	0.07	D
TOC					
Exhaust	0.015	2.10	2.47 E-03	0.35	D
Evaporative	6.61 E-04	0.09	0.00	0.00	E
Crankcase	4.85 E-03	0.69	4.41 E-05	0.01	E
Refueling	1.08 E-03	0.15	0.00	0.00	E

<sup>a</sup> References 2,5-6,9-14. When necessary, an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr. To convert from lb/hp-hr to kg/kw-hr, multiply by 0.608. To convert from lb/MMBtu to ng/J, multiply by 430. SCC = Source Classification Code. TOC = total organic compounds.


<sup>b</sup> PM-10 = particulate matter less than or equal to 10 μm aerodynamic diameter. All particulate is assumed to be ≤ 1 μm in size.

<sup>c</sup> Assumes 99% conversion of carbon in fuel to CO<sub>2</sub> with 87 weight % carbon in diesel, 86 weight % carbon in gasoline, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and gasoline heating value of 20,300 Btu/lb.

<sup>d</sup> Instead of 0.439 lb/hp-hr (power output) and 62.7 lb/mmBtu (fuel input), the correct emissions factors values are 6.96 E-03 lb/hp-hr (power output) and 0.99 lb/mmBtu (fuel input), respectively. This is an editorial correction. March 24, 2009

Table 3.3-2. SPECIATED ORGANIC COMPOUND EMISSION FACTORS FOR UNCONTROLLED DIESEL ENGINES<sup>a</sup>

EMISSION FACTOR RATING: E

Pollutant	Emission Factor (Fuel Input) (lb/MMBtu)
Benzene <sup>b</sup>	9.33 E-04
Toluene <sup>b</sup>	4.09 E-04
Xylenes <sup>b</sup>	2.85 E-04
Propylene 	2.58 E-03
1,3-Butadiene <sup>b,c</sup>	<3.91 E-05
Formaldehyde <sup>b</sup>	1.18 E-03
Acetaldehyde <sup>b</sup>	7.67 E-04
Acrolein <sup>b</sup>	<9.25 E-05
Polycyclic aromatic hydrocarbons (PAH)	
Naphthalene <sup>b</sup>	8.48 E-05
Acenaphthylene	<5.06 E-06
Acenaphthene	<1.42 E-06
Fluorene	2.92 E-05
Phenanthrene	2.94 E-05
Anthracene	1.87 E-06
Fluoranthene	7.61 E-06
Pyrene	4.78 E-06
Benzo(a)anthracene	1.68 E-06
Chrysene	3.53 E-07
Benzo(b)fluoranthene	<9.91 E-08
Benzo(k)fluoranthene	<1.55 E-07
Benzo(a)pyrene	<1.88 E-07
Indeno(1,2,3-cd)pyrene	<3.75 E-07
Dibenz(a,h)anthracene	<5.83 E-07
Benzo(g,h,l)perylene	<4.89 E-07
TOTAL PAH	1.68 E-04

<sup>a</sup> Based on the uncontrolled levels of 2 diesel engines from References 6-7. Source Classification Codes 2-02-001-02, 2-03-001-01. To convert from lb/MMBtu to ng/J, multiply by 430.

<sup>b</sup> Hazardous air pollutant listed in the *Clean Air Act*.

<sup>c</sup> Based on data from 1 engine.

SOME USEFUL WEIGHTS AND MEASURES

Unit Of Measure	Equivalent
grain	0.002 ounces
gram	0.04 ounces
ounce	28.35 grams
kilogram	2.21 pounds
pound	0.45 kilograms
pound (troy)	12 ounces
ton (short)	2000 pounds
ton (long)	2240 pounds
ton (metric)	2200 pounds
ton (shipping)	40 feet <sup>3</sup>
centimeter	0.39 inches
inch	2.54 centimeters
foot	30.48 centimeters
meter	1.09 yards
yard	0.91 meters
mile	1.61 kilometers
centimeter <sup>2</sup>	0.16 inches <sup>2</sup>
inch <sup>2</sup>	6.45 centimeters <sup>2</sup>
foot <sup>2</sup>	0.09 meters <sup>2</sup>
meter <sup>2</sup>	1.2 yards <sup>2</sup>
yard <sup>2</sup>	0.84 meters <sup>2</sup>
mile <sup>2</sup>	2.59 kilometers <sup>2</sup>
centimeter <sup>3</sup>	0.061 inches <sup>3</sup>
inch <sup>3</sup>	16.39 centimeters <sup>3</sup>
foot <sup>3</sup>	283.17 centimeters <sup>3</sup>
foot <sup>3</sup>	1728 inches <sup>3</sup>

SOME USEFUL WEIGHTS AND MEASURES (cont.)

Unit Of Measure	Equivalent	
meter <sup>3</sup>	1.31	yeads <sup>3</sup>
yard <sup>3</sup>	0.77	meters <sup>3</sup>
cord	128	feet <sup>3</sup>
cord	4	meters <sup>3</sup>
peck	8	quarts
bushel (dry)	4	pecks
bushel	2150.4	inches <sup>3</sup>
gallon (U. S.)	231	inches <sup>3</sup>
barrel	31.5	gallons
hogshead	2	barrels
township	36	miles <sup>2</sup>
hectare	2.5	acres

MISCELLANEOUS DATA

One cubic foot of anthracite coal weighs about 53 pounds.

One cubic foot of bituminous coal weighs from 47 to 50 pounds.

One ton of coal is equivalent to two cords of wood for steam purposes.

A gallon of water (U. S. Standard) weighs 8.33 pounds and contains 231 cubic inches.

There are 9 square feet of heating surface to each square foot of grate surface.

A cubic foot of water contains 7.5 gallons and 1728 cubic inches, and weighs 62.5 lbs.

Each nominal horsepower of a boiler requires 30 to 35 pounds of water per hour.

A horsepower is equivalent to raising 33,000 pounds one foot per minute, or 550 pounds one foot per second.

To find the pressure in pounds per square inch of a column of water, multiply the height of the column in feet by 0.434.



TYPICAL PARAMETERS OF VARIOUS FUELS<sup>a</sup>

Type Of Fuel	Heating Value		Sulfur % (by weight)	Ash % (by weight)
	kcal	Btu		
<b>Solid Fuels</b>				
Bituminous Coal	7,200/kg	13,000/lb	0.6-5.4	4-20
Anthracite Coal	6,810/kg	12,300/lb	0.5-1.0	7.0-16.0
Lignite (@ 35% moisture)	3,990/kg	7,200/lb	0.7	6.2
Wood (@ 40% moisture)	2,880/kg	5,200/lb	N	1-3
Bagasse (@ 50% moisture)	2,220/kg	4,000/lb	N	1-2
Bark (@ 50% moisture)	2,492/kg	4,500/lb	N	1-3 <sup>b</sup>
Coke, Byproduct	7,380/kg	13,300/lb	0.5-1.0	0.5-5.0
<b>Liquid Fuels</b>				
Residual Oil	9.98 x 10 <sup>6</sup> /m <sup>3</sup>	150,000/gal	0.5-4.0	0.05-0.1
Distillate Oil	9.30 x 10 <sup>6</sup> /m <sup>3</sup>	140,000/gal	0.2-1.0	N
Diesel	9.12 x 10 <sup>6</sup> /m <sup>3</sup>	137,000/gal	0.4	N
Gasoline	8.62 x 10 <sup>6</sup> /m <sup>3</sup>	130,000/gal	0.03-0.04	N
Kerosene	8.32 x 10 <sup>6</sup> /m <sup>3</sup>	135,000/gal	0.02-0.05	N
Liquid Petroleum Gas	6.25 x 10 <sup>6</sup> /m <sup>3</sup>	94,000/gal	N	N
<b>Gaseous Fuels</b>				
Natural Gas	9,341/m <sup>3</sup>	1,050/SCF	N	N
Coke Oven Gas	5,249/m <sup>3</sup>	590/SCF	0.5-2.0	N
Blast Furnace Gas	890/m <sup>3</sup>	100/SCF	N	N

<sup>a</sup> N = negligible.

<sup>b</sup> Ash content may be considerably higher when sand, dirt, etc., are present.



# 2021 EPA Tier 3 Exhaust Emission Compliance Statement C150D6D Stationary Emergency 60 Hz Diesel Generator Set

**Compliance Information:**

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

Engine Manufacturer:	Cummins Inc.
EPA Certificate Number:	MCEXL0409AAD-019
Effective Date:	06/8/2020
Date Issued:	06/8/2020
EPA Engine Family (Cummins Emissions Family):	MCEXL0409AAD

**Engine Information:**

Model:	QSB7-G5 NR3	Bore:	4.21 in. (106.9 mm)
Engine Nameplate HP:	324	Stroke:	4.88 in. (124 mm)
Type:	4 Cycle, In-line, 6 Cylinder Diesel	Displacement:	408 cu. in. (7 liters)
Aspiration:	Turbocharged and Charge Air Cooled	Compression ratio:	17.2:1
Emission Control Device:		Exhaust stack diameter:	4 in. (101.6)

**Diesel Fuel Emission Limits**

**D2 Cycle Exhaust Emissions**

	Grams per BHP-hr			Grams per kWm-hr		
	<u>NO<sub>x</sub> + NMHC</u>	<u>CO</u>	<u>PM</u>	<u>NO<sub>x</sub> + NMHC</u>	<u>CO</u>	<u>PM</u>
Test Results	3.0	0.7	0.08	4.0	1.0	0.11
EPA Emissions Limit	3.0	2.6	0.15	4.0	3.5	0.20

**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, 300-500 ppm Sulphur

**Reference conditions:** Air Inlet Temperature: 25 °C (77 °F), Fuel Inlet Temperature: 40 °C (104 °F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H2O/lb) of dry air; required for NO<sub>x</sub> 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.



# Diesel generator set

QSB7 series engine  
125-200 kW @ 60 Hz  
EPA Tier 3 emissions



## Description

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

## Features

**Heavy duty engine** - Rugged 4-cycle industrial diesel delivers reliable power and fast response to load changes.

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

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

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

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

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

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

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

## Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G3
Voltage regulation, no load to full load	± 1.0%
Random voltage variation	± 1.0%
Frequency regulation	Isochronous
Random frequency variation	± 0.50%
Radio frequency emissions compliance	FCC code title 47 part 15 class A and B

## Engine specifications

Design	Turbocharged and charge air cooled
Bore	107 mm (4.21 in.)
Stroke	124 mm (4.88 in.)
Displacement	6.7 L (408 in <sup>3</sup> )
Cylinder block	Cast iron, in-line 6 cylinder
Battery capacity	2 x 850 amps per battery at ambient temperature of 0 °C (32 °F)
Battery charging alternator	100 amps
Starting voltage	2 x 12 volt in parallel, negative ground
Lube oil filter type(s)	Spin-on with relief valve
Standard cooling system	High ambient radiator
Rated speed	1800 rpm

## Alternator specifications

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

## Generator set options

### Fuel system

- Regional fuel tanks

### Engine

- Engine air cleaner – normal duty
- Shut down – low oil pressure
- Extension – oil drain
- Engine oil heater

### Alternator

- 105 °C temperature rise alternator
- PMG excitation
- Annunciator – RS485
- Battery charger – 6A, 12 V

### Control

- AC output analog meters
- Stop switch – emergency
- Auxiliary output relays (2)

### Electrical

- One circuit breaker configuration
- 100% rated LSI circuit

### Enclosure

- Aluminium enclosure Sound Level 1 or Level 2, green color

### Cooling system

- Shutdown – low coolant level
- Extension – coolant drain
- Coolant heater options:  
< -18 °C (0 °F) – extreme cold

### Warranty

- Base warranty – 2 year/1000 hours, Standby

## Control system PowerCommand 1.1



**PowerCommand control** is an integrated generator set control system providing voltage regulation, engine protection, operator interface and isochronous governing (optional). Major features include:

- Battery monitoring and testing features and smart starting control system.
- Standard PCCNet interface to devices such as remote annunciator for NFPA 110 applications.
- Control boards potted for environmental protection.
- Control suitable for operation in ambient temperatures from -40 °C to +70 °C (-40 °F to +158 °F) and altitudes to 5000 meters (13,000 feet).
- Prototype tested; UL, CSA, and CE compliant.
- InPower™ PC-based service tool available for detailed diagnostics.

### Operator/display panel

- Manual off switch
- Alpha-numeric display with pushbutton access for viewing engine and alternator data and providing setup, controls and adjustments (English or international symbols)
- LED lamps indicating generator set running, not in auto, common warning, common shutdown, manual run mode and remote start
- Suitable for operation in ambient temperatures from -40 °C to +70 °C
- Bargraph display (optional)

### AC protection

- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Field overload

### Engine protection

- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown

## 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.

- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low and weak battery voltage warning
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown

### Alternator data

- Line-to-Line and Line-to-neutral AC volts
- 3-phase AC current
- Frequency
- Total kVa

### Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature
- Engine speed

### Other data

- Generator set model data
- Start attempts, starts, running hours
- Fault history
- RS485 Modbus® interface
- Data logging and fault simulation (requires InPower service tool)

### Digital governing

- Integrated digital electronic isochronous governor
- Temperature dynamic governing

### Digital voltage regulation





- Integrated digital electronic voltage regulator
- 2-phase Line-to-Line sensing
- Configurable torque matching

### Control functions

- Time delay start and cooldown
- Cycle cranking
- PCCNet interface
- (2) Configurable inputs
- (2) Configurable outputs
- Remote emergency stop
- Automatic Transfer Switch (ATS) control
- Generator set exercise, field adjustable
- AC output analog meters (bargraph)
  - Color-coded graphical display of:
    - 3-phase AC voltage
    - 3-phase current
    - Frequency
    - kVa
- PowerCommand 2.3 control with AmpSentry protection
- Remote annunciator with (3) configurable inputs and (4) configurable outputs

## Codes and standards

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

	<p>This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.</p>		<p>The generator set is available Listed to UL 2200, Stationary Engine Generator Assemblies.</p>
	<p>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.</p>	<p><b>U.S. EPA</b></p>	<p>Engine certified to U.S. EPA SI Stationary Emission Regulation 40 CFR, Part 60.</p>
	<p>All low voltage models are CSA certified to product class 4215-01.</p>	<p><b>International Building Code</b></p>	<p>The generator set is certified to International Building Code (IBC) 2012.</p>

**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](http://power.cummins.com)

**Our energy working for you.™**





## Generator set data sheet

Model: C150D6D  
 Frequency: 60 Hz  
 Fuel type: Diesel  
 KW rating: 150 standby

Emissions level: EPA Tier 3, Stationary emergency

Exhaust emission data sheet:	EDS-3044
Exhaust emission compliance sheet:	EPA-2033
Sound performance data sheet:	MSP-4008
Cooling performance data sheet:	MCP-2048
Prototype test summary data sheet:	PTS-636

Fuel consumption	Standby			
	kW (kVA)			
Ratings	150 (188)			
Load	1/4	1/2	3/4	Full
US gph	4.7	6.9	9.2	11.7
L/hr	17.78	26.11	34.82	44.28

Engine	Standby rating
Engine manufacturer	Cummins Inc.
Engine model	QSB7-G5
Configuration	Cast iron, in-line, 6 cylinders
Aspiration	Turbocharged and charge air cooled
Gross engine power output, kWm (bhp)	242 (324)
BMEP at set rated load, kPa (psi)	1763 (255.7)
Bore, mm (in)	107 (4.21)
Stroke, mm (in)	124 (4.88)
Rated speed, rpm	1800
Piston speed, m/s (ft/min)	7.44 (1464)
Compression ratio	17.2:1
Lube oil capacity, L (qt)	17.4 (18.38)
Overspeed limit, rpm	2250

Fuel flow	
Maximum fuel flow, L/hr (US gph)	103 (27.0)
Maximum fuel inlet restriction with clean filter, mm Hg (in Hg)	127 (5.0)

## Air

	Standby rating
Combustion air, m <sup>3</sup> /min (scfm)	14.78 (522)
Maximum air cleaner restriction with clean filter, kPa (in H <sub>2</sub> O)	3.7 (15)

## Exhaust

Exhaust flow at set rated load, m <sup>3</sup> /min (cfm)	35.62 (1258)
Exhaust temperature, °C (°F)	466.67 (872)
Maximum back pressure, kPa (in H <sub>2</sub> O)	10 (40.19)
Actual exhaust back pressure with CPG sound level 2 enclosure muffler, kPa (in H <sub>2</sub> O)	9.5 (38.18)
Actual exhaust back pressure with CPG weather enclosure muffler, kPa (in H <sub>2</sub> O)	7.2 (28.93)

## Standard set-mounted radiator cooling

Ambient design, °C (°F)	50 (122)
Fan load, kW <sub>m</sub> (HP)	14.02 (18.8)
Coolant capacity (with radiator), L (US Gal)	22 (5.9)
Cooling system air flow, m <sup>3</sup> /min (scfm)	305.82 (10800)
Total heat rejection, MJ/min (Btu/min)	7.91 (7499)
Maximum cooling air flow static restriction, kPa (in H <sub>2</sub> O)	0.12 (0.5)

## Derating factors

Standby	Engine power available up to 3425 m (11237 ft.) at ambient temperatures up to 40° C (104° F) and 2298 m (7540 ft.) at 50° C (122° F). Consult your Cummins distributor for temperature and ambient requirements outside these parameters.
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## Alternator data

Standard Alternators	Single phase <sup>2</sup>	Three phase <sup>1</sup>				
		105 °C	105 °C	105 °C	105 °C	105 °C
Maximum temperature rise above 40 °C ambient	105 °C	105 °C	105 °C	105 °C	105 °C	105 °C
Feature code	BB87-2	BB93-2	BB94-2	BB95-2	BB92-2	BB85-2
Alternator data sheet number	ADS-212	ADS-210	ADS-210	ADS-209	ADS-209	ADS-210
Voltage ranges	120/240	120/208	120/240	277/480	347/600	127/220
Voltage feature code	R104-2	R098-2	R106-2	R002-2	R114-2	R020-2
Surge kW	205.9	210.2	211.4	211.4	210.7	211.6
Motor starting kVA (at 90% sustained voltage) Shunt	770	563	563	516	516	563
Motor starting kVA (at 90% sustained voltage) PMG	920	663	663	607	607	663
Full load current amps at standby rating	625	520	451	226	180	492

Notes:

<sup>1</sup> Single phase power can be taken from a three phase generator set at up to 2/3 set rated 3-phase kW at 1.0 power factor

<sup>2</sup> Full single phase output up to full set rated 3-phase kW at 1.0 power factor

## Formulas for calculating full load currents:

$$\frac{\text{Three phase output}}{\text{Voltage} \times 1.73 \times 0.8} = \frac{\text{Single phase output}}{\text{Voltage}}$$

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8} = \frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

**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.





# PowerCommand®

## 2.3 Control System



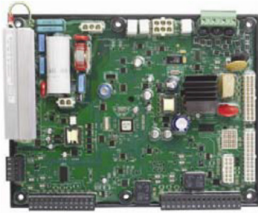
### Control System Description

The PowerCommand control system is a microprocessor-based generator set monitoring, metering and control system designed to meet the demands of today's engine driven generator sets. The integration of all control functions into a single control system provides enhanced reliability and performance, compared to conventional generator set control systems. These control systems have been designed and tested to meet the harsh environment in which gensets are typically applied.

### Features

- 320 x 240 pixels graphic LED backlight LCD.
- Multiple language support.
- AmpSentry™ protective relay - true alternator overcurrent protection.
- Real time clock for fault and event time stamping.
- Exerciser clock and time of day start/stop.
- Digital voltage regulation. Three phase full wave FET type regulator compatible with either shunt or PMG systems.
- Generator set monitoring and protection.
- 12 and 24 VDC battery operation.
- Modbus® interface for interconnecting to customer equipment.
- Warranty and service. Backed by a comprehensive warranty and worldwide distributor service network.
- Certifications - suitable for use on generator sets that are designed, manufactured, tested and certified to relevant UL, NFPA, ISO, IEC, Mil Std., CE and CSA standards.

# PowerCommand Digital Genset Control PCC 2300



## Description

The PowerCommand generator set control is suitable for use on a wide range of generator sets in non-paralleling applications. The PowerCommand control is compatible with shunt or PMG excitation style. It is suitable for use with reconnectable or non-reconnectable generators, and it can be configured for any frequency, voltage and power connection from 120-600 VAC Line-to-Line.

Power for this control system is derived from the generator set starting batteries. The control functions over a voltage range from 8 VDC to 30 VDC.

## Features

- 12 and 24 VDC battery operation.
- Digital voltage regulation - Three phase full wave FET type regulator compatible with either shunt or PMG systems. Sensing is three phase.
- Full authority engine communications (where applicable) - Provides communication and control with the Engine
- due to thermal Control Module (ECM).
- AmpSentry™ protection provides industry-leading alternator overcurrent protection:
  - Time-based generator protection applicable to both line-to-line and line-to-neutral, that can detect an unbalanced fault condition and swiftly react appropriately. Balanced faults can also be detected by AmpSentry and appropriate acted upon.
- Reduces the risk of Arc Flash overload or electrical faults by inverse time protection
- Common harnessing - with higher feature Cummins controls. Allows for easy field upgrades.
- Generator set monitoring - Monitors status of all critical engine and alternator functions.
- Digital genset metering (AC and DC).
- Genset battery monitoring system to sense and warn against a weak battery condition.
- Configurable for single or three phase AC metering.
- Engine starting - Includes relay drivers for starter, Fuel Shut Off (FSO), glow plug/spark ignition power and switch B+ applications.
- Generator set protection – Protects engine and alternator.
- Real time clock for fault and event time stamping.
- Exerciser clock and time of day start/stop.
- Advanced serviceability - using InPower™, a PC-based software service tool.

- Environmental protection - The control system is designed for reliable operation in harsh environments. The main control board is a fully encapsulated module that is protected from the elements.
- Modbus interface for interconnecting to customer equipment.
- Configurable inputs and outputs - Four discrete inputs and four dry contact relay outputs.
- Warranty and service - Backed by a comprehensive warranty and worldwide distributor service network.
- Certifications - Suitable for use on generator sets that are designed, manufactured, tested and certified to relevant UL, NFPA, ISO, IEC, Mil Std., CE and CSA standards.

## Base Control Functions

### HMI Capability

Operator adjustments - The HMI includes provisions for many set up and adjustment functions.

Generator set hardware data - Access to the control and software part number, generator set rating in kVA and generator set model number is provided from the HMI or InPower.

Data logs - Includes engine run time, controller on time, number of start attempts, total kWh, and load profile (control logs data indicating the operating hours at percent of rated kW load, in 5% increments. The data is presented on the operation panel based on total operating hours on the generator.)

Fault history - Provides a record of the most recent fault conditions with control date and time stamp. Up to 32 events are stored in the control non-volatile memory.

### Alternator data

- Voltage (single or three phase Line-to-Line and Line-to-Neutral)
- Current (single or three phase)
- kW, kVar, power factor, kVA (three phase and total)
- Frequency

AmpSentry: 3x current regulation for downstream tripping/motor inrush management. Thermal damage curve (3-phase short) or fixed timer (2 sec for 1- Phase Short or 5 sec for 2-Phase short).

### Engine data

- Starting battery voltage
- Engine speed
- Engine temperature
- Engine oil pressure
- Engine oil temperature
- Intake manifold temperature
- Comprehensive Full Authority Engine (FAE) data (where applicable)

Service adjustments - The HMI includes provisions for adjustment and calibration of generator set control functions. Adjustments are protected by a password. Functions include:

### Service adjustments (continued)

- Engine speed governor adjustments
- Voltage regulation adjustments
- Cycle cranking
- Configurable fault set up
- Configurable output set up
- Meter calibration
- Display language and units of measurement

### **Engine Control**

SAE-J1939 CAN interface to full authority ECMs (where applicable). Provides data swapping between genset and engine controller for control, metering and diagnostics.

12 VDC/24 VDC battery operations - PowerCommand will operate either on 12 VDC or 24 VDC batteries.

Temperature dependent governing dynamics (with electronic governing) - modifies the engine governing control parameters as a function of engine temperature. This allows the engine to be more responsive when warm and more stable when operating at lower temperature levels.

Isochronous governing - (where applicable) Capable of controlling engine speed within +/-0.25% for any steady state load from no load to full load. Frequency drift will not exceed +/-0.5% for a 33 °C (60 °F) change in ambient temperature over an 8 hour period.

Droop electronic speed governing - Control can be adjusted to droop from 0 to 10% from no load to full load.

Remote start mode - It accepts a ground signal from remote devices to automatically start the generator set and immediately accelerate to rated speed and voltage. The remote start signal will also wake up the control from sleep mode. The control can incorporate a time delay start and stop.

Remote and local emergency stop - The control accepts a ground signal from a local (genset mounted) or remote (facility mounted) emergency stop switch to cause the generator set to immediately shut down. The generator set is prevented from running or cranking with the switch engaged. If in sleep mode, activation of either emergency stop switch will wakeup the control.

Sleep mode - The control includes a configurable low current draw state to minimize starting battery current draw when the genset is not operating. The control can also be configured to go into a low current state while in auto for prime applications or applications without a battery charger.

Engine starting - The control system supports automatic engine starting. Primary and backup start disconnects are achieved by one of two methods: magnetic pickup or main alternator output frequency. The control also supports configurable glow plug control when applicable.

Cycle cranking - Is configurable for the number of starting cycles (1 to 7) and duration of crank and rest periods. Control includes starter protection algorithms to prevent the operator from specifying a starting sequence that might be damaging.

Time delay start and stop (cooldown) - Configurable for time delay of 0-300 seconds prior to starting after receiving a remote start signal and for time delay of 0-600 seconds prior to shut down after signal to stop in normal operation modes. Default for both time delay periods is 0 seconds.

### **Alternator Control**

The control includes an integrated three phase Line-to-Line sensing voltage regulation system that is compatible with shunt or PMG excitation systems. The voltage regulation system is a three phase full wave rectified and has an FET output for good motor starting capability.

Major system features include:

Digital output voltage regulation - Capable of regulating output voltage to within +/-1.0% for any loads between no load and full load. Voltage drift will not exceed +/- 1.5% for a 40 °C (104 °F) change in temperature in an eight hour period. On engine starting or sudden load acceptance, voltage is controlled to a maximum of 5% overshoot over nominal level. The automatic voltage regulator feature can be disabled to allow the use of an external voltage regulator.

Droop voltage regulation - Control can be adjusted to droop from 0-10% from no load to full load.

Torque-matched V/Hz overload control - The voltage roll-off set point and rate of decay (i.e. the slope of the V/Hz curve) is adjustable in the control.

Fault current regulation - PowerCommand will regulate the output current on any phase to a maximum of three times rated current under fault conditions for both single phase and three phase faults. In conjunction with a permanent magnet generator, it will provide three times rated current on all phases for motor starting and short circuit coordination purpose.

### **Protective Functions**

On operation of a protective function the control will indicate a fault by illuminating the appropriate status LED on the HMI, as well as display the fault code and fault description on the LCD. The nature of the fault and time of occurrence are logged in the control. The service manual and InPower service tool provide service keys and procedures based on the service codes provided.

Protective functions include:

#### **Battle Short Mode**

When enabled and the *battle short* switch is active, the control will allow some shutdown faults to be bypassed. If a bypassed shutdown fault occurs, the fault code and description will still be annunciated, but the genset will not shutdown. This will be followed by a *fail to shutdown* fault. Emergency stop shutdowns and others that are critical for proper operation are not bypassed. Please refer to the control application guide or manual for list of these faults.

## Derate

The derate function reduces output power of the genset in response to a fault condition. If a derate command occurs while operating on an isolated bus, the control will issue commands to reduce the load on the genset via contact closures or modbus.

## Configurable Alarm and Status Inputs

The control accepts up to four alarm or status inputs (configurable contact closed to ground or open) to indicate a configurable (customer-specified) condition. The control is programmable for warning, shutdown or status indication and for labeling the input.

## Emergency Stop

Annunciated whenever either emergency stop signal is received from external switch.

## Full Authority Electronic Engine Protection

Engine fault detection is handled inside the engine ECM. Fault information is communicated via the SAE-J1939 data link for annunciation in the HMI.

## General Engine Protection

**Low and high battery voltage warning** - Indicates status of battery charging system (failure) by continuously monitoring battery voltage.

**Weak battery warning** - The control system will test the battery each time the generator set is signaled to start and indicate a warning if the battery indicates impending failure.

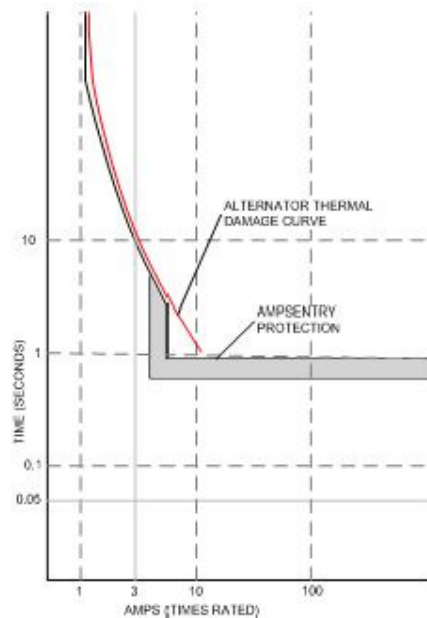
**Fail to start (overcrank) shutdown** - The control system will indicate a fault if the generator set fails to start by the completion of the engine crank sequence.

**Fail to crank shutdown** - Control has signaled starter to crank engine but engine does not rotate.

**Cranking lockout** - The control will not allow the starter to attempt to engage or to crank the engine when the engine is rotating.

## Alternator Protection

**AmpSentry protective relay** - A comprehensive monitoring and control system integral to the PowerCommand Control System that guards the electrical integrity of the alternator and power system by providing protection against a wide array of fault conditions in the generator set or in the load. It also provides single and three phase fault current regulation so that downstream protective devices have the maximum current available to quickly clear fault conditions without subjecting the alternator to potentially catastrophic failure conditions. Thermal damage curve (3-Phase short) or fixed timer (2 sec for 1-Phase short, 5 sec for 2-Phase short). See document R1053 for a full-size time over current curve.



**AmpSentry Maintenance Mode (AMM)** - Instantaneous tripping, if AmpSentry Maintenance mode is active (50mS response to turn off AVR excitation/shutdown genset) for arc flash reduction when personnel are near genset.

**High AC voltage shutdown (59)** - Output voltage on any phase exceeds preset values. Time to trip is inversely proportional to amount above threshold. Values adjustable from 105-125% of nominal voltage, with time delay adjustable from 0.1-10 seconds. Default value is 110% for 10 seconds.

**Low AC voltage shutdown (27)** - Voltage on any phase has dropped below a preset value. Adjustable over a range of 50-95% of reference voltage, time delay 2-20 seconds. Default value is 85% for 10 seconds. Function tracks reference voltage. Control does not nuisance trip when voltage varies due to the control directing voltage to drop, such as during a V/Hz roll-off during synchronizing.

**Under frequency shutdown (81 u)** - Generator set output frequency cannot be maintained. Settings are adjustable from 2-10 Hz below reference governor set point, for a 5-20 second time delay. Default: 6 Hz, 10 seconds.

Under frequency protection is disabled when excitation is switched off, such as when engine is operating in idle speed mode.

**Over frequency shutdown/warning (81 o)** - Generator set is operating at a potentially damaging frequency level. Settings are adjustable from 2-10 Hz above nominal governor set point for a 1-20 second time delay. Default: 6 Hz, 20 seconds, disabled.

**Overcurrent warning/shutdown** - Thresholds and time delays are configurable. Implementation of the thermal damage curve with instantaneous trip level calculated based on current transformer ratio and application power rating.

**Loss of sensing voltage shutdown** - Shutdown of generator set will occur on loss of voltage sensing inputs to the control.

**Field overload shutdown** - Monitors field voltage to shutdown generator set when a field overload condition occurs.

**Over load (kW) warning** - Provides a warning indication when engine is operating at a load level over a set point.

Adjustment range: 80-140% of application rated kW, 0-120 second delay. Defaults: 105%, 60 seconds.

**Reverse power shutdown (32)** - Adjustment range: 5-20% of standby kW rating, delay 1-15 seconds. Default: 10%, 3 seconds.

**Reverse Var shutdown** - Shutdown level is adjustable: 15-50% of rated Var output, delay 10-60 seconds. Default: 20%, 10 seconds.

**Short circuit protection** - Output current on any phase is more than 175% of rating and approaching the thermal damage point of the alternator. Control includes algorithms to protect alternator from repeated over current conditions over a short period of time.

## Field Control Interface

**Input signals to the PowerCommand control include:**

- Coolant level (where applicable)
- Fuel level (where applicable)
- Remote emergency stop
- Remote fault reset
- Remote start
- Battleshort
- Rupture basin
- Start type signal
- Configurable inputs - Control includes (4) input signals from customer discrete devices that are configurable for warning, shutdown or status indication, as well as message displayed

**Output signals from the PowerCommand control include:**

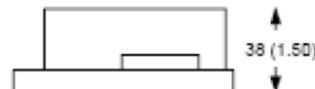
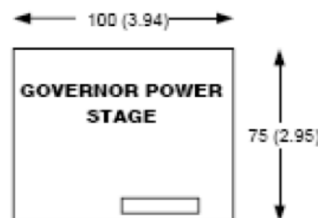
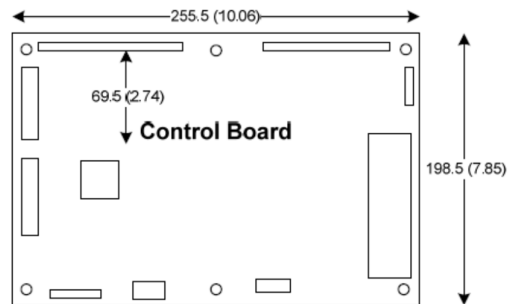
- Load dump signal: Operates when the generator set is in an overload condition.
- Delayed off signal: Time delay based output which will continue to remain active after the control has removed the run command. Adjustment range: 0 – 120 seconds. Default: 0 seconds.

- Configurable relay outputs: Control includes (4) relay output contacts (3 A, 30 VDC). These outputs can be configured to activate on any control warning or shutdown fault as well as ready to load, not in auto, common alarm, common warning and common shutdown.
- Ready to load (generator set running) signal: Operates when the generator set has reached 90% of rated speed and voltage and latches until generator set is switched to off or idle mode.

## Communications Connections Include:

- PC tool interface: This RS-485 communication port allows the control to communicate with a personal computer running InPower software.
- Modbus RS-485 port: Allows the control to communicate with external devices such as PLCs using Modbus protocol.  
Note - An RS-232 or USB to RS-485 converter is required for communication between PC and control.
- Networking: This RS-485 communication port allows connection from the control to the other Cummins products.

## Mechanical Drawings





# PowerCommand Human Machine Interface HMI320



## Description

This control system includes an intuitive operator interface panel that allows for complete genset control as well as system metering, fault annunciation, configuration and diagnostics. The interface includes five genset status LED lamps with both internationally accepted symbols and English text to comply with customer's needs. The interface also includes an LED backlit LCD display with tactile feel soft-switches for easy operation and screen navigation. It is configurable for units of measurement and has adjustable screen contrast and brightness.

The *run/off/auto* switch function is integrated into the interface panel.

All data on the control can be viewed by scrolling through screens with the navigation keys. The control displays the current active fault and a time-ordered history of the five previous faults.

## Features

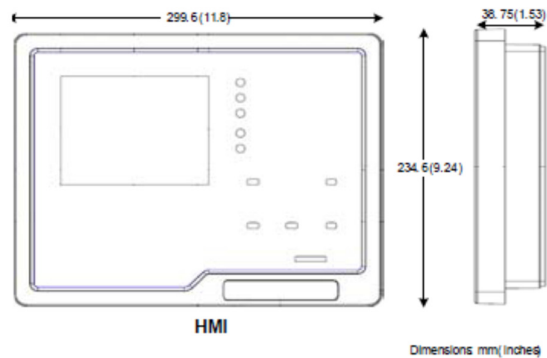
- LED indicating lamps:
  - Genset running
  - Remote start
  - Not in auto
  - Shutdown
  - Warning
  - Auto
  - Manual and stop
- 320 x 240 pixels graphic LED backlight LCD.
- Four tactile feel membrane switches for LCD defined operation. The functions of these switches are defined dynamically on the LCD.
- Seven tactile feel membrane switches dedicated screen navigation buttons for up, down, left, right, ok, home and cancel.
- Six tactile feel membrane switches dedicated to control for auto, stop, manual, manual start, fault reset and lamp test/panel lamps.

- Two tactile feel membrane switches dedicated to control of circuit breaker (where applicable).
- Allows for complete genset control setup.
- Certifications: Suitable for use on generator sets that are designed, manufactured, tested and certified to relevant UL, NFPA, ISO, IEC, Mil Std., CE and CSA standards.
- LCD languages supported: English, Spanish, French, German, Italian, Greek, Dutch, Portuguese, Finnish, Norwegian, Danish, Russian and Chinese Characters.

## Communications connections include:

- PC tool interface - This RS-485 communication port allows the HMI to communicate with a personal computer running InPower.
- This RS-485 communication port allows the HMI to communicate with the main control board.

## Mechanical Drawing



## Software

InPower (beyond 6.5 version) is a PC-based software service tool that is designed to directly communicate to PowerCommand generator sets and transfer switches, to facilitate service and monitoring of these products.

## Environment

The control is designed for proper operation without recalibration in ambient temperatures from -40 °C to +70 °C (-40 °F to 158 °F) and for storage from -55 °C to +80 °C (-67 °F to 176 °F). Control will operate with humidity up to 95%, non-condensing.

The HMI is designed for proper operation in ambient temperatures from -20 °C to +70 °C (-4 °F to 158 °F) and for storage from -30 °C to +80 °C (-22 °F to 176 °F).

The control board is fully encapsulated to provide superior resistance to dust and moisture. Display panel has a single membrane surface, which is impervious to effects of dust, moisture, oil and exhaust fumes. This panel uses a sealed membrane to provide long reliable service life in harsh environments.

The control system is specifically designed and tested for resistance to RFI/EMI and to resist effects of vibration to provide a long reliable life when mounted on a generator set. The control includes transient voltage surge suppression to provide compliance to referenced standards.

## Certifications

PowerCommand meets or exceeds the requirements of the following codes and standards:

- NFPA 110 for level 1 and 2 systems.
- ISO 8528-4: 1993 compliance, controls and switchgear.
- CE marking: The control system is suitable for use on generator sets to be CE-marked.
- EN50081-1,2 residential/light industrial emissions or industrial emissions.
- EN50082-1,2 residential/light industrial or industrial susceptibility.
- ISO 7637-2, level 2; DC supply surge voltage test.
- Mil Std 202C, Method 101 and ASTM B117: Salt fog test.
- UL 6200 recognized and suitable for use on UL 2200 Listed generator sets.
- CSA C282-M1999 compliance
- CSA 22.2 No. 14 M91 industrial controls.
- PowerCommand control systems and generator sets are designed and manufactured in ISO 9001 certified facilities.

## Warranty

All components and subsystems are covered by an express limited one year warranty. Other optional and extended factory warranties and local distributor maintenance agreements are available.



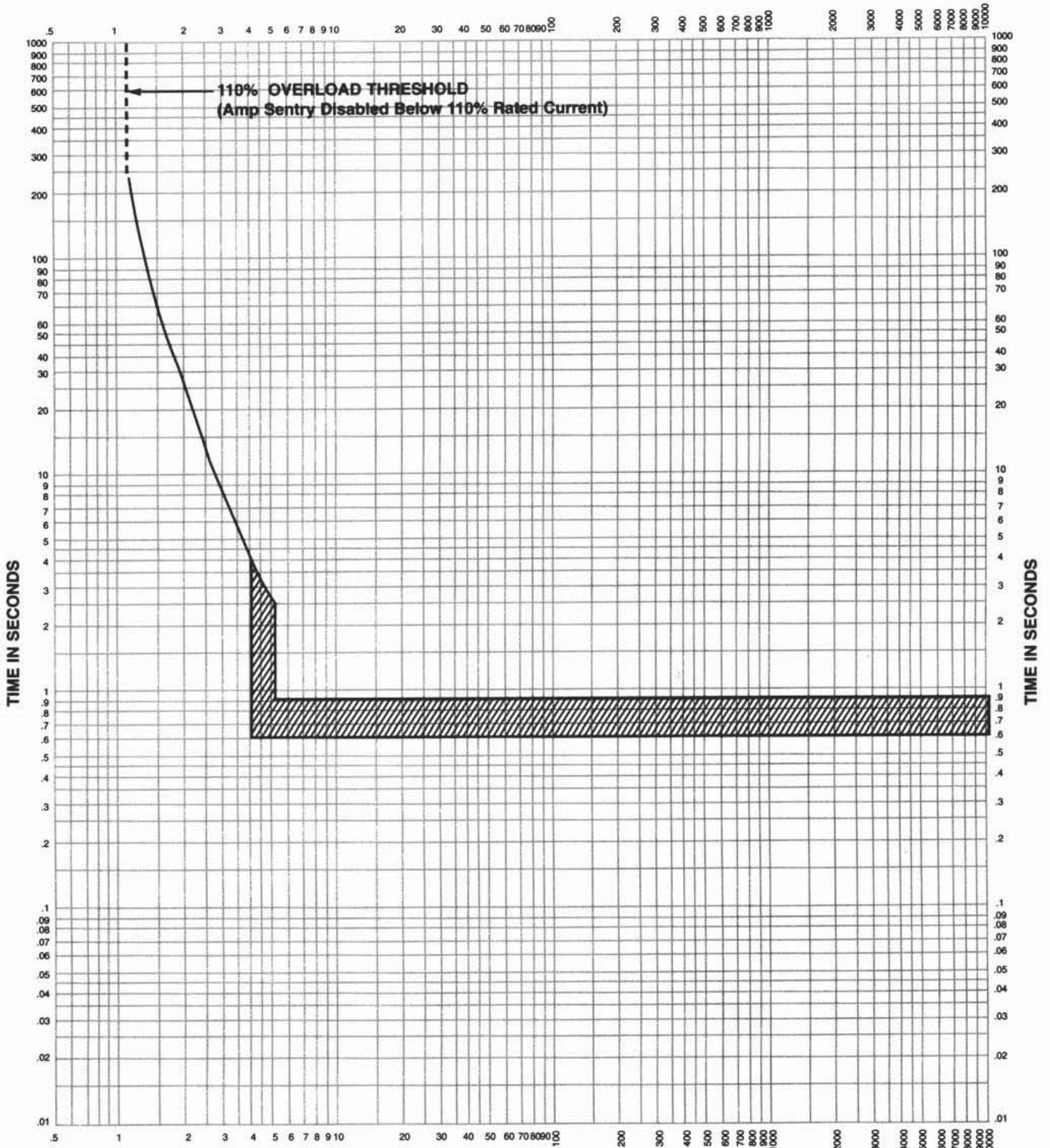
**For more information contact your local Cummins distributor  
or visit [power.cummins.com](http://power.cummins.com)**

**Our energy working for you.™**



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CURRENT IN MULTIPLES OF GENERATOR SET RATING



CURRENT IN MULTIPLES OF GENERATOR SET RATING



**PowerCommand™ Control Amp Sentry™  
Time-Over-Current Characteristic Curve**

Note: This curve is applicable to all Onan PowerCommand™ Generator Sets.





# Exhaust Emission Data Sheet

## C150D6D

### 60 Hz Diesel Generator Set

#### Engine Information:

Model:	Cummins QSB7-G5 NR3	Bore:	4.21 in. (106.9 mm)
Type:	4 cycle, in-line, 6 cylinder diesel	Stroke:	4.88 in. (123.9 mm)
Aspiration:	Turbocharged and Charge Air Cooled	Displacement:	408 cu. in. (6.7 liters)
Compression Ratio:	17.2:1	Exhaust Stack Diameter:	4 in (101.6 mm)
Emission Control Device:	Turbocharged and Charge Air Cooled		

#### Performance Data

	<u>1/4</u> <u>Standby</u>	<u>1/2</u> <u>Standby</u>	<u>3/4</u> <u>Standby</u>	<u>Full</u> <u>Standby</u>
BHP @ 1800 RPM (60 Hz)	85.1	135.4	185.7	237.1
Fuel Consumption (gal/Hr)	4.7	6.9	9.2	11.7
Exhaust Gas Flow (CFM)	652.3	948.5	1143.2	1258.0
Exhaust Gas Temperature (°F)	685.9	764.7	825.8	872.2

#### Exhaust Emission Data

HC (Total Unburned Hydrocarbons)	0.29	0.18	0.09	0.04
NOx (Oxides of Nitrogen as NO <sub>2</sub> )	1.85	1.91	2.23	2.89
CO (Carbon Monoxide)	1.82	1.17	0.68	0.35
PM (Particulate Matter)	0.17	0.12	0.08	0.05
Smoke (Bosch)	0.74	0.68	0.58	0.48
Sulfur Dioxide (SO <sub>2</sub> )	0.17	0.17	0.16	0.15

All values (except smoke) are cited: g/BHP-hr

#### Test Conditions

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

Fuel Specification:	ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and 40-48 cetane number.
Fuel Temperature:	99 ± 9 °F (at fuel pump inlet)
Intake Air Temperature:	77 ± 9 °F
Barometric Pressure:	29.6 ± 1 in. Hg
Humidity:	NOx measurement corrected to 75 grains H <sub>2</sub> O/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 result in elevated emission levels.



# 2021 EPA Tier 3 Exhaust Emission Compliance Statement C150D6D Stationary Emergency 60 Hz Diesel Generator Set

### Compliance Information:

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

Engine Manufacturer:	Cummins Inc.
EPA Certificate Number:	MCEXL0409AAD-019
Effective Date:	06/8/2020
Date Issued:	06/8/2020
EPA Engine Family (Cummins Emissions Family):	MCEXL0409AAD

### Engine Information:

Model:	QSB7-G5 NR3	Bore:	4.21 in. (106.9 mm)
Engine Nameplate HP:	324	Stroke:	4.88 in. (124 mm)
Type:	4 Cycle, In-line, 6 Cylinder Diesel	Displacement:	408 cu. in. (7 liters)
Aspiration:	Turbocharged and Charge Air Cooled	Compression ratio:	17.2:1
Emission Control Device:		Exhaust stack diameter:	4 in. (101.6)

### Diesel Fuel Emission Limits

#### D2 Cycle Exhaust Emissions

	Grams per BHP-hr			Grams per kWm-hr		
	<u>NO<sub>x</sub> + NMHC</u>	<u>CO</u>	<u>PM</u>	<u>NO<sub>x</sub> + NMHC</u>	<u>CO</u>	<u>PM</u>
Test Results	3.0	0.7	0.08	4.0	1.0	0.11
EPA Emissions Limit	3.0	2.6	0.15	4.0	3.5	0.20

**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, 300-500 ppm Sulphur

**Reference conditions:** Air Inlet Temperature: 25 °C (77 °F), Fuel Inlet Temperature: 40 °C (104 °F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H<sub>2</sub>O/lb) of dry air; required for NO<sub>x</sub> 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.

### **3. OPERATION PLAN – AIR EMISSIONS DURING SSM**

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The emergency generator will be located at Fire Station No. 3 on Kirtland Air Force Base. As soon as a malfunction occurs, the facility will shut down applicable equipment as soon as possible to ensure no excess emissions or non-permitted emissions are released. The facility will only startup again once it is identified that the malfunction is addressed, and the facility will operate as normal and permitted.

Additional details are provided in this section for the generator regarding specific steps the applicant will take should any malfunction occur on site as well as details regarding safety procedures and processes to ensure protection of employees, the general public, and the environment.

#### **3.1 Emergency Generator Operational Plan**

##### **3.1.1 Emergency Generator Startup Procedure**

A startup event for a Reciprocating Internal Combustion Engine (RICE) occurs when the unit is initially operated after being off. The operator carefully monitors the entire startup process to ensure safety and minimize airborne emissions.

The following actions included in the operational plan are critical for minimizing emissions during startup:

- Minimizing cold engine startups. The operator will work to ensure warm engine startup by ensuring engine block heaters are online. These units will be checked on a weekly basis.
- Ensuring the engine is achieving good combustion.
- Monitoring the opacity and color of the exhaust gases and taking the unit offline for repairs upon the observation of abnormal soot coming out of the stack.

##### **3.1.2 Emergency Generator Shutdown Procedure**

A shutdown event for a RICE occurs when the unit is shut down after a period of operation. The operator carefully monitors the entire shutdown process to ensure safety and minimize airborne emissions.

The following actions included in the operational plan are critical for minimizing emissions during engine shutdown:

- Removing the full electrical load from the system and initiating a cool down cycle before the engine is stopped.
- Monitoring the opacity and color of the exhaust gases and taking the unit offline for repairs upon the observation of abnormal soot coming out of the stack.

##### **3.1.3 Emergency Generator Maintenance**

The operator ensures the emergency generator RICE is appropriately maintained according to the manufacturer's recommendations. The applicant will carefully monitor the engine to ensure safety and minimize airborne emissions during regularly scheduled maintenance events.

The following actions included in the maintenance operational plan are critical for minimizing emissions during the event:

- Ensure the engine is achieving good combustion during the maintenance activity.
- Monitoring the opacity and color of the exhaust gases and taking the unit offline for repairs upon the observation of abnormal soot coming out of the stack.

## 4. AIR DISPERSION MODELING ANALYSIS

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Kirtland AFB is required to demonstrate compliance with the National and New Mexico Ambient Air Quality Standards (NAAQS and NMAAQs) for the pollutants emitted by the facility. As stated on Page 6 of the EHD's Air Dispersion Modeling Guidelines (dated October 10, 2019), the Air Quality Program has exempted some source categories from air dispersion modeling because they have minimal or intermittent emissions.

Emergency generators (with backup PNM power and less than 500 hours of annual operation) are an example of an exempt source. The engine in this application is proposed for emergency use only; and will be limited to less than 500 hours of annual operation. As the unit meets the applicable criteria in the modeling guidelines, a waiver is not required to be submitted and no modeling is required as part of this application.

## **ATTACHMENT A. APPLICATION FORMS**

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Air Quality Permit Application for Emergency Diesel Engines Subject to Federal (USEPA) New Source Performance Standards (20.11.41 NMAC) – Version 02/14

Permit Application Checklist

Permit Application Review Fee Checklist

Pre-Permit Application Meeting Waiver Request and Approval



**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:  
**3<sup>rd</sup> 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: \_\_\_\_ / \_\_\_\_ / 20\_\_

1. Company Name: U.S. Air Force – Kirtland Air Force Base (KAFB) Ph: (505) 846-8546 Email: isreal.tavarez@us.af.mil
2. Company Address: 377 MSG/CEIEC, 2050 Wyoming Blvd. , Suite A-116B City: KAFB, Albuquerque State: NM Zip: 87117-5270
3. Company Mailing Address (if different): N/A Zip: N/A
4. Company Contact: Isreal Tavarez Title: Chief of Environmental Ph: (505) 846-8546 Email: isreal.tavarez@us.af.mil
5. Facility Name: Fire Station No. 3 Facility Hours: 12:00 am TO 11:59 pm
6. Facility Address: 28100 Pennsylvania Rd. SE City: KAFB, Albuquerque State: NM Zip: 87117
7. Local Business Mailing Address (if different): N/A Email: N/A
8. Facility Environmental Contact: Isreal Tavarez Title: Chief of Environmental Ph: (505) 846-8546 Fax : N/A
9. Email: isreal.tavarez@us.af.mil 10. Type of Business: National Security
11. Environmental Consultant Name and Email Address (if applicable): ENCANTO Facility Services (Contractor); jhailey@perikin.com
12. North American Industry Classification System (NAICS): 928110 13. Standard Industrial Classification (SIC): 9711
14. UTM coordinates (required): 360,186 m east 3,875,889 m north 15. Facility Ph: (505) 846-2522 Fax: N/A
16. Billing Contact: Carina Munoz-Dyer Title: Program Manager Ph: (505) 846-8781 Fax: N/A
17. Billing Address: 377 MSG/CEIEC Air Quality, 2050 Wyoming Blvd. SE , B20685 City: KAFB, Albuquerque State: NM Zip: 87117
18. Is this an Initial Installation; OR Modification of an Existing Unit:  Initial  Modification 19. Current or requested operating hrs/yr: 500
20. Is engine or genset installed: 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)
Engine	Cummins	QSB7-G5 NR3	TBD	TBD	N/A	324	N/A
Generator	Cummins	C150 D6D	TBD	TBD	N/A	N/A	150

**Section 3. Stack and Emissions Information**

Stack Height Above Ground & Stack Diameter In Feet	Stack Temperature	Stack Flow Rate & Exit Direction
10 feet – Height 0.33 feet – Diameter	872 °F	1258 ft <sup>3</sup> /min – Flow Rate Exit - Vertical

**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
TBD	CO	2.60	x	324	=	842.40	÷	453.6	=	1.86	x	8,760	÷	2,000	=	8.13
	NO <sub>x</sub>	2.85	x		=	923.40	÷	453.6	=	2.04	x	8,760	÷	2,000	=	8.92
	NMHC	0.15	x		=	48.60	÷	453.6	=	0.11	x	8,760	÷	2,000	=	0.47
	*NO <sub>x</sub> + NMHC	3.0	x		=	972.00	÷	453.6	=	2.14	x	8,760	÷	2,000	=	9.39
	**SO <sub>x</sub>	0.93	x		=	301.32	÷	453.6	=	0.66	x	8,760	÷	2,000	=	2.91
	***PM	0.15	x		=	48.60	÷	453.6	=	0.11	x	8,760	÷	2,000	=	0.47

\* If the USEPA Emission Factor or manufacturer's data is given as combined NO<sub>x</sub> + NMHC, also provide individual emission factors for NO<sub>x</sub> and NMHC from the manufacturer or other approved methodology for estimating individual emission factors.

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

\*\*\* Particulate Matter (PM) emissions are considered to be < 1µm (micron). Therefore, PM emissions also reflect PM<sub>10</sub> & PM<sub>2.5</sub>.

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

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

Pollutant	Emission in Pounds Per Hour	T I M E S	Requested Operating Hours Per Year	E Q U A L S	Pounds Per Year	D I V I D E	Pounds Per Ton	E Q U A L S	Emission In Tons Per Year
CO	1.86	x	500	=	928.57	÷	2,000	=	0.46
NO <sub>x</sub>	2.04	x		=	1017.86	÷	2,000	=	0.51
NMHC	0.11	x		=	53.57	÷	2,000	=	0.027
*NO <sub>x</sub> + NMHC	2.14	x		=	1071.43	÷	2,000	=	0.54
**SO <sub>x</sub>	0.66	x		=	332.10	÷	2,000	=	0.17
***PM	0.11	x		=	53.57	÷	2,000	=	0.027

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.

**Jason F. Vattioni, Colonel, USAF**      VATTIONI.JASON.F.117002      Digitally signed by VATTIONI.JASON.F.1170028640      Date: 2023.03.01 21:14:47 -0700'      **Commander, 377th Air Base Wing**      03 / 01 /20 23  
 Print Name      Signature      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 <sup>1</sup> (g/hp-hr)	NMHC <sup>1</sup> (g/hp-hr)	NOx + NMHC <sup>1</sup> (g/hp-hr)	SOx <sup>2</sup> (g/hp-hr)	Particulate Matter (PM) (g/hp-hr)	Notes
< 11 Hp < 8 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	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 ≥ 8 kW < 19 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	4.9			7.1	0.93*	0.6	
	2 (60.4202) - (89.112)	2007	4.9			5.6	0.93*	0.6	
	4 (60.4202)	2008 +	4.9			5.6	0.93*	0.3	
≥ 25 Hp < 50 Hp ≥ 19 kW < 37 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	4.1			7.1	0.93*	0.6	
	2 (60.4202) - (89.112)	2007	4.1			5.6	0.93*	0.45	
	4 (60.4202)	2008 +	4.1			5.6	0.93*	0.22	
≥ 50 Hp < 100 Hp ≥ 37 kW < 75 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	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	
	3 (60.4202) - (89.112)	2008 +	3.7			3.5	0.93*	0.3	
≥ 100 Hp < 175 Hp ≥ 75 kW < 130 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	3.03**	6.9	1.12**		0.93*	1.0**	
	3 (60.4202) - (89.112)	2007 +	3.7			3.0	0.93*	0.22	
<b>≥ 175 Hp ≤ 750 Hp</b> ≥ 130 kW ≤ 560 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	8.5	6.9	1.0		<b>0.93*for &lt; 600Hp or 3.67* for &gt; 600Hp</b>	0.4	
	3 (60.4202) - (89.112)	2007 +	<b>2.6</b>			<b>3.0</b>		<b>0.15</b>	
> 750 Hp > 560 kW	1 (60.4205)	Pre 2007 <sup>3</sup>	8.5	6.9	1.0		3.67	0.4	
	3 (60.4202) - (89.112)	2007***	2.6			4.8		0.15	
	*** 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								

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

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

<sup>3</sup> 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).



# City of Albuquerque Environmental Health Department Air Quality Program



## Construction Permit (20.11.41 NMAC) Application Checklist

**This checklist must be returned with the application**

Any person seeking a new air quality permit, a permit modification, or an emergency permit under 20.11.41 NMAC (Construction Permits) shall do so by filing a written application with the Albuquerque-Bernalillo County Joint Air Quality Program, which administers and enforces local air quality laws for the City of Albuquerque (“City”) and Bernalillo County (“County”), on behalf of the City Environmental Health Department (“Department”).

The Department will rule an application administratively incomplete if it is missing or has incorrect information. The Department may require additional information that is necessary to make a thorough review of an application, including but not limited to technical clarifications, emission calculations, emission factor usage, additional application review fees if any are required by 20.11.2 NMAC, and new or additional air dispersion modeling.

If the Department has ruled an application administratively incomplete three (3) times, the Department will deny the permit application. Any fees submitted for processing an application that has been denied will not be refunded. If the Department denies an application, a person may submit a new application and the fee required for a new application. The applicant has the burden of demonstrating that a permit should be issued.

The following are the minimum elements that shall be included in the permit application before the Department can determine whether an application is administratively complete and ready for technical review. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.

At all times before the Department has made a final decision regarding the application, an applicant has a duty to promptly supplement and correct information the applicant has submitted in an application to the Department. The applicant’s duty to supplement and correct the application includes but is not limited to relevant information acquired after the applicant has submitted the application and additional information the applicant otherwise determines is relevant to the application and the Department’s review and decision. While the Department is processing an application, regardless of whether the Department has determined the application is administratively complete, if the Department determines that additional information is necessary to evaluate or make a final decision regarding the application, the Department may request additional information and the applicant shall provide the requested additional information.

**NOTICE REGARDING PERMIT APPEALS:** A person who has applied for or has been issued an air quality permit by the Department shall be an obligatory party to a permit appeal filed pursuant to 20.1.1.81 NMAC.

**NOTICE REGARDING SCOPE OF A PERMIT:** The Department’s issuance of an air quality permit only authorizes the use of the specified equipment pursuant to the air quality control laws, regulations and conditions. Permits relate to air quality control only and are issued for the sole purpose of regulating the emission of air contaminants from said equipment. Air quality permits are not a general authorization for the location, construction and/or operation of a facility, nor does a permit authorize any particular land use or other form of land entitlement. It is the applicant’s/permittee’s responsibility to obtain all other necessary permits from the appropriate agencies, such as the City Planning Department or County Department of Planning and Development Services, including but not limited to site plan approvals, building permits, fire department approvals and the like, as may be required by law for the location, construction and/or operation of a facility. For more information, please visit the City Planning Department website at <https://www.cabq.gov/planning> and the County Department of Planning and Development Services website at <https://www.bernco.gov/planning>.

**The Applicant shall:**

**20.11.41.13(A) NMAC – Pre-Application Requirements:**

Item	Completed	NA <sup>1</sup>	Waived <sup>2</sup>
(1) Request a pre-application meeting with the Department using the pre-application meeting request form.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Attend the pre-application meeting. Date of Pre-application meeting: N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1. Not Applicable
2. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.

**20.11.41.13(B) NMAC – Applicant’s Public Notice Requirements:**

Item	Included in Application	NA <sup>1</sup>	Waived <sup>2</sup>
(1) Provide public notice in accordance with the regulation, including by certified mail or electronic copy 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Contact list of representative(s) of neighborhood associations and recognized coalitions cannot be more than three months old from the application submittal date.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Provide notice using the Notice of Intent to Construct form.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) In accordance with the regulation, post and maintain in a visible location a weather proof sign provided by the Department.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. Not Applicable; For emergency permits, the public notice requirements in 20.11.41.24 NMAC shall apply instead.
2. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.

**The Permit Application shall include:**

**20.11.41.13(E) NMAC – Application Contents**

Item	Included In Application	NA <sup>1</sup>	Waived <sup>2</sup>
(1) A complete permit application on the most recent form provided by the Department.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) The application form includes:			
a. The owner’s name, street and post office address, and contact information;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The facility/ operator’s name, street address and mailing address, if different from the owner;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The consultant’s name, and contact information, if applicable;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. All information requested on the application form is included (i.e., the form is complete).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) Date application is submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) Sufficient attachments for the following:			
a. Ambient impact analysis using an atmospheric dispersion model approved by the U.S. Environmental Protection Agency, and the Department to demonstrate compliance with the applicable ambient air quality standards. See 20.11.01 NMAC. If you are modifying an existing source, the modeling must include the	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item	Included In Application	NA <sup>1</sup>	Waived <sup>2</sup>
emissions of the entire source to demonstrate the impact the new or modified source(s) will have on existing plant emissions.			
b. The air dispersion model has been executed pursuant to a protocol that was approved in advance by the Department.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Air dispersion modeling approved protocol date:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Basis or source for each emission rate (including manufacturer's specification sheet, AP-42 section sheets, test data, or corresponding supporting documentation for any other source used).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. All calculations used to estimate potential emission rates and controlled/proposed emissions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Basis for the estimated control efficiencies and sufficient engineering data for verification of the control equipment operation, including if necessary, design, drawing, test report and factors which affect the normal operation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Fuel data for each existing and/or proposed piece of fuel burning equipment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Stack and exhaust gas parameters for all existing and proposed emission stacks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(5) An operational and maintenance strategy detailing:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. steps the applicant will take if a malfunction occurs that may cause emission of a regulated air contaminant to exceed a limit that is included in the permit;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. the nature of emission during routine startup or shutdown of the source and the source's air pollution control equipment; and	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. the steps the application will take to minimize emissions during routine startup or shutdown.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(6) A map, such as a 7.5'-topographic quadrangle map published by the U.S. Geological Survey or a map of equivalent or greater scale, detail, and precision, including a City or County zone atlas map that shows the proposed location of each process equipment unit involved in the proposed construction, modification, or operation of the source, as applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(7) 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 by the Department in writing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(8) A complete description of all sources of regulated air contaminants and a process flow diagram depicting the process equipment unit or units at the facility, both existing and proposed, that are proposed to be involved in routine operations and from which regulated air contaminant emissions are expected to be emitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(9) A full description of air pollution control equipment, including all calculations and the basis for all control efficiencies presented, manufacturer's specifications sheets, and site layout and assembly drawings; UTM (universal transverse mercator) coordinates shall be used to identify the location of each emission unit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(10) A description of the equipment or methods proposed by the applicant to be used for emission measurement.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(11) The maximum and normal operating time schedules of the source after completion of construction or modification, as applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(12) Any other relevant information as the Department may reasonably require, including without limitation:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Applicants shall provide documentary proof that the proposed air quality permitted use of the facility's subject property is allowed by the zoning designation of the City or County zoning laws, as applicable. Sufficient documentation includes: (i) a zoning certification from the City Planning Department or County Department of Planning and Development Services, as applicable, if the property is subject to City or County zoning jurisdiction; or (ii) a zoning verification from both planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item	Included In Application	NA <sup>1</sup>	Waived <sup>2</sup>
departments if the property is not subject to City or County zoning jurisdiction. <sup>3</sup> A zone atlas map shall not be sufficient.			
(13) The signature of the applicant, operator, owner or an authorized representative, certifying to the accuracy of all information as represented in the application and attachments, if any.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(14) A check or money order for the appropriate application fee or fees required by 20.11.2 NMAC (Fees).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. *Not Applicable*
2. *It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.*
3. *For emergency permit applications, applicants are not required to submit documentation for the subject property's zoning designation.*



# City of Albuquerque

## Environmental Health Department

### Air Quality Program



## 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, 3<sup>rd</sup> 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.



# City of Albuquerque

## Environmental Health Department

### Air Quality Program



### Permit Application Review Fee Checklist Effective January 1, 2023 – December 31, 2023

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	U.S Air Force – Kirtland Air Force Base	
Company Address	2050 Wyoming Blvd. SE Suite A-116B, KAFB, Albuquerque, NM 87117	
Facility Name	Fire Station #3	
Facility Address	28100 Pennsylvania Rd. SE, KAFB, Albuquerque, NM 87117	
Contact Person	Isreal Tavarez	
Contact Person Phone Number	(505) 846-8546	
Are these application review fees for an existing permitted source located within the City of Albuquerque or Bernalillo County?		No
If yes, what is the permit number associated with this modification?	Permit #: N/A	
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)		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
<b>Air Quality Notifications</b>			
	AQN New Application	\$641.00	2801
	AQN Technical Amendment	\$352.00	2802
	AQN Transfer of a Prior Authorization	\$352.00	2803
X	<i>Not Applicable</i>	<i>See Sections Below</i>	
<b>Stationary Source Review Fees (Not Based on Proposed Allowable Emission Rate)</b>			
	Source Registration required by 20.11.40 NMAC	\$ 657.00	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	\$1,314.00	2301
X	<i>Not Applicable</i>	<i>See Sections Below</i>	
<b>Stationary Source Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollutant)</b>			
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	\$986.00	2302
X	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	\$1,971.00	2303
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	\$3,942.00	2304
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	\$5,913.00	2305
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	\$7,884.00	2306
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	\$9,855.00	2307
	<i>Not Applicable</i>	<i>See Section Above</i>	

<b>Federal Program Review Fees (In addition to the Stationary Source Application Review Fees above)</b>			
X	40 CFR 60 - "New Source Performance Standards" (NSPS)	\$1,314.00	2308
	40 CFR 61 - "Emission Standards for Hazardous Air Pollutants (NESHAPs)	\$1,314.00	2309
X	40 CFR 63 - (NESHAPs) Promulgated Standards	\$1,314.00	2310
	40 CFR 63 - (NESHAPs) Case-by-Case MACT Review	\$13,140.00	2311
	20.11.61 NMAC, Prevention of Significant Deterioration (PSD) Permit	\$6,570.00	2312
	20.11.60 NMAC, Non-Attainment Area Permit	\$6,570.00	2313
	<i>Not Applicable</i>	<i>Not Applicable</i>	

### 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
<b>Modification Application Review Fees (Not Based on Proposed Allowable Emission Rate)</b>			
	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	\$1,314	2321
X	<i>Not Applicable</i>	<i>See Sections Below</i>	
<b>Modification Application Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollutant)</b>			
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	\$986.00	2322
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	\$1,971.00	2323
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	\$3,942.00	2324
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	\$5,913.00	2325
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	\$7,884.00	2326
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	\$9,855.00	2327
X	<i>Not Applicable</i>	<i>See Section Above</i>	
<b>Major Modifications Review Fees (In addition to the Modification Application Review Fees above)</b>			
	20.11.60 NMAC, Permitting in Non-Attainment Areas	\$6,570	2333
	20.11.61 NMAC, Prevention of Significant Deterioration	\$6,570	2334
X	<i>Not Applicable</i>	<i>Not Applicable</i>	
<b>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)</b>			
	40 CFR 60 - "New Source Performance Standards" (NSPS)	\$1,314.00	2328
	40 CFR 61 - "Emission Standards for Hazardous Air Pollutants (NESHAPs)	\$1,314.00	2329
	40 CFR 63 - (NESHAPs) Promulgated Standards	\$1,314.00	2330
	40 CFR 63 - (NESHAPs) Case-by-Case MACT Review	\$13,140.00	2331
	20.11.61 NMAC, Prevention of Significant Deterioration (PSD) Permit	\$6,570.00	2332
	20.11.60 NMAC, Non-Attainment Area Permit	\$6,570.00	2333
X	<i>Not Applicable</i>	<i>Not Applicable</i>	



**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	<i>Not Applicable</i>	<i>See Sections II, III or V</i>	

**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	<i>Not Applicable</i>	<i>See Sections II, III or V</i>	

**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	\$ 4599
Section III Total	\$
Section IV Total	\$
Section V Total	\$
<b>Total Application Review Fee</b>	<b>\$ 4599</b>

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 1st day of March 2023

Jason F. Vattioni, Colonel, USAF

Commander, 377th Air Base Wing

**Print Name**

**Print Title**

VATTIONI.JASON. Digitally signed by  
 F.1170028640 VATTIONI.JASON.F.1170028640  
 Date: 2023.03.01 21:16:12 -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.

**From:** [CUEVAS, ANDRIA R CIV USAF AFGSC 377 MSG/CEIEC](#)  
**To:** [Velez, Griselda](#); [Richard Simard](#)  
**Cc:** [Carney, Michael Lee CIV USARMY CESPA \(USA\)](#)  
**Subject:** (external) FW: Pre-Permit Application Waiver Request: KAFB - FS3  
**Date:** Wednesday, December 14, 2022 4:14:07 PM

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-----Original Message-----

From: Munoz-Dyer, Carina G. <[cmunoz-dyer@cabq.gov](mailto:cmunoz-dyer@cabq.gov)>  
Sent: Wednesday, September 28, 2022 8:15 AM  
To: CUEVAS, ANDRIA R CIV USAF AFGSC 377 MSG/CEIEC  
<[andria.cuevas.1@us.af.mil](mailto:andria.cuevas.1@us.af.mil)>  
Cc: [kafbemctr@navarro-inc.com](mailto:kafbemctr@navarro-inc.com); Nishiyama, Kiyoo <[knishiyama@perikin.com](mailto:knishiyama@perikin.com)>;  
[ch098@cummins.com](mailto:ch098@cummins.com); Carney, Michael Lee CIV USARMY CESPA (USA)  
<[Michael.L.Carney@usace.army.mil](mailto:Michael.L.Carney@usace.army.mil)>  
Subject: [Non-DoD Source] RE: Pre-Permit Application Waiver Request: KAFB - FS3

Good morning Andria.

The pre-application meeting for a construction permit for an emergency generator for the KAFB -FS3 is waived. Please include this email with your application.

Respectfully,  
Carina

CARINA G. MUNOZ-DYER  
air quality permitting division manager | environmental health department  
o 505.768.1948  
m 505.391.9617  
[cabq.gov/environmentalhealth/](http://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?

-----Original Message-----

From: CUEVAS, ANDRIA R CIV USAF AFGSC 377 MSG/CEIEC  
<[andria.cuevas.1@us.af.mil](mailto:andria.cuevas.1@us.af.mil)>  
Sent: Wednesday, September 28, 2022 5:58 AM  
To: Munoz-Dyer, Carina G. <[cmunoz-dyer@cabq.gov](mailto:cmunoz-dyer@cabq.gov)>  
Cc: [kafbemctr@navarro-inc.com](mailto:kafbemctr@navarro-inc.com); Nishiyama, Kiyoo <[knishiyama@perikin.com](mailto:knishiyama@perikin.com)>;  
[ch098@cummins.com](mailto:ch098@cummins.com); Carney, Michael Lee CIV USARMY CESPA (USA)  
<[Michael.L.Carney@usace.army.mil](mailto:Michael.L.Carney@usace.army.mil)>  
Subject: Pre-Permit Application Waiver Request: KAFB - FS3

Good Morning Carina!

KAFB is in the process of drafting a 20.11.41 NMAC Construction Permit for the Fire Station 3 emergency back-up generator. Because KAFB has prepared/submitted numerous EmGen permit application I am respectfully requesting if AEHD will waive the requirement for the pre-permit application meeting.

I appreciate your consideration...THX!

-Andria

//SIGNED//

Andria Cuevas, Program Manager  
377 MSG/CEIEC, Air Quality  
2050 Wyoming Blvd SE, B20685  
Kirtland AFB, NM 87117  
505-846-2522  
andria.cuevas.1@us.af.mil

## **ATTACHMENT B. NOTICE OF INTENT TO CONSTRUCT AND ZONING**

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Notice of Intent (NOI) to Construct

Notice of Intent Cover Letter

Email Documentation of NOI Sent to Neighborhood Associations and Coalitions

Public Notice Sign Guidelines Checklist

Pictures of Posted Notice

Zoning Requirements

# 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:* U.S Air Force - Kirtland Air Force Base, 2050 Wyoming Blvd. SE, Suite A-116B, Albuquerque, NM 87117

**Owner / operator's  
name and address:**

*Nombre y domicilio del propietario u operador:* Same As Above

**Contact for comments and inquires:**

*Datos actuales para comentarios y preguntas:*

Name (*Nombre*): Isreal Tavarez

Address (*Domicilio*): 377 MSG/CEIEC, 2050 Wyoming Blvd. SE Suite A-116B

Phone Number (*Número Telefónico*): (505) 846-8546

E-mail Address (*Correo Electrónico*): isreal.tavarez@us.af.mil

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

*Fecha actual o estimada en que se entregará la solicitud al departamento:* March 13, 2023

**Description of the source:**

*Descripción de la fuente:* A new genset including an emergency diesel engine and generator.

**Exact location of the source  
or proposed source:**

*Ubicación exacta de la fuente o fuente propuesta:* Fire Station #3, 28100 Pennsylvania Rd. SE, KAFB, Albuquerque, NM 87117

**Nature of business:**

*Tipo de negocio:* National Security

**Process or change for which the  
permit is requested:**

*Proceso o cambio para el cuál de solicita el permiso:* Install a new 324 horsepower diesel engine/150 kW generator to provide emergency power.

**Maximum operating schedule:**

*Horario máximo de operaciones:* 24 hrs/day, 7 days/wk, 4 wks/mo, 12 mo/yr up to 500 hr/yr

**Normal operating schedule:**

*Horario normal de operaciones:* Intermittent

**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 <i>Contaminante de aire</i>	Proposed Construction Permit <i>Permiso de Construcción Propuesto</i>		Net Changes <b>(for permit modification or technical revision)</b> <i>Cambio Neto de Emisiones</i> <i>(para modificación de permiso o revisión técnica)</i>	
	pounds per hour <i>libras por hora</i>	tons per year <i>toneladas por año</i>	pounds per hour <i>libras por hora</i>	tons per year <i>toneladas por año</i>
<b>CO</b>	1.86	0.46	N/A	N/A
<b>NOx</b>	2.04	0.51	N/A	N/A
<b>VOC</b>	0.11	0.027	N/A	N/A
<b>SO2</b>	0.66	0.17	N/A	N/A
<b>PM10</b>	0.11	0.027	N/A	N/A
<b>PM2.5</b>	0.11	0.027	N/A	N/A
<b>HAP</b>	0.014	0.0035	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](http://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](http://www.cabq.gov/airquality/air-quality-permits)



**SUBJECT: 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	U.S. Air Force – Kirtland Air Force Base
Site or Facility Name	Fire Station No. 3
Site or Facility Address	28100 Pennsylvania Rd. SE, KAFB, Albuquerque, NM 87117
New or Existing Source	NEW
Anticipated Date of Application Submittal	JANUARY 30, 2023
Summary of Proposed Source to Be Permitted	The application is to construct a Cummins 324 horsepower, EPA Tier III emission certified, diesel-fired internal combustion engine coupled to a 150 kW emergency electrical generator. The application seeks to restrict the unit to 500 hours per year of operation. The purpose of the unit is to provide emergency backup electrical power in the case of the unavoidable loss of commercial power.

***What emission limits and operating schedule are being requested?***

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

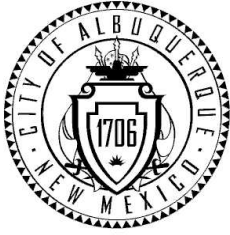
***How do I get additional information regarding this proposed application?***

For inquiries regarding the proposed source, contact:

- ISREAL TAVAREZ
- ISREAL.TAVAREZ@US.AF.MIL
- (505) 846-8546

For inquiries regarding the air quality permitting process, contact:

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



# 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: Fire Station No. 3

Contact: Isreal Tavarez; (505) 846-8546

Company/Business: U.S. Air Force – Kirtland Air Force Base

- 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:



# City of Albuquerque Environmental Health Department Air Quality Program



## Construction Permit (20.11.41 NMAC) Zoning Requirement Cover Letter

### **This Cover Letter Must Be Returned With The Application Along With All Required Attachments**

The Albuquerque-Bernalillo County Joint Air Quality Program, which administers and enforces local air quality laws for the City of Albuquerque (“City”) and Bernalillo County (“County”), on behalf of the City Environmental Health Department (“Department”).

Any person seeking a new air quality permit or a permit modification under 20.11.41 NMAC (Construction Permits) shall provide documentary proof that the proposed air quality permitted use of the facility’s subject property is allowed by the zoning designation of the City or County zoning laws, as applicable. Sufficient documentation may include (i) a zoning certification from the City Planning Department or County Department of Planning and Development Services, as applicable, if the applicant is subject to City or County zoning jurisdiction; or (ii) a zoning verification from both planning departments if the applicant is not subject to City or County zoning jurisdiction. A zone atlas map shall not be sufficient. At this time, applicants are not required to submit documentation for the subject property’s zoning designation when applying for an emergency permit, a new portable stationary source, a relocation of a portable stationary source, or a technical or administrative revision to an existing permit.

The Department will rule an application administratively incomplete if it is missing or has incorrect information. If the Department has ruled an application administratively incomplete three (3) times, the Department will deny the permit application. Any fees submitted for processing an application that has been denied will not be refunded. If the Department denies an application, a person may submit a new application and the fee required for a new application. The applicant has the burden of demonstrating that a permit should be issued.

The Department may require additional information that is necessary to make a thorough review of an application. At all times before the Department has made a final decision regarding the application, an applicant has a duty to promptly supplement and correct information the applicant has submitted in an application to the Department. The applicant’s duty to supplement and correct the application includes, but is not limited to, relevant information acquired after the applicant has submitted the application and additional information the applicant otherwise determines is relevant to the application and the Department’s review and decision. While the Department is processing an application, regardless of whether the Department has determined the application is administratively complete, if the Department determines that additional information is necessary to evaluate or make a final decision regarding the application, the Department may request additional information and the applicant shall provide the requested additional information.

**NOTICE REGARDING SCOPE OF A PERMIT:** The Department’s issuance of an air quality permit only authorizes the use of the specified equipment pursuant to the air quality control laws, regulations and conditions. Permits relate to air quality control only and are issued for the sole purpose of regulating the emission of air contaminants from said equipment. Air quality permits are not a general authorization for the location, construction and/or operation of a facility, nor does a permit authorize any particular land use or other form of land entitlement. It is the applicant’s/permittee’s responsibility to obtain all other necessary permits from the appropriate agencies, such as the City Planning Department or County Department of Planning and Development Services, including but not limited to site plan approvals, building permits, fire department approvals and the like, as may be required by law for the location, construction and/or operation of a facility. For more information, please visit the City Planning Department website at <https://www.cabq.gov/planning> and the County Department of Planning and Development Services website at <https://www.bernco.gov/planning>.

**Corporate and Facility Information:** This information shall match the information in the permit application.

Air Quality Permit Applicant Company Name: <b>U.S Air Force Kirtland Air Force Base</b>			
Facility Name: <b>Fire Station #3</b>			
Facility Physical Address: <b>28100 Pennsylvania Rd, SE.</b>	City: <b>Kirtland AFB</b>	State: <b>NM</b>	Zip: <b>87117-5270</b>
Facility Legal Description: <b>Replace Air Force Base Fire Station #3</b>			

**General Operation Information:** This information shall match the information in the permit application.

Permitting action being requested (please refer to the definitions in 20.11.41 NMAC):

- New Permit                       Permit Modification, Current Permit #:

**Attachment Information:** The location information provided to the City Planning Department or County Department of Planning and Development Services, as applicable, and reflected in the zoning certification or verifications, as applicable, shall be the same as the Facility location information provided to the Department in the air quality construction permit application.

<input checked="" type="checkbox"/> Zoning Certification Provided by: <b>County Planning</b>  <i>This is a use-specific certification.</i>  <u><b>City Planning Form:</b></u> <a href="https://www.cabq.gov/planning/code-enforcement-zoning">https://www.cabq.gov/planning/code-enforcement-zoning</a>  <u><b>County Planning Form:</b></u> <a href="https://www.bernco.gov/planning/planning-and-land-use/applications-forms/">https://www.bernco.gov/planning/planning-and-land-use/applications-forms/</a>	<input type="checkbox"/> City Zoning Verification  <input type="checkbox"/> County Zoning Verification  <u><b>City Planning Form:</b></u> <a href="https://www.cabq.gov/planning/code-enforcement-zoning">https://www.cabq.gov/planning/code-enforcement-zoning</a>  <u><b>County Planning Form:</b></u> <a href="https://www.bernco.gov/planning/planning-and-land-use/applications-forms/">https://www.bernco.gov/planning/planning-and-land-use/applications-forms/</a>
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# BERNALILLO COUNTY

Planning & Development Services  
 111 Union Square SE, Suite 100  
 Albuquerque, NM 87102  
 (505) 314-0350 Fax: (505) 314-0480  
 www.bernco.gov



## ZONING SECTION

### REQUEST FOR STATEMENT OF ZONAL CERTIFICATION/ VERIFICATION (ZNP)

PROPERTY OWNER'S NAME U.S. Air Force - Kirtland Air Force Base			PHONE 505-846-8546
OWNER'S ADDRESS 2050 Wyoming Blvd. SE Suite A-116B	CITY Kirtland AFB, NM	STATE NM	ZIP 87117-5663

APPLICANT'S NAME Kirtland Air Force Base			PHONE 505-846-8546
APPLICANT'S ADDRESS 377 MSG/CE Environmental, 2050 Wyoming Blvd. SE Suite A-116B	CITY Kirtland AFB, NM	STATE NM	ZIP 87117-5270

SITE ADDRESS 28100 Pennsylvania St. SE, Kirtland Air Force Base, NM, 87117		
DIRECTIONS 1.5 miles from the intersection of Wyoming SE and Pennsylvania SE going East to Highline Road		
LEGAL DESCRIPTION T9N R 4E SEC 9 640 AC		
ZONE MAP Unincorporated Area	CURRENT ZONE(S)	PROPERTY SIZE IN ACREAGE
UPC # 102105326726410144		
EXISTING BUILDING & USE		

STATEMENT INFORMATION: (check one)	GENERAL VERIFICATION <input type="checkbox"/> No charge	USE-SPECIFIC CERTIFICATION <input type="checkbox"/> (please explain) \$45.00
	_____ _____ _____	
STATEMENT SHOULD BE ADDRESSED TO:		

NAME Isreal Tavarez			
MAILING ADDRESS 377 MSG/CE Environmental, 2050 Wyoming Blvd. SE Suite A-116B	CITY Kirtland AFB, NM	STATE NM	ZIP 87117-5270

**ALL CERTIFICATION/ VERIFICATION STATEMENTS WILL BE SENT BY MAIL UNLESS OTHERWISE NOTED:**

- \_\_\_ Fax a copy to \_\_\_\_\_
- \_\_\_ Contact when completed; applicant will pick up certification statement
- \_\_\_ E-Mail to \_\_\_\_\_

\_\_\_\_\_ Applicant's signature

\_\_\_\_\_ Date



**County of Bernalillo**  
**State of New Mexico**  
**Planning & Development Services Department**

415 Silver Ave. SW, 2<sup>nd</sup> Floor  
Albuquerque, New Mexico 87102  
Office: (505) 314-0350 Fax: (505) 314-0480  
www.bernco.gov

December 9, 2022

U.S. Dept. of Army Headquarters  
2050 Wyoming Blvd Suite A-116B  
Kirtland Air Force Base  
Albuquerque, NM 87117

Re: Bernalillo County zoning regulations and federally owned parcels

To Whom It May Concern:

This letter shall certify that Bernalillo County zoning regulations are not applicable to U.S. Federal Government nor U.S. Federal Government entity owned properties. This includes properties located within the boundary of Kirtland Air Force Base. Bernalillo County is willing to assist federal entities with necessary permits, building permits for example, if approached by a federal entity.

This certification statement only references the applicability of the Zoning Ordinance as it applies to the aforementioned properties.

Do not hesitate to contact me if you have questions concerning this matter at 314-0499 or at [mgould@bernco.gov](mailto:mgould@bernco.gov).

Sincerely,

*Maggie Gould*

Maggie Gould  
Acting Zoning Administrator

Cc: [gvelez@perikin.com](mailto:gvelez@perikin.com)

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**COMMISSIONERS**

*Adriann Barboa, Chair, District 3*      *Walt Benson, Vice-Chair, District 4*  
*Debbie O'Malley, District 1*      *Steven Michael Quezada, District 2*      *Charlene E. Pyskoty, District 5*

**ELECTED OFFICIALS**

*Tanya R. Giddings, Assessor*      *Linda Stover, Clerk*      *Cristy J. Carbón-Gaul, Probate Judge*      *Manuel Gonzales III, Sheriff*      *Nancy M. Bearce, Treasurer*

**COUNTY MANAGER**

*Julie Morgas Baca*

# ZONING VERIFICATION REQUEST

## OVERVIEW

### HELPFUL HINTS

- Make sure the property is located within the Albuquerque city limits prior to requesting a verification statement.
- Provide the legal description of the property and/or the Uniform Property Code (UPC) number. This information helps staff to identify the property and expedite your request.
- Verification statements are processed in the order that they are received. Depending upon division workload and service demands, verification statements may take up to seven (7) days to complete.

For more information, contact:

City of Albuquerque  
Planning Department

Phone: (505) 924-3450

(505) 924-3860

[www.cabq.gov/planning](http://www.cabq.gov/planning)



**Code Compliance Manager:**  
**Andrew Garcia**

### What is a zoning verification statement?

A zoning verification statement is written confirmation provided by the city to confirm the current zoning designation of a particular piece of property.

### What type of information is provided in a zoning verification statement?

Verification statements contain the following information:

- The assigned address of the subject site
- The legal description of the property
- The zoning designation of the property
- The overlay district or sector plan affecting the property, if applicable

Zoning verification statements DO NOT include the following:

- Confirmation of the existing development's compliance with current zoning code requirements\*, conformance/non-conformance of existing uses or structures, or reference to building or fire codes
- Copies of site plans, special exceptions, certificates or other approvals
- The zoning designations of abutting or nearby properties
- Reference to existing zoning code violations

*\*Written confirmation of a property's compliance with current zoning standards, reference to nonconformance/rebuild allowances, and/or types of permitted development on a property are provided through our ZONAL CERTIFICATION process.*

### How do I obtain a zoning verification statement?

Complete the form on the reverse side of this brochure and return it to:

City of Albuquerque – Code Enforcement Division  
600 2<sup>nd</sup> St. NW, Suite 500

Albuquerque, New Mexico 87102  
(505) 924-3847

## THERE IS NO FEE FOR A ZONING VERIFICATION STATEMENT

### SELF-HELP RESOURCES

- **Zoning Code.** If you would like to view and/or obtain copies of the Comprehensive City Zoning Code, please visit the following website:
  - o [http://www.amlegal.com/albuquerque\\_nm/](http://www.amlegal.com/albuquerque_nm/)
- **Recorded Documents.** If you would like copies of official recorded documents such as site plans, special exceptions or certificates of occupancy, please make a Freedom of Information Act (FOIA) request to:
  - o [cityclerk@cabq.gov](mailto:cityclerk@cabq.gov)
- **GIS Data.** If you would like mapping or geographic information, please visit the following website:
  - o [www.cabq.gov/gis/advanced-map-viewer](http://www.cabq.gov/gis/advanced-map-viewer)
- **Related City Agencies.** If you would like information on City of Albuquerque building codes, fire codes or other development standards, please visit the following website:
  - o [www.cabq.gov](http://www.cabq.gov)







To whom it may concern,

The parcel 28100 Pennsylvania St. SE is not City of ABQ jurisdiction.

Thank you,  
Geraldine Delgado  
CABQ Code Enforcement

## **ATTACHMENT C. FACILITY LOCATION AND AERIAL PHOTOGRAPH**

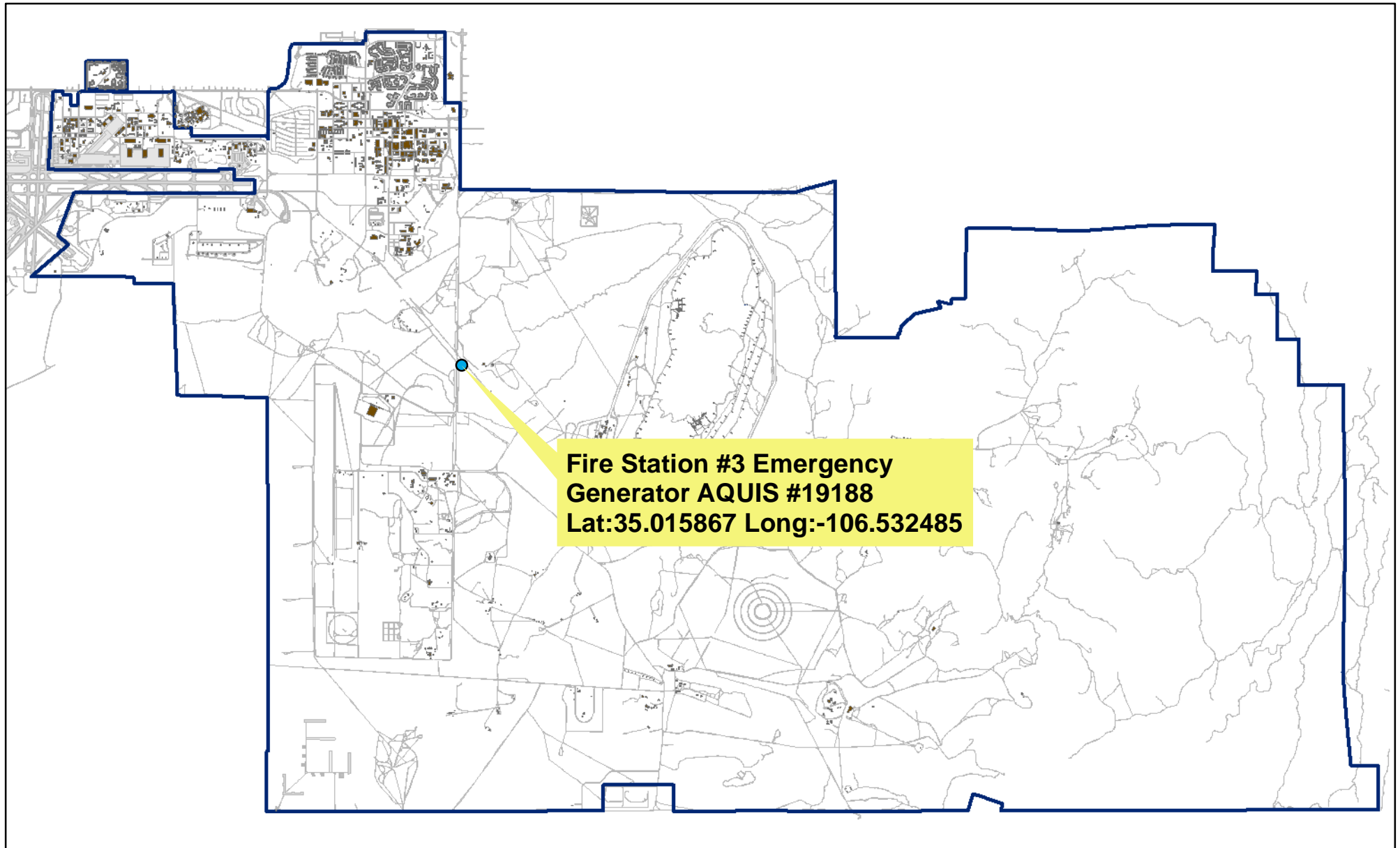
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Attachment C - Figure 1: Facility Location

Attachment C - Figure 2: Aerial Photograph of Process Locations

**Attachment C - Figure 1: Facility Location**

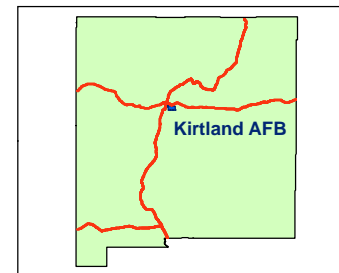




-  Air Emission Source
-  Buildings


# Kirtland AFB

## Generator Location Map



**Attachment C - Figure 2: Aerial Photograph of Process Locations**





**Fire Station #3 Emergency  
Generator AQUIS #19188  
Lat:35.015867 Long:-106.532485**