



Kirtland Air Force Base

20.11.41 NMAC Construction Permit Application
Emergency Generator
Space Development Agency
Optical Ground Entry Point

377 MSG/CE Environmental Kirtland AFB, New Mexico

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1.1 Executive Summary

This application is being submitted for an Authority to Construct (ATC) for an initial permit application for an emergency generator to be located at 80004 Lovelace Rd SE, Albuquerque, NM 87117.

In accordance with 20.11.41.13.E NMAC, this application submittal includes all 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, 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 36 kW Kubota V2403-CR-TIE4BG generator (Unit 19193)

The uncontrolled emissions are based on 8760 hours per year. Requested controlled emissions are based on 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. These emissions are included in the department's application forms.

2. DESCRIPTION OF FACILITY AND EMISSIONS INFORMATION

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

2.1 Description of the Facility

The backup generator's main function is to provide backup power to support operations if primary power is interrupted. There are comparatively minor actual emissions from the infrequent and intermittent emergency backup operations inherent to operations at this facility.

40 CFR 60 Subpart IIII is applicable to Stationary Compression Ignition Internal Combustion Engines constructed after July 11, 2005. Thus, this emergency generator will be subject to this regulation and will comply with regulation. Additionally, the unit is subject to 40 CFR 63 Subpart ZZZZ [National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines.

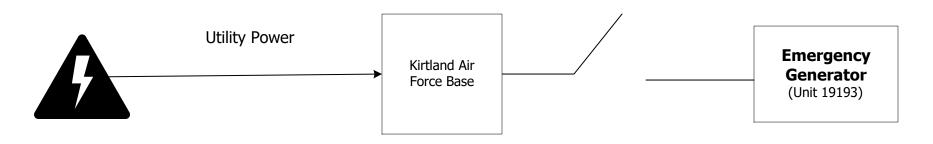
The unit will comply with the requirements for RICE at existing area sources.

2.2 Process Flow

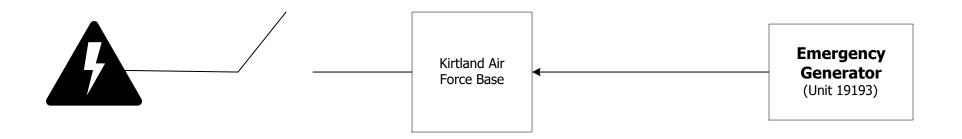
There is no specific process for this facility as the only source at this facility is the generator which provides power in the event of a PNM outage. The simplified process flow diagram represents the normal operating and loss of utility power conditions.

Emergency Generator Process Flow Diagram

Normal Operating Conditions



Loss of Utility Power



2.3 Air Pollutant Emissions and Calculation Methodology

2.3.1 Emergency-Fired Diesel Generator (Unit ID: 19193)

Emissions from the emergency generator are a result of the combustion of diesel fuel. $NO_x + NMHC$, CO, and PM combustion emissions are calculated based on the EPA's Nonroad Compression-Ignition Engines: Exhaust Emission Standards for Tier 4 units, EPA-420-B-16-022. To separate NOx from the NOx + NMHC emission factor, NOx is assumed to be 95% based on the California Environmental Protection Agency (CARB Revised date: DEC 18, 2011). To separate NMHC (VOCs) from the NOx + NMHC emission factor, NMHC is assumed to be 5% based on the same method NOx was determined above. The Tier 4 emission factor (g/kW-hr) was multiplied by the engine's generator standby rating (kW) and grams were converted to pounds.

 SO_2 emissions are estimated based on AP-42 Table 3.3-1 (generator rating hp <600hp) and an additional an additional assumption of 100% of sulfur into SO_2 . The AP-42 emission factor (lb/hp-hr) was multiplied by the engine horsepower (hp) to calculate hourly emissions.

HAPs are based on AP-42 Table 3.3-1 and 3.3-2. HAPs include formaldehyde, acetaldehyde, acrolein, benzene, toluene, xylene, propylene, 1,3-butadiene, and naphthalene. For HAP emissions, the heat value of 137,000 Btu/gal (from AP-42 Appendix A) and the manufacturer provided fuel usage of 2.25 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 uncontrolled emission rate in tons per year, the lb/hr rate was multiplied by 8760 hr/yr and converted to tons (1 ton = 2,000 lb). The controlled emission rate in ton per year, the lb/hr rate was multiplied by the assumption of 100 hours per year.

2.4 Emission Calculations

Kirtland Air Force Base- Emergency Generator

Uncontrolled Emissions

Unit	Unit Description		Unit Description		O _X	C	0	V	OC	S	02	PM	10	PM	l _{2.5}	HA	AP
Unit	Description	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy		
Unit 19193	Emergency Generator	0.36	1.56	0.44	1.91	0.019	0.082	0.10	0.43	2.38E-03	0.010	2.38E-03	0.010	1.96E-03	8.58E-03		
Total		0.36	1.56	0.44	1.91	0.019	0.082	0.10	0.43	2.38E-03	0.010	2.38E-03	0.010	1.96E-03	8.58E-03		

Controlled Emissions

Unit	Description	N	0 _x	С	0	V	OC	S	02	PN	110	PM	1 _{2.5}	H/	AP
Unit		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Unit 19193	Emergency Generator	0.36	0.018	0.44	0.022	0.019	0.001	0.10	0.005	0.0024	0.00012	0.0024	0.00012	0.0020	0.0001
Total		0.36	0.018	0.44	0.022	0.019	0.001	0.10	0.005	0.0024	0.00012	0.0024	0.00012	0.0020	0.0001

Kirtland Air Force Base- Emergency Generator

Unit: Unit 19193 Engine Make: Kubota V2403-CR-TIE4BG Engine Piaki: Engine Family: Uncontrolled Annual Hours of Operation: Requested Hours of Operation: Generator Standby Rating: hr/yr hr/yr kW 8760 100 36 Engine Nameplate Horsepower: 48.3 hp Fuel Usage: 2.25 gal/hr Diesel Heat Value^b: 137000.00 Btu/gal Emission Standard: EPA-420-B-16-022; Table 3.3-1 and Table 3.3-2

Criteria Pollutant and VOC Emissions

Pollutant1	Diesel Emission Factor (g/kW-hr)	Diesel Emission Factor (lb/hp-hr)	Potential Emissions (lb/hr)	Uncontrolled Emissions (tpy)	Controlled Emissions (tpy)	Emission Factor Source	Potential Emission Calculation
NO _X ^{1,2}	4.47	-	0.36	1.56	0.018	EPA-420-B-16-022	PTE = Emission factor (g/KW-hr) * Engine Power (kW) / Conversion (lb/ 453.59 g)
CO ₁	5.50	-	0.44	1.91	0.022	EPA-420-B-16-022	PTE = Emission factor (g/KW-hr) * Engine Power (kW) / Conversion (lb/ 453.59 g)
PM ₁₀ ^{1,3}	0.03	-	0.0024	0.010	0.00012	EPA-420-B-16-022	PTE = Emission factor (g/KW-hr) * Engine Power (kW) / Conversion (lb/ 453.59 g)
PM _{2.5} ^{1,3}	0.03	-	0.0024	0.010	0.00012	EPA-420-B-16-022	PTE = Emission factor (g/KW-hr) * Engine Power (kW) / Conversion (lb/ 453.59 g)
VOC ^{1,2}	0.24	-	0.019	0.082	0.001	EPA-420-B-16-022	PTE = Emission factor (g/KW-hr) * Engine Power (kW) / Conversion (lb/ 453.59 g)
SO ₂ ⁴	-	0.00205	0.099	0.43	0.005	AP 42: Table 3.3-1	PTE = Emission factor (lb/hp-hr) * Engine Power (hp)

HAP Emissions

Pollutant ⁵	Diesel Emission Factor (lb/MMBtu)	Potential Emissions (lb/hr)	Uncontrolled Emissions (tpv)	Controlled Emissions (tpv)	Emission Factor Source	Potential Emission Calculation
Benzene	9.33E-04	2.87E-04	0.0013	1.44E-05		PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Toluene	4.09E-04	1.26E-04	0.0006	6.29E-06	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Xylenes	2.85E-04	8.77E-05	0.0004	4.38E-06	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
1,3-Butadiene	3.91E-05	1.20E-05	0.00005	6.01E-07	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Formaldehyde	1.18E-03	3.63E-04	0.0016	1.82E-05	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Propylene	2.58E-03	7.94E-04	0.0035	3.97E-05	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Acetaldehyde	7.67E-04	2.36E-04	0.0010	1.18E-05	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Acrolein	9.25E-05	2.85E-05	0.00012	1.42E-06	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Naphthalene	8.48E-05	2.61E-05	0.00011	1.30E-06	AP-42 Table 3.3-2	PTE = Emission factor (lb/MMBtu) * Diesel Heat Value (BTU/gal) *Fuel Usage (gal/hr)
Total	6.37E-03	0.0020	0.0086	0.0001	-	-

¹ NOx, CO, PM, and VOC emission factors are referenced from Nonroad Compression-Ignition Engines: Exhaust Emission Standards for Tier 4 units, EPA-420-B-16-022.

Ex	Exhaust Parameters ⁷										
Stack Height	6.21	ft									
Exit Diameter	0.25	ft									
Stack Area	0.049	ft ²									
Exhaust Flow	48.31	ft ³ /min									
Exhaust Flow	0.81	ft ³ /s									
Exit Velocity	16.40	ft/s									
Temperature	440	۰F									

⁷ The velocity, diameter, and temperature were taken from the NMED missing stack parameter table.

² NOx and MHC are derived from NOx+NMHC based on the assumption of 95% NOX and 5% NMHC according to Table D-25 on California Environmental Protection Agency (CARB. Revised date: Dec 18. 2011)

PM conservatively assumed to be PM=PM_{in=}PM_{ix}

SO₂ is calculated based on 49 42 Table 3.1.

⁵ HAPs emissions factors are referenced from AP-42 Table 3.3-1 & 3.3-2. HAPs include: Formaldehvde, Acetaldehvde, Acrolein, Benzene, Toluene, Xvlene, Propvlene, 1.3-Butadiene, and Naohthalene.

⁶ Appendix A. AP 42.

2.5 Supporting Information

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

AP-42 Appendix A: Miscellaneous Data and Conversion Factors

40 CFR 60.4201 (40 CFR 1039.101) Federal New Source Performance Standards (NSPS) for Stationary Non-Emergency Diesel Engines, Tier 4

Generator Specifications

CARB Guidance

Table 3.3-1. EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES^a

		ne Fuel 01, 2-03-003-01)	Diese (SCC 2-02-001-	el Fuel 02, 2-03-001-01)	
Pollutant	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)	EMISSION FACTOR RATING
NO _x	0.011	1.63	0.031	4.41	D
СО	6.96 E-03 ^d	0.99^{d}	6.68 E-03	0.95	D
SO _x	5.91 E-04	0.084	2.05 E-03	0.29	D
PM-10 ^b	7.21 E-04	0.10	2.20 E-03	0.31	D
CO ₂ °	1.08	154	1.15	164	В
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	Е
Crankcase	4.85 E-03	0.69	4.41 E-05	0.01	Е
Refueling	1.08 E-03	0.15	0.00	0.00	Е

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

PM-10 = particulate matter less than or equal to 10 μ m aerodynamic diameter. An particulate is assumed to be $\leq 1~\mu$ m in size. Assumes 99% conversion of carbon in fuel to CO₂ 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. 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^a

EMISSION FACTOR RATING: E

Pollutant	Emission Factor (Fuel Input) (lb/MMBtu)			
Benzene ^b	9.33 E-04			
Toluene ^b	4.09 E-04			
Xylenes ^b	2.85 E-04			
Propylene	2.58 E-03			
1,3-Butadiene ^{b,c}	<3.91 E-05			
Formaldehyde ^b	1.18 E-03			
Acetaldehyde ^b	7.67 E-04			
Acrolein ^b	<9.25 E-05			
Polycyclic aromatic hydrocarbons (PAH)				
Naphthalene ^b	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			

^a 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.

^b Hazardous air pollutant listed in the *Clean Air Act*.

^c 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 ³			
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 ²	0.16	inches ²			
inch ²	6.45	centimeters ²			
foot ²	0.09	meters ²			
meter ²	1.2	yards ²			
yard ²	0.84	meters ²			
mile ²	2.59	kilometers ²			
centimeter ³	0.061	inches ³			
inch ³	16.39	centimeters ³			
foot ³	283.17	centimeters ³			
foot ³	1728	inches ³			

SOME USEFUL WEIGHTS AND MEASURES (cont.)

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

	Heating	g Value	Sulfur	Ash	
Type Of Fuel	kcal	Btu	% (by weight)	% (by weight)	
Solid Fuels					
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	4,000/1b	N	1-2	
Bark (@ 50% moisture)	2,492/kg	4,500/lb	N	1-3 ^b	
Coke, Byproduct	7,380/kg	13,300/lb	0.5-1.0	0.5-5.0	
Liquid Fuels					
Residual Oil	$9.98 \times 10^6 / \text{m}^3$	150,000/gal	0.5-4.0	0.05-0.1	
Distillate Oil	$9.30 \times 10^6 / \text{m}^3$	140,000/gal	0.2-1.0	N	
Diesel	$9.12 \times 10^6 / \text{m}^3$	137,000/gal	0.4	N	
Gasoline	$8.62 \times 10^6 / \text{m}^3$	130,000/gal	0.03-0.04	N	
Kerosene	$8.32 \times 10^6 / \text{m}^3$	135,000/gal	0.02-0.05	N	
Liquid Petroleum Gas	$6.25 \times 10^6 / \text{m}^3$	94,000/gal	N	N	
Gaseous Fuels					
Natural Gas	9,341/m ³	1,050/SCF	N	N	
Coke Oven Gas	5,249/m ³	590/SCF	0.5-2.0	N	
Blast Furnace Gas	890/m ³	100/SCF	N	N	

a N = negligible.
b Ash content may be considerably higher when sand, dirt, etc., are present.



Nonroad Compression-Ignition Engines: Exhaust Emission Standards

	Rated Power (kW)	Tier	Model Year	NMHC (g/kW-hr)	NMHC + NOx (g/kW-hr)	NOx (g/kW-hr)	PM (g/kW-hr)	CO (g/kW-hr)	Smoke ^a (Percentage)	Useful Life (hours /years) ^b	Warranty Period (hours /years) b
		1	2000- 2004	-	10.5	-	1.0	8.0			
	kW < 8	2	2005- 2007	-	7.5	-	0.80	8.0		3,000/5	1,500/2
		4	2008+	-	7.5	-	0.40 °	8.0			
	0.4114/	1	2000- 2004	-	9.5	-	0.80	6.6			
	8 ≤ kW < 19	2	2005- 2007	-	7.5	-	0.80	6.6		3,000/5	1,500/2
		4	2008+	-	7.5	-	0.40	6.6			
		1	1999- 2003	-	9.5	-	0.80	5.5			
	19 ≤ kW < 37	2	2004- 2007	-	7.5	-	0.60	5.5		5,000/7 d	3,000/5 °
	< 31	4	2008- 2012	-	7.5	-	0.30	5.5			
			2013+	-	<mark>4.7</mark>	-	0.03	5.5			
		1	1998- 2003	-	-	9.2	-	-			
		2	2004- 2007	-	7.5	-	0.40 5.0				
Federal	37 ≤ kW < 56	3 ^f	2008- 2011	-	4.7	-	0.40	5.0	20/15/50		
reactar		4 (Option 1) ^g	2008- 2012	-	4.7	-	0.30	5.0			
		4 (Option 2) ^g	2012	-	4.7	-	0.03	5.0			
		4	2013+	-	4.7	-	0.03	5.0			
		1	1998- 2003	-	-	9.2	-	-			
	FC < 10M	2	2004- 2007	-	7.5	-	0.40	5.0		8,000/10	3,000/5
	56 ≤ kW < 75	3	2008- 2011	-	4.7	-	0.40	5.0			
		4	2012- 2013 ^h	-	4.7	-	0.02	5.0			
			2014+ i	0.19	-	0.40	0.02	5.0			
		1	1997- 2002	-	-	9.2	-	-			
	75 ~ 134/	2	2003- 2006	-	6.6	-	0.30	5.0			
	75 ≤ kW < 130	3	2007- 2011	-	4.0	-	0.30	5.0			
		4	2012- 2013 ^h	-	4.0	-	0.02	5.0			
			2014+	0.19	-	0.40	0.02	5.0			

	Rated Power (kW)	Tier	Model Year	NMHC (g/kW-hr)	NMHC + NOx (g/kW-hr	NOx (g/kW-hr	PM (g/kW-hr	CO (g/kW-hr)	Smoke ^a (Percentage)	Useful Life (hours /years) b	Warranty Period (hours /years) b	
	130 ≤ kW < 225	1	1996- 2002	1.3 ^j	-	9.2	0.54	11.4				
		2	2003- 2005	-	6.6	-	0.20	3.5				
		3	2006- 2010	-	4.0	-	0.20	3.5				
		4	2011- 2013 ^h	1	4.0	-	0.02	3.5				
			2014+ i	0.19	-	0.40	0.02	3.5				
		1	1996- 2000	1.3 ^j	-	9.2	0.54	11.4				
		2	2001- 2005	-	6.4	-	0.20	3.5				
	225 ≤ kW < 450	3	2006- 2010	-	4.0	-	0.20	3.5		8,000/10	3,000/5	
		4	2011- 2013 ^h	-	4.0	-	0.02	3.5	20/15/50			
			2014+ i	0.19	-	0.40	0.02	3.5				
	450 ≤ kW < 560	1	1996- 2001	1.3 ^j	-	9.2	0.54	11.4				
Federal		2	2002- 2005	-	6.4	-	0.20	3.5				
		3	2006- 2010	-	4.0	-	0.20	3.5				
			4	2011- 2013 ^h	-	4.0	-	0.02	3.5			
			2014+ i	0.19	-	0.40	0.02	3.5				
		1	2000- 2005	1.3 ^j	-	9.2	0.54	11.4				
	560 ≤ kW	2	2006- 2010	•	6.4	-	0.20	3.5				
	< 900	4	2011- 2014	0.40	-	3.5	0.10	3.5				
			2015+ i	0.19	-	3.5 ^k	0.04 1	3.5				
		1	2000- 2005	1.3 ^j	-	9.2	0.54	11.4				
	kW > 900	2	2006- 2010	-	6.4	-	0.20	3.5				
		4	2011- 2014	0.40	-	3.5 ^k	0.10	3.5				
			2015+ i	0.19	-	3.5 ^k	0.04 1	3.5				

Notes on following page.

Notes:

- For Tier 1, 2, and 3 standards, exhaust emissions of nitrogen oxides (NOx), carbon monoxide (CO), hydrocarbons (HC), and non-methane hydrocarbons (NMHC) are measured using the procedures in 40 Code of Federal Regulations (CFR) Part 89 Subpart E. For Tier 1, 2, and 3 standards, particulate matter (PM) exhaust emissions are measured using the California Regulations for New 1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines.
- For Tier 4 standards, engines are tested for transient and steady-state exhaust emissions using the procedures in 40 CFR Part 1039 Subpart F. Transient standards do not apply to engines below 37 kilowatts (kW) before the 2013 model year, constant-speed engines, engines certified to Option 1, and engines above 560 kW.
- Tier 2 and later model naturally aspirated nonroad engines shall not discharge crankcase emissions into the atmosphere unless these emissions are permanently routed into the exhaust. This prohibition does not apply to engines using turbochargers, pumps, blowers, or superchargers.
- In lieu of the Tier 1, 2, and 3 standards for NOX, NMHC + NOX, and PM, manufacturers may elect to participate in the averaging, banking, and trading (ABT) program described in 40 CFR Part 89 Subpart C.
- a Smoke emissions may not exceed 20 percent during the acceleration mode, 15 percent during the lugging mode, and 50 percent during the peaks in either mode. Smoke emission standards do not apply to single-cylinder engines, constant-speed engines, or engines certified to a PM emission standard of 0.07 grams per kilowatt-hour (g/kW-hr) or lower. Smoke emissions are measured using procedures in 40 CFR Part 86 Subpart I.
- **b** Useful life and warranty period are expressed hours and years, whichever comes first.
- c Hand-startable air-cooled direct injection engines may optionally meet a PM standard of 0.60 g/kW-hr. These engines may optionally meet Tier 2 standards through the 2009 model years. In 2010 these engines are required to meet a PM standard of 0.60 g/kW-hr.
- d Useful life for constant speed engines with rated speed 3,000 revolutions per minute (rpm) or higher is 5 years or 3,000 hours, whichever comes first.

- e Warranty period for constant speed engines with rated speed 3,000 rpm or higher is 2 years or 1,500 hours, whichever comes first.
- f These Tier 3 standards apply only to manufacturers selecting Tier 4 Option 2. Manufacturers selecting Tier 4 Option 1 will be meeting those standards in lieu of Tier 3 standards.
- g A manufacturer may certify all their engines to either Option 1 or Option 2 sets of standards starting in the indicated model year. Manufacturers selecting Option 2 must meet Tier 3 standards in the 2008-2011 model years.
- h These standards are phase-out standards. Not more than 50 percent of a manufacturer's engine production is allowed to meet these standards in each model year of the phase out period. Engines not meeting these standards must meet the final Tier 4 standards.
- i These standards are phased in during the indicated years. At least 50 percent of a manufacturer's engine production must meet these standards during each year of the phase in. Engines not meeting these standards must meet the applicable phase-out standards.
- **j** For Tier 1 engines the standard is for total hydrocarbons.
- **k** The NOx standard for generator sets is 0.67 g/kW-hr.
- I The PM standard for generator sets is 0.03 g/kW-hr.

Citations: Code of Federal Regulations (CFR) citations:

- 40 CFR 89.112 = Exhaust emission standards
- 40 CFR 1039.101 = Exhaust emission standards for after 2014 model year
- 40 CFR 1039.102 = Exhaust emission standards for model year 2014 and earlier
- 40 CFR 1039 Subpart F = Exhaust emissions transient and steady state test procedures
- 40 CFR 86 Subpart I = Smoke emission test procedures
- 40 CFR 1065 = Test equipment and emissions measurement procedures

30 kW Triton Tier 4 Final Diesel Generator TP-K30-T4F



Triton offers a complete line of Tier 4 Final diesel generators from 15 to 1500 kVA. Powerful and Dependable, our Tier 4 products can be open, mobile or stationary, depending upon your requirement. Powering everything from agriculture to health care to government institutions.

Kubota





FEATURES

- ✓ Fully Integrated T4F Power Generation System
- ✓ Prototype-tested, Factory Built and Fully Tested
- ✓ Open-Source Components and Controls
- √ 125% Full Containment for Fluids
- ✓ Available in Open, Enclosed and Mobile
- ✓ Sub-Base Tank up to 45 hours

OPTIONS:

- Extended UL Fuel Tank
- Paralleling Systems
- UL2200 and CSA Available
- Extended Warranty
- Trailer with Extended Fuel Capacity
- Variety of Connections Available
- ° Over 100 different options available (see below)



OUTPUT RATINGS

Available Voltages	Sta	ndby	Pr	rime
at 60Hz	kW	kVA	kW	kVA
Single Phase, 1.0 Power Factor 110/220, 120/240	30	30	27	27
Three Phase, 0.8 Power Factor 120/208, 277/480 *Additional Voltages Available	30	38	28	35

OUR TIER FOUR FINAL ENGINES

Only the highest quality Final Tier 4 engines power our mobile generators, offering the maximum performance and versatility. We utilize Kubota (15 to 40 kVA), John Deere (55 to 300 kVA), Scania (350 to 550 kVA) and Volvo (625 to 1500 kVA). Countless hours of lab testing, field prototype machines, and rugged off-highway applications have proven you don't have to sacrifice performance to comply with emissions standards.

OUR ALTERNATORS

Triton Mobile are equipped with Leroy-Somer alternators. Utilizing the latest technologies and with outputs extending from 5 to 5,000 kW, these alternators are designed to deliver superior efficiencies in Standby, Continuous and Prime generator applications worldwide.

30 kW Triton Tier 4 Final Diesel Generator TP-K30-T4F



ENGINE INFORMATION

Engine Make	Kubota
Model	V2403-CR-TIE4BG
Tier Rating	Tier 4 Final
Engine Speed (RPM)	1800
Engine Power Output at rated RPM	39 kWm / <mark>48.3 HP</mark>
Cooling	Radiator Cooled
Aspiration	Turbocharged
Total Displacement (Liter)	2.4
No. of Cylinders and Build	4, in line
Bore and Stroke	87 x 102.4
Compression Ratio	-
Governor	Electronic
Fuel Consumption (L/hr)	
Full Load	8.5
75% Load	6.4
50% Load	4.3
Oil Capacity (Liter)	13
Coolant Capacity (Liter)	11

ALTERNATOR INFORMATION

Manufacturer	Leroy Somer		
Design	Brushless single bearing, revolving field		
Stator	2/3 pitch		
Rotor	Single bearing, flexible disc		
Insulation System	Class H		
Standard Temperature Rise	125 -163°C Continuous		
Exciter Type	Self Excited		
Phase Rotation	A (U), B (V), C (W)		
Alternator Cooling	Direct drive centrifugal blower fan		
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load < 5%		
Telephone Influence Factor (TIF)	<50 per NEMA MG1-22.43		
Telephone Harmonic Factor (THF)	<2%		

DEEP SEA 7420 DIGITAL CONTROLLER

- Adaptable for a wide variety of single gen-set applications, supporting diesel, gas and petrol engines.
- Monitors engine speed, oil pressure, coolant temperature, frequency, voltage, current, power and fuel level, giving you comprehensive engine and alternator protection.
- Easy USB configuration via the DSE PC Suite or directly through the controller's panel.
- Additional Synchronization Model (DSE8510) available upon request on customized equipment.



30 kW Triton Tier 4 Final Diesel Generator TP-K30-T4F



STANDARD ITEMS

- ✓ Engine System:
 - o Oil Drain Pump
 - o Tier 4 Final Certification
 - o Electronic Governor
 - o Full Fluid Containment
- ✓ Fuel System
 - Fuel Valve for External Tank
 - o Primary Fuel Filter
 - Fuel Capacity: XXX liters
 - Flexible Fuel Lines
- ✓ Electrical System
 - Side Mounted Control Panel
 - Unit Mounted Mainline Circuit Breaker
 - Battery Switch
- ✓ Cooling System
 - 45° C Ambient Temperature Rating
 - o 50/50 Ethylene glycol antifreeze
 - Radiator Drain Extension

- ✓ Generator Set
 - Mounted on Heavy Duty Steel Base
 - Full Factory Load Bank Testing
 - o Sub-Base Lifting Points
 - o Forklift Pockets for Easy Transport
- ✓ Alternator
 - 12 Lead Leroy-Somer Alternator
- ✓ Enclosure
 - o Stainless Steel Hinges and Locks
 - o Ultra-Quiet Enclosure
 - Powder Coated Finish
 - Easy Access to All Service Points
 - Fully Sound Attenuated (66db at 7 meters)
 - Advanced Water and Dust Proofing

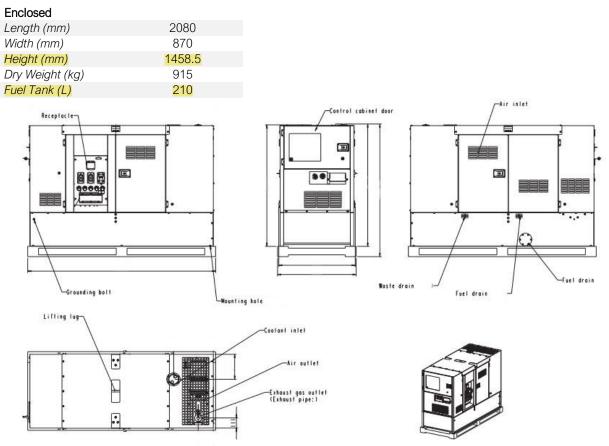
OPTIONAL ITEMS

- ° Engine System:
 - Upgraded Exhaust Silencers (Hospital, Residential, Critical)
 - Heavy Duty Air filters
 - o Oil Heater
 - Block Heater (Circulating, up to 5000 Watt)
- Fuel System
 - o Fuel Cooling System
 - Extended Fuel Tank
- ° Electrical System
 - o 2,3 or 4 Position Voltage Switch
 - Battery Charger (Standard and Float Type)
 - o Additional Circuit Breakers
 - Shunt Trips
 - Electrically Controlled Breakers
 - o Paralleling Systems
 - Electrical Connections (Cam-Locks, Refer Plugs, Distro Panel, and more)

- Cooling System
 - Upgraded Radiator Systems
 - Marine Grade Radiator
- Generator Set
 - Seismic Isolators
 - o Remote Mounted Control System
- Enclosure
 - o 20 and 40' Container Packages
 - Custom Paint Colors
- Alternator
 - Marinization (2-3 times dipped)
 - o Permanent Magnetic Generator
- Trailer
 - Standard Trailer
 - Trailer with Extended Fuel Tank
 - o Rhino Coating
- Additional Options
 - Please inquire, Triton can assist in engineering nearly any option



WEIGHT AND DIMENSIONS



"Drawings are representative only and do not reflect actual product

ENCLOSURE FEATURES AND BENEFITS

- ✓ Made of high-quality steel and completely powder coated. The paint has a three-step process ensuring protection against erosion, scratching, and corrosion.
- ✓ Advanced water and dust proof design of service doors and canopy board, effectively stopping intrusion from natural elements.
- ✓ Noise reduction enhanced by an exhaust silencer and high quality interior acoustic lining that is sound absorbent and fire-retardant
- ✓ Built for easy installation, maintenance and transport
- ✓ Lifting eyes located at base make it easier to move and transport.
- ✓ Easy to Maintain with Access on both sides, includes Integral base drainage outlets, modular enclosure for easy parts replacement.

TRITON POWER CORP 8511 NW 61 STREET MIAMI, FL USA 305-592-6300 Fax: 305-592-5900

email: info@tritonpower.com website: tritonpower.com

Table 40: Missing Stack Parameter Substitutions for Other Point Sources

NO ₂ Rate (lb/hr)	Height (m)	Temperature (K)	Velocity (m/s)	Diameter (m)
21.7	7	730	28	0.3
21	6	730	28	0.3
20	5.5	730	28	0.3
19	4.5	730	28	0.3
18	4.5	730	27	0.3
17	4.5	730	27	0.3
16	4.5	730	27	0.25
15	4.5	730	27	0.25
14	4.5	700	22	0.25
13	4.5	700	22	0.25
12	4.5	700	22	0.2
11	4.5	700	22	0.2
10	4.5	700	22	0.2
9	4.5	700	20	0.2
8	4.5	700	18	0.2
7	4.5	700	14	0.2
6	4.5	650	14	0.2
5	4.5	500	5	0.2
4	4	500	5	0.1
3	3.5	500	5	0.1
2	3	500	5	0.0762
1	2	<mark>500</mark>	5	0.0762

For GCP 2, 3, and 5 permits with 95 tons/year of PM_{2.5} emissions, use the following values:

TSP emission rate = 95 TPY

 PM_{10} emission rate = 71.25 TPY (TSP X 0.75)

 $PM_{2.5}$ emission rate = 17.875 TPY ($PM_{10} \times 0.25$) = (TSP × 0.1875)

For volume sources with missing parameters:

Maximum release height = 10 m

Minimum release height = 1 m

Missing release height = PM10 Rate x 20 m/(lb/hr)

Initial vertical dimension = release height x 0.93

No limit to the maximum lateral dimension.

Lateral dimension = PM10Rate x 10 m/(lb/hr)

Minimum Lateral Dimension = 0.47 m

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

Policy

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

Effective date

June 28, 2004

Definitions

The following is a list of associated definitions.

- *CI Engine* Compression Ignition Engine is an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle.
- *HC* Organic compound consistently entirely of hydrogen and carbon.
- *NMHC* Non-Methane Hydrocarbon is the sum of all hydrocarbon air pollutants except methane.
- *NOx* Nitrogen Oxides are compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen, which are typically created during combustion processes.

Contact

Randy Frazier, x4672

Document Control

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

Approval

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

3. OPERATIONAL PLAN – AIR EMISSIONS DURING SSM

This emergency generator will be located at 80004 Lovelace Rd SE on Kirtland Air Force Base (Kirtland AFB). As soon as a malfunction occurs, the facility will shut down applicable equipment as 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 each piece of equipment regarding specific steps Kirtland AFB 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. Kirtland AFB 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 by ensuring achievement of good combustion.
- ▶ Monitoring the opacity and color of the exhaust gasses and taking the unit offline for repairs upon the observation of abnormal soot coming out of the stacks.

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. Kirtland AFB 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 gasses and taking the unit offline for repairs upon the observation of abnormal soot coming out of the stacks.

3.1.3 Emergency Generator Maintenance

Kirtland AFB ensures the emergency generator RICE is appropriately maintained according to the manufacturer's recommendations. Kirtland AFB carefully monitors the engines 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 stacks.

4. AIR DISPERSION MODELING ANALYSIS

N/A- No modeling is required since the facility consists of an emergency generator.

APPENDIX A. APPLICATION FORMS

A.1 Permit Application Checklist



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 20.11.81 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	N/A ¹	Waived ²
(1)	Request a pre-application meeting with the Department using the pre-application meeting request form. Include a copy of the request form submitted to the Department.			
(2)	Attend the pre-application meeting. Date of pre-application meeting:		\boxtimes	
	Pre-application meeting agenda and public notice sign checklists included with application?		\boxtimes	

^{1.} Not Applicable

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

Item	Included in Application	N/A ¹	Waived ²
(1) Provide public notice in accordance with the regulation, including by cert electronic copy to the designated representative(s) of the recognized neight associations and recognized coalitions that are within one-half mile of the boundaries of the property on which the source is or is proposed to be located.	nborhood exterior		
 Contact list of representative(s) of recognized neighborhood association recognized coalitions cannot be more than three months old from the apsubmittal date. Include contact list provided by Department in application submittal. 			
Provide notice using the Notice of Intent to Construct form and Applie Cover Letter.	cant Notice		
(2) In accordance with the regulation, post and maintain in a visible location a proof sign provided by the Department. Include pictures in application.	weather 🖂		
Documentary proof of all public notice requirements listed above and required by 20.11.41.13(E)(15) included with application?	y 🖂		

Not Applicable; For emergency permits, the public notice requirements in 20.11.41.24 NMAC shall apply instead.

20.11.41.13(D) NMAC

Item	Included in Application
A person who is seeking a construction permit pursuant to 20.11.41 NMAC shall complete a permit application and file one complete original and one duplicate copy with the Department.	\boxtimes
A high-quality electronic duplicate copy is required by the Department to speed up review and allow for the Department public notice to be posted online. The electronic copy must be an exact duplicate of the hardcopy original, including pages with signatures such as the application certification page. Note: Do not include financial information, such as a copy of a check, in the electronic PDF.	\boxtimes
The electronic submittal on thumb drive, unless alternate method is allowed by the Department, must also include modeling files, if applicable, and emission calculations file(s) in Microsoft Excel-compatible format.	

^{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.

^{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	N/A ¹	Waived ²
(1)	A complete permit application on the most recent form provided by the Department.	\boxtimes		
(2)	The application form includes:			
	a. The applicant's name, street and post office address, and contact information;	\boxtimes		
	b. The facility owner/ operator's name, street address and mailing address, if different from the applicant;	\boxtimes		
	c. The consultant's name and contact information, if applicable;	\boxtimes		
	d. All information requested on the application form is included (<i>i.e.</i> , the form is complete).	\boxtimes		
(3)	The date the application was submitted to the Department.	\boxtimes		
(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 National Ambient Air Quality Standards (NAAQS). See 20.11.1 NMAC. If you are modifying an existing source, the modeling must include the emissions of the entire source to demonstrate the impact the new or modified source(s) will have on existing plant emissions.			
	 The air dispersion model has been executed pursuant to a protocol that was approved in advance by the Department. 		\boxtimes	
	c. Air dispersion modeling approved (or 2 nd denied) protocol date:		\boxtimes	
	d. Basis or source for each emission rate (including manufacturer's specification sheets, AP-42 section sheets, test data, or corresponding supporting documentation for any other source used).	\boxtimes		
	e. All calculations used to estimate potential emission rates and controlled/proposed emissions.	\boxtimes		
	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.	\boxtimes		
	g. Fuel data for each existing and/or proposed piece of fuel burning equipment.	\boxtimes		
	h. Anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.	\boxtimes		
	i. Stack and exhaust gas parameters for all existing and proposed emission stacks.	\boxtimes		
(5)	An operational and maintenance strategy detailing:	\boxtimes		
	a. the 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;	\boxtimes		
	b. the nature of emissions during routine startup or shutdown of the source and the source's air pollution control equipment; and	\boxtimes		
	c. the steps the applicant will take to minimize emissions during routine startup or shutdown.	\boxtimes		
(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.			

Revised November 2023 Page 3 of 4

	Item	Included in Application	N/A ¹	Waived ²
(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 to by the Department in writing.			
(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.	\boxtimes		
(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.	\boxtimes		
(10)		\boxtimes		
(11)	The maximum and normal operating time schedules of the source after completion of construction or modification, as applicable.	\boxtimes		
(12)	Any other relevant information as the Department may reasonably require, including without limitation:	\boxtimes		
	a. Provide an applicability determination for all potentially applicable federal regulations.	\boxtimes		
	b. 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 departments if the property is not subject to City or County zoning jurisdiction. ³ A zone atlas map shall not be sufficient.	×		
	c. Compliance History Disclosure Form ⁴	\boxtimes		
(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.	\boxtimes		
(14)	A check or money order for the appropriate application fee or fees required by 20.11.2 NMAC, <i>Fees</i> . (Online fee payments are now accepted as well. Application must be submitted first, then Department will provide invoice for online payment.) Not Applicable	\boxtimes		

- 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. Applicants are not required to submit documentation for the subject property's zoning designation when applying for a relocation of a portable stationary source, or a technical or administrative revision to an existing permit.
- 4. Required for applications filed pursuant to the following regulations: Construction Permits (20.11.41 NMAC); Operating Permits (20.11.42 NMAC); Nonattainment Areas (20.11.60 NMAC); Prevention of Significant Deterioration (20.11.61 NMAC); and Acid Rain (20.11.62 NMAC); except this Form shall not be required for asbestos notifications under 20.11.20.22 NMAC, and this Form shall only be required for administrative permit revision (20.11.41.28(A) NMAC) and administrative permit amendments (20.11.42.12(E)(1) NMAC) when the action requested is a transfer of ownership. Air Quality Program staff can answer basic questions about the Compliance History Disclosure Form but will not provide specific advice about which boxes to check or whether information must be disclosed. The decision about how to answer a question and whether there is information to disclose is the responsibility of applicants/permittees.

A.2 Pre-Application Checklist

From: MUNOZ-DYER, CARINA G CIV USAF AFGSC 377 MSG/CEIEC

To: <u>McKinstry, Michael W.</u>

Subject: Waiver Request - KAFB SDA Emergency Generator Application, Pre-application meeting request

Date: Thursday, October 10, 2024 1:09:00 PM

Hello Michael.

As I mentioned earlier today, we are submitting an application for an emergency generator.

I am respectfully requesting a waiver to the pre-application meeting requirement. This generator will be supporting our Space Development Agency and we will be requesting to operate a maximum of 100 hrs per year.

Thanks Carina Spoke to Mr. McKinstry 15 Oct 2024 on the phone regarding the waiver request,he said he was okay with it.

Carina G. Munoz-Dyer 377 MSG/CEIEC, Air Quality Program Manager 2050 Wyoming Blvd SE, B20685, Room A-106 Kirtland AFB, NM 87117 Carina.munoz-dyer@us.af.mil DSN 246-8781 – Office 505-846-8781 Telework Tuesdays and Fridays

A.3 Permit Application Review Fees Form



City of Albuquerque Environmental Health Department Air Quality Program



Permit Application Review Fee Instructions

All source registration and construction 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 modification 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:

- deliver it in person to the Albuquerque Environmental Health Department, 3rd floor, Suite 3023, Albuquerque-Bernalillo County Government Center, south building, One Civic Plaza NW, Albuquerque, NM or,
- 2. mail it to Albuquerque Environmental Health Department, Air Quality Program, Permitting Division, P.O. Box 1293, Albuquerque, NM 87103.
- 3. online fee payments are now accepted as well. Application must be submitted first, then Department will provide invoice for online payment.

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, 2024 – December 31, 2024

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	Company Name U.S. Air Force - Kirtland Air Force Base (KAFB)				
Company Address 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-106, Kirtland Al NM 87117					
Facility Name Space Development Agency Optical Ground Entry Point					
Facility Address 80004 Lovelace Rd SE, Kirtland AFB, NM 87117					
Contact Person Isreal Tavarez, Chief, Environmental Management					
Contact Person Phone Number	(505) 846-8546				
Are these application review fees for an within the City of Albuquerque or Berna	Yes 🗌	No 🔀			
If yes, what is the permit number associa	Permit # N/A				
Is this application review fee for a Quali 20.11.2 NMAC? (See Definition of Quali	Yes 🗌	No 🔀			

II. STATIONARY SOURCE APPLICATION REVIEW FEES:

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

Check All That Apply	Stationary Sources	Review Fee	Program Element						
Air Quality Notifications									
	AQN New Application	\$680.00	2801						
	AQN Technical Amendment	\$371.00	2802						
	AQN Transfer of a Prior Authorization	\$371.00	2803						
	Not Applicable								
	Stationary Source Review Fees (Not Based on Proposed Allowable Emission Rate)								
	Source Registration required by 20.11.40 NMAC		2401						
\boxtimes	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		2301						
	Not Applicable	See Sections Below							
Stationa	ry Source Review Fees (Based on the Proposed Allowable Emission Rate for the single	highest fee pol	llutant)						
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	\$1,039.00	2302						
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	\$2,078.00	2303						
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	\$4,156.00	2304						
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	\$6,324.00	2305						
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	\$8,312.00	2306						
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	\$10,390.00	2307						

		-	_						
Federal	Federal Program Review Fees for each subpart (In addition to the Stationary Source Application Review Fees above)								
	40 CFR 60 – "New Source Performance Standards" (NSPS)	\$1,385.00	2308						
	40 CFR 61 – "Emission Standards for Hazardous Air Pollutants (NESHAPs)	\$1,385.00	2309						
	40 CFR 63 – (NESHAPs) Promulgated Standards	\$1,385.00	2310						
	40 CFR 63 – (NESHAPs) Case-by-Case MACT Review	\$13,854.00	2311						
	20.11.61 NMAC – Prevention of Significant Deterioration (PSD) Permit	\$6,927.00	2312						
	20.11.60 NMAC – Non-Attainment Area Permit	\$6,927.00	2313						
	Not Applicable	Not Applicable							

Not Applicable

III. MODIFICATION TO EXISTING PERMIT APPLICATION REVIEW FEES:

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

Check All That Apply	Modifications	Review Fee	Program Element							
	Modification Application Review Fees (Not Based on Proposed Allowable Emission Rate)									
	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	\$1,385	2321							
\boxtimes	Not Applicable	See Sections Below								
	Modification Application Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pol	lutant)								
	Proposed Allowable Emission Rate Equal to or greater than 1 tpy and less than 5 tpy	\$1,039.00	2322							
	Proposed Allowable Emission Rate Equal to or greater than 5 tpy and less than 25 tpy	\$2,078.00	2323							
	Proposed Allowable Emission Rate Equal to or greater than 25 tpy and less than 50 tpy	\$4,156.00	2324							
	Proposed Allowable Emission Rate Equal to or greater than 50 tpy and less than 75 tpy	\$6,234.00	2325							
	Proposed Allowable Emission Rate Equal to or greater than 75 tpy and less than 100 tpy	\$8,312.00	2326							
	Proposed Allowable Emission Rate Equal to or greater than 100 tpy	\$10,390.00	2327							
\boxtimes	Not Applicable	See Sections Below								
	Major Modifications Review Fees (In addition to the Modification Application Review	w Fees above)								
	20.11.60 NMAC – Permitting in Non-Attainment Areas	\$6,927.00	2333							
	20.11.61 NMAC – Prevention of Significant Deterioration	\$6,927.00	2334							
	Not Applicable	Not Applicable								
(This section	Federal Program Review Fees for each subpart (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)									
	40 CFR 60 – "New Source Performance Standards" (NSPS)	\$1,385.00	2328							
	40 CFR 61 – "Emission Standards for Hazardous Air Pollutants (NESHAPs)	\$1,385.00	2329							
	40 CFR 63 – (NESHAPs) Promulgated Standards	\$1,385.00	2330							
	40 CFR 63 – (NESHAPs) Case-by-Case MACT Review	\$13,854.00	2331							
	20.11.61 NMAC - Prevention of Significant Deterioration (PSD) Permit	\$6,927.00	2332							
	20.11.60 NMAC – Non-Attainment Area Permit	\$6,927.00	2333							
\boxtimes	Not Applicable	Not Applicable								

 \boxtimes

See Sections

Below

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
\boxtimes	Not Applicable	See Sections II, III or V	

V. PORTABLE STATIONARY SOURCE RELOCATION FEES:

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

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

VI. Please submit payment in the amount shown for the total application review fee.

Section Totals	Review Fee Amount
Section II Total	\$4,155
Section III Total	\$
Section IV Total	\$
Section V Total	\$
Total Application Review Fee	\$4,155

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

Signed this day	of, 20
MICHAEL J. POWER, Colonel, USAF	Commander, 377th Air Base Wing
Print Name	Print Title
POWER.MICHAEL.J.1017246 Digitally signed by POWER.MICHAEL.J.1017246581 Date: 2024.10.04 14:34:39 -06'00'	
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.

A.4 Permit Application Form



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 8:00 am – 5:00 pm Monday – Friday to:

3rd Floor, Suite 3023 – One Civic Plaza NW, Albuquerque, NM 87102

(505) 768-1972 aqd@cabq.gov



Application for Air Pollutant Sources in Bernalillo County Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Submittal Date: September 30, 2024 Owner/Corporate Information Check here and leave this section blank if information is exactly the same as Facility Information below. Company Name: Kirtland Air Force Base (KAFB) Mailing Address: 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-City: Kirtland AFB State: NM Zip: **87117** Company Phone: (505) 846-8546 Company Contact: Isreal L. Tavarez Company Contact Title: Chief, Environmental Management Phone: (505) 846-8546 E-mail: isreal.tavarez@us.af.mil Stationary Source (Facility) Information: Provide a plot plan (legal description/drawing of the facility property) with overlay sketch of facility processes, location of emission points, pollutant type, and distances to property boundaries. Facility Name: Space Development Agency Optical Ground Entry Point Facility Physical Address: 80004 Lovelace Rd SE City: Albuquerque State: NM Zip: **87117** Facility Mailing Address (if different): N/A City: N/A State: N/A Zip: N/A Facility Contact: Isreal L. Tavarez Title: Chief, Environmental Management Phone: (505) 846-8546 E-mail: isreal.tavarez@us.af.mil Authorized Representative Name¹: Isreal L. Tavarez Authorized Representative Title: Chief, Environmental Management Billing Information | Check here if same contact and mailing address as corporate | Check here if same as facility Billing Company Name: U.S. Air Force - Kirtland Air Force Base (KAFB) Mailing Address: 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-City: Kirtland AFB State: NM Zip: **87117 106, KAFB** Billing Contact: Carina G. Munoz-Dyer Title: Program Manager Phone: (505) 846-8781 E-mail: carina.munoz-dyer@us.af.mil Preparer/Consultant(s) Information Check here and leave section blank if no Consultant used or Preparer is same as Facility Contact. Name: Jaimy Karacaoglu Title: Senior Consultant Mailing Address: 9400 Holly Avenue NE, Building 3, Suite B City: Albuquerque State: NM Zip: **87122**

Phone: (505) 266-6611

Email: jaimy.karacaoglu@trinityconsultants.com

^{1.} See 20.11.41.13(E)(13) NMAC.

General Operation Information (if any question does not pertain to your facility, type N/A on the line or in the box)

Permitting action being requested (please refer to the definitions in 20.11.40 NMAC or 20.11.41 NMAC):								
New Permit	Permit Modification		Technical Perm	it Revision	Admin	istrative Permit Revision		
	Current Permit #: N/A		Current Permit #: N/A		Current Pe	ermit #: N/A		
New Registration Certificate	Modification		Technical Revis	ion	Admin	istrative Revision		
	Current Reg. #: N/A		Current Reg. #: N/A	A	Current Re	eg. #: N/A		
UTM coordinates of facility (Zone 13, NAD 83): 362296.40 m Easting, 3868609.02 m Northing								
Facility type (i.e., a description of y	our facility operations): Air	Force E	Base / Emergency Ge	enerator				
Standard Industrial Classification (SIC Code #): 9711		North American Inc 928110	dustry Classific	cation Syste	em (<u>NAICS Code #</u>):		
Is this facility currently operating in	n Bernalillo County? No		If YES , list date of or If NO , list date of p	-		024		
Is the facility permanent? Yes			If NO, list dates for requested temporary operation: From N/A Through N/A					
Is the facility a portable stationary	source? No		If YES, is the facility address listed above the main permitted location for this source? N/A					
Is the application for a physical or or control equipment, etc.) to an e		sion, or r	reconstruction (e.g.,	altering proce	ess, or addir	ng, or replacing process		
Provide a description of the reques	sted changes: N/A							
What is the facility's operation?	Continuous Inter	mittent	Batch					
Estimated percent of production/operation:	Jan-Mar: 100 %	Apr-Ju	n: 100 %	Jul-Sep: 100 %		Oct-Dec: 100 %		
Requested operating times of facility:	24 hours/day	7 days	/week	4 weeks/mont	th	12 months/year		
Will there be special or seasonal operating times other than shown above? This includes monthly- or seasonally-varying hours. Yes								
If YES, please explain: Emergency operation limited to 100 hours per year								
List raw materials processed: N/A - Application is for construction of an emergency generator.								
List saleable item(s) produced: N/A - Application is for construction of an emergency generator.								

USE INSTRUCTIONS: For the forms on the following pages, please do not alter or delete the existing footnotes or page breaks. If additional footnotes are needed then add them to the end of the existing footnote list for a given table. Only update the rows and cells within tables as necessary for your project. Unused rows can be deleted from tables. If multiple scenarios will be represented then the Uncontrolled and Controlled Emission Tables, and other tables as needed, can be duplicated and adjusted to indicate the different scenarios.

Regulated Emission Sources Table

(*E.g.*, Generator-Crusher-Screen-Conveyor-Boiler-Mixer-Spray Guns-Saws-Sander-Oven-Dryer-Furnace-Incinerator-Haul Road-Storage Pile, etc.) Match the Units listed on this Table to the same numbered line if also listed on Emissions Tables & Stack Table.

	Number and escription ¹	Manufacturer	Model #	Serial #	Manufacture Date	Installation Date	Modification Date ²	Process Rate or Capacity (Hp, kW, Btu, ft³, Ibs, tons, yd³, etc.)³	Fuel Type
Unit 19193	Emergency Generator	Kubota	V2403-CR-TIE4BG	TBD	01/2022	TBD	N/A	48.3 HP/36 kW	Diesel

- 1. Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.
- 2. To determine whether a unit has been modified, evaluate if changes have been made to the unit that impact emissions or that trigger modification as defined in 20.11.41.7(U) NMAC. If not, put N/A.
- 3. Basis for Equipment Process Rate or Capacity (*e.g.*, Manufacturer's Data, Field Observation/Test, etc.) Manufacturer's Data, EPA Tier 4 Emission Factors, AP-42, CARB NOx/NMHC fraction Table D-25
 Submit information for each unit as an attachment.

Emissions Control Equipment Table

Control Equipment Units listed on this Table should either match up to the same Unit number as listed on the Regulated Emission Sources, Controlled Emissions and Stack Parameters Tables (if the control equipment is integrated with the emission unit) or should have a distinct Control Equipment Unit Number and that number should then also be listed on the Stack Parameters Table.

Control Equipment Unit Number and Description	Controlling Emissions for Unit Number(s)	Manufacturer	Model # Serial #	Date Installed	Controlled Pollutant(s)	% Control Efficiency ¹	Method Used to Estimate Efficiency	Rated Process Rate or Capacity or Flow
N/A- There is no control equipment at this facility.								

^{1.} Basis for Control Equipment % Efficiency (e.g., Manufacturer's Data, Field Observation/Test, AP-42, etc.). **N/A** Submit information for each unit as an attachment.

Exempted Sources and Exempted Activities Table

See 20.11.41 NMAC for exemptions.

Unit Number and Description	Manufacturer	Model #	Serial #	Manufacture Date	Installation Date	Modification Date ¹	Process Rate or Capacity (Hp, kW, Btu, ft³, lbs, tons, yd³, etc.)²	Fuel Type	
N/A—There are no exempted sources and exempted activities at this facility.									

- 1. To determine whether a unit has been modified, evaluate if changes have been made to the unit that impact emissions or that trigger modification as defined in 20.11.41.7(U) NMAC. Also, consider if any changes that were made alter the status from exempt to non-exempt. If not, put N/A.
- 2. Basis for Equipment Process Rate or Capacity (e.g., Manufacturer's Data, Field Observation/Test, etc.) N/A Submit information for each unit as an attachment.

Uncontrolled Emissions Table

(Process potential under physical/operational limitations during a 24 hr/day and 365 day/year = 8760 hrs)

Regulated Emission Units listed on this Table should match up to the same numbered line and Unit as listed on the Regulated Emissions and Controlled Tables. List total HAP values per Emission Unit if overall HAP total for the facility is ≥ 1 ton/yr.

Unit Number*		n Oxides O _x)	Mon	bon oxide O)	Hydrocarb Organic C	nethane ons/Volatile compounds C/VOCs)	Sulfur E (SC			e Matter ≤ ns (PM ₁₀)	Particulate 2.5 Micro	e Matter ≤ ns (PM _{2.5})		lous Air ts (HAPs)	Method(s) used for Determination of Emissions (AP-42, Material
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	Balance, Field Tests, etc.)
Unit 19193	0.36	1.56	0.44	1.91	0.019	0.082	0.10	0.43	0.0024	0.010	0.0024	0.010	0.0020	0.0086	AP-42 Section 3.3-1 and Section 3.3-2, 40 CFR 60 NSPS Tier 4
Totals of Uncontrolled Emissions	0.36	1.56	0.44	1.91	0.019	0.082	0.10	0.43	0.0024	0.0010	0.0024	0.0010	0.0020	0.0086	

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

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^{*}A permit is required and this application along with the additional checklist information requested on the Permit Application checklist must be provided if:

⁽¹⁾ any one of these process units or combination of units, has an uncontrolled emission rate greater than or equal to (≥) 10 lbs/hr or 25 tons/yr for any of the above pollutants, excluding HAPs, based on 8,760 hours of operation; or

⁽²⁾ any one of these process units or combination of units, has an uncontrolled emission rate ≥ 2 tons/yr for any single HAP or ≥ 5 tons/yr for any combination of HAPs based on 8,760 hours of operation; or

⁽³⁾ any one of these process units or combination of units, has an uncontrolled emission rate ≥ 5 tons/yr for lead (Pb) or any combination of lead and its compounds based on 8,760 hours of operation; or

⁽⁴⁾ any one of the process units <u>or</u> combination of units is subject to an Air Board or federal emission limit or standard.

^{*} If all of these process units, individually and in combination, have an uncontrolled emission rate less than (<) 10 lbs/hr or 25 tons/yr for all of the above pollutants (based on 8,760 hours of operation), but

> 1 ton/yr for any of the above pollutants, then a source registration is required. A Registration is required, at minimum, for any amount of HAP emissions. Please complete the remainder of this form.

Controlled Emissions Table

(Based on current operations with emission controls OR requested operations with emission controls)

Regulated Emission Units listed on this Table should match up to the same numbered line and Unit as listed on the Regulated Emissions and Uncontrolled Tables. List total HAP values per Emission Unit if overall HAP total for the facility is ≥ 1 ton/yr.

Unit Number		n Oxides O _x)	Mon	rbon noxide CO)	Hydrocarbo Organic C	ethane ons/Volatile ompounds C/VOCs)		Dioxide O₂)		e Matter ≤ ons (PM ₁₀)		e Matter ≤ ns (PM _{2.5})		dous Air its (HAPs)	Control Method	% Efficiency ¹
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr		
Unit 19193	0.36	0.018	0.44	0.022	0.019	0.001	0.10	0.005	0.0024	0.00012	0.0024	0.00012	0.0020	0.0001	Operating Hours	N/A
Totals of Controlled Emissions	0.36	0.018	0.44	0.022	0.019	0.001	0.10	0.005	0.0024	0.00012	0.0024	0.00012	0.0020	0.0001		

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

Submit information for each unit as an attachment.

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^{1.} Basis for Control Method % Efficiency (e.g., Manufacturer's Data, Field Observation/Test, AP-42, etc.). EPA Tier 4 Emission Factors, Manufacturer Specification, AP-42, CARB NOx/NMHC fraction Table D-25.

Hazardous Air Pollutants (HAPs) Emissions Table

Report the Potential Emission Rate for each HAP from each source on the Regulated Emission Sources Table that emits a given HAP. Report individual HAPs with ≥ 1 ton/yr total emissions for the facility on this table. Otherwise, report total HAP emissions for each source that emits HAPs and report individual HAPs in the accompanying application package in association with emission calculations. If this application is for a Registration solely due to HAP emissions, report the largest HAP emissions on this table and the rest, if any, in the accompanying application package.

	- ' '		0	- /		-, -					, - //		1 7 0	ppeat.e pe		
Unit	Tota	l HAPs														
Number	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Unit 19193	0.0020	0.0001														
Totals of HAPs for all units:	0.0020	0.0001														

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

Use Instructions: Copy and paste the HAPs table here if need to list more individual HAPs.

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Purchased Hazardous Air Pollutant Table*

Product Categories (Coatings, Solvents, Thinners, etc.)	Hazardous Air Pollutant (HAP), or Volatile Hazardous Air Pollutant (VHAP) Primary To The Representative As Purchased Product	Chemical Abstract Service (CAS) Number of HAP or VHAP from Representative As Purchased Product	HAP or VHAP Concentration of Representative As Purchased Product (pounds/gallon, or %)	Concentration Determination (CPDS, SDS, etc.) ¹	Total Product Purchases For Category	(-)	Quantity of Product Recovered & Disposed For Category	(=)	Total Product Usage For Category
	N/A—Th	nis facility does not	purchase any direct	hazardous air pollu	itant source ma	terial.			
		TOTALS			lb/yr gal/yr	(-)	lb/yr gal/yr	(=)	lb/yr gal/yr

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

NOTE: Product purchases, recovery/disposal and usage should be converted to the units listed in this table. If units cannot be converted please contact the Air Quality Program prior to making changes to this table.

1. Submit, as an attachment, information on one (1) product from each Category listed above which best represents the average of all the products purchased in that Category. CPDS = Certified Product Data Sheet; SDS = Safety Data Sheet

* A Registration is required, at minimum, for any amount of HAP or VHAP emission.

Emissions from purchased HAP usage should be accounted for on previous tables as appropriate.

A permit may be required for these emissions if the source meets the requirements of 20.11.41 NMAC.

Material and Fuel Storage Table

(E.g., Tanks, barrels, silos, stockpiles, etc.)

Stor Equip	Ū	Product Stored	Capacity (bbls, tons, gals, acres, etc.)	Above or Below Ground	Construction (Welded, riveted) & Color	Installation Date	Loading Rate ¹	Offloading Rate ¹	True Vapor Pressure	Control Method	Seal Type	% Eff. ²
Unit 19193	Belly Tank	Diesel	210 Liters	Above Ground	N/A	TBD	Tank Fueled Directly from a Truck	8.5 Liter/hr	N/A	N/A	N/A	N/A

- 1. Basis for Loading/Offloading Rate (*e.g.*, Manufacturer's Data, Field Observation/Test, etc.). Manufacturer's Data Submit information for each unit as an attachment.
- 2. Basis for Control Method % Efficiency (*e.g.*, Manufacturer's Data, Field Observation/Test, AP-42, etc.). **N/A** Submit information for each unit as an attachment.

Stack Parameters Table

If any equipment from the Regulated Emission Sources Table is also listed in this Stack Table, use the same numbered line for the emission unit on both tables to show the association between the Process Equipment and its stack.

	Number and escription	Pollutant (CO, NOx, PM ₁₀ , etc.)	UTM Easting (m)	UTM Northing (m)	Stack Height (ft)	Stack Exit Temp. (°F)	Stack Velocity (fps)	Stack Flow Rate (acfm)	Stack Inside Diameter (ft)	Stack Type
Unit 19193	Emergency Generator	NO _x , CO, VOC, SO ₂ , PM ₁₀ , PM _{2.5} , HAPs	362296.40 m	3868609.02 m	6.21	440	16.40	48.31	0.25	Vertical

Certification

NOTICE REGARDING SCOPE OF A PERMIT: The Environmental Health 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 <u>not</u> 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 of Albuquerque Planning Department or Bernalillo 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 of Albuquerque Planning Department website at https://www.cabq.gov/planning and the Bernalillo County Department of Planning and Development Services website at https://www.bernco.gov/planning.

NOTICE REGARDING ACCURACY OF INFORMATION AND DATA SUBMITTED: Any misrepresentation of a material fact in this application and its attachments is cause for denial of a permit or revocation of part or all of the resulting registration or permit, and revocation of a permit for cause may limit the permitee's ability to obtain any subsequent air quality permit for ten (10) years. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the Air Quality Control Act, NMSA 1978 §§ 74-2-1 to 74-2-17, is guilty of a misdemeanor and shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per day per violation or by imprisonment for not more than twelve months, or by both.

I, the undersigned, hereby certify that I have knowledge of the information and data represented and submitted in this application and that the same is true and accurate, including the information and date in any and all attachments, including without limitation associated forms, materials, drawings, specifications, and other data. I also certify that the information represented gives a true and complete portrayal of the existing, modified existing, or planned new stationary source with respect to air pollution sources and control equipment. I understand that there may be significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. I also understand that the person who has applied for or has been issued an air quality permit by the Department is an obligatory party to a permit appeal filed pursuant to 20.11.81 NMAC. Further, I certify that I am qualified and authorized to file this application, to certify the truth and accuracy of the information herein, and bind the source. Moreover, I covenant and agree to comply with any requests by the Department for additional information necessary for the Department to evaluate or make a final decision regarding the application.

Signed this	day of	
MICHAEL J. POWER, Colonel, USAF	Commander, 377th Air Base Wing	
Print Name	Print Title	
POWER.MICHAEL.J.101 Digitally signed by POWER.MICHAELJ.1017246581 Date: 2024.10.04 14:35:10 -06'00'		
Signature	Role: Owner X Operator	
	Other Authorized Representative	

APPENDIX B. NOTICE OF INTENT TO CONSTRUCT

B.1 Notice of Intent Cover Letter

SUBJECT: Public Notice of Proposed Air Quality Construction Permit Application Raven Defense Corporation

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?

	1 1 11
Applicant Name	U.S. Air Force – Kirtland Air Force Base
Site or Facility Name	Space Development Agency Optical Ground Entry Point
Site or Facility Address	80004 Lovelace Rd SE, Kirtland AFB, NM 87117
New or Existing Source	NEW
Anticipated Date of Application Submittal	October 10, 2024
Summary of Proposed Source to Be Permitted	This is an Authority to Construct application to permit a new emergency generator. The emergency generator will be restricted to 100 hours per year of operation.

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:

- Kirtland Air Force Base Public Affairs Office
- 377abw.pa@us.af.mil
- (505) 846-5991

For inquiries regarding the air quality permitting process, contact:

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

B.2 Notice of Intent (NOI) to Construct

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 U.S. Air Force - Kirtland Air Force Base (AFB) 80004 Lovelace Rd SE, Kirtland AFB, NM 87117 solicitante:

Owner / operator's name and address:

Nombre y domicilio del Kirtland AFB

propietario u operador: 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-112, Kirtland AFB, NM 87117-5270

Contact for comments and inquires:

Datos actuales para comentarios y preguntas:

Name (Nombre): Isreal Tavarez, Chief, Environmental Management

377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-112, Kirtland AFB, NM

Address (Domicilio): 87117-5270

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: October 10, 2024

Description of the source:

Descripción de la fuente: Diesel-Fired Emergency Generator

Exact location of the source or proposed source:

Ubicación exacta de la fuente o

80004 Lovelace Rd SE, Kirtland AFB, NM 87117 fuente propuesta:

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: Addition of an emergency generator to provide backup power to the facility

Maximum operating schedule:

Horario máximo de operaciones: 8760 hours/year

Normal operating schedule:

Horario normal de operaciones: 100 hours/year

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

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

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

Air Contaminant	Proposed Cons Permiso de Constr		Net Char (for permit modification of Cambio Neto de (para modificación de perm	or technical revision) Emisiones
Contaminante de aire	pounds per hour <i>libras por hora</i>	tons per year toneladas por año	pounds per hour <i>libras por hora</i>	tons per year toneladas por año
NO _x	0.36	0.018	-	-
СО	0.44	0.022	-	-
VOC	0.019	0.001	-	-
SO ₂	0.099	0.005	-	-
PM ₁₀	0.0024	0.00012	-	-
PM _{2.5}	0.0024	0.00012	-	-
HAP	0.0020	0.00010	-	-

NOTE: To add extra rows for H₂S or Pb in Word, click in a box in the last row. Click the plus (+) sign that appears on the right of the row to add a row.

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

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

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

B.3	Email Documentation of NOI Sent to Neighborhood Associations and
	Coalitions

MUNOZ-DYER, CARINA G CIV USAF AFGSC 377 MSG/CEIEC

From: MUNOZ-DYER, CARINA G CIV USAF AFGSC 377 MSG/CEIEC

Sent: Tuesday, October 15, 2024 4:48 PM

Cc: 377 MSG/CE Environmental Air Quality; 'm.ryankious@gmail.com';

'info@willsonstudio.com'; 'brasher@aps.edu'; 'eastgatewaycoalition@gmail.com';

'b.lisa.davis@gmail.com'; 'admin@eastmountaincoalition.org'; 'info@eastmountaincoalition.org'; 'm.ryankious@gmail.com'; 'sp-wonderwoman@comcast.net'; 'elderhomesteadna@gmail.com';

'csutimgallegos@yahoo.com'; 'presidentfhva@gmail.com'; 'mbfernandez1@gmail.com';

'herbwright@peoplepc.com'; 'fhvapres@gmail.com'; 'janis.schubert@gmail.com';

'levigreen8914@gmail.com'; 'lamesainternationaldistrict@gmail.com';

'5058041113rw@gmail.com'; 'peterkalitsis@gmail.com';

'phnacommunications@gmail.com'; 'jolsen1204@gmail.com'; 'franchini3@gmail.com';

'siesta2napres@gmail.com'; 'notices@slananm.org'; 'debsla@swcp.com';

'contact@slananm.org'; 'tmienterprises1@gmail.com'; 'sarah.khanlian@gmail.com'; 'pmbdoc@yahoo.com'; 'jpate@molzencorbin.com'; 'hardy_bernadette@yahoo.com';

'j504rise@yahoo.com'; 'landry54@msn.com'; 'info@willsonstudio.com';

'altheatherton@gmail.com'; 'victoryhills505@gmail.com'; 'donaldlove08@comcast.net';

'klove726@gmail.com'

Subject: Public Notice of Proposed Air Quality Construction Permit Application Space

Development Agency

Attachments: KAFB SDA NSR NOI.pdf

Dear Neighborhood Association/Coalition Representative(s),

Why did I receive this public notice?

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

What is the Air Quality Permit application review process?

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

What do I need to know about this proposed application?

Applicant Name	U.S. Air Force – Kirtland Air Force Base
Site or Facility Name	Space Development Agency Optical Ground Entry Point
Site or Facility Address	80004 Lovelace Rd SE, Kirtland AFB, NM 87117
New or Existing Source	NEW
Anticipated Date of Application Submittal	October 10, 2024

Summary of Proposed Source to Be Permitted

This is an Authority to Construct application to permit a new emergency generator. The emergency generator will be restricted to 100 hours per year of operation.

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:

- Kirtland Air Force Base Public Affairs Office
- 377abw.pa@us.af.mil
- (505) 846-5991

For inquiries regarding the air quality permitting process, contact:

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

Carina G. Munoz-Dyer 377 MSG/CEIEC, Air Quality Program Manager 2050 Wyoming Blvd SE, B20685, Room A-106 Kirtland AFB, NM 87117 Carina.munoz-dyer@us.af.mil DSN 246-8781 – Office 505-846-8781 Telework Tuesdays and Fridays

B.4 Public Notice Sign Guidelines Checklist



Applicant Company Name: Kirtland Air Force Base

Facility Name: Kirtland Air Force Base

City of Albuquerque Environmental Health Department Air Quality Program



Public Notice Sign Guidelines

Any person seeking a permit under 20.11.41 NMAC, Construction 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.

\boxtimes		gn must be posted at the more visible of either the proposed or existing facility entrance (or, it ed in advance and in writing by the department, at another location on the property that is accessible 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 feet above the existing ground surface to facilitate ease of viewing
\boxtimes	follow	e at least two pictures of the completed, properly posted sign in the application package immediatelying this document. One picture should show the location of the posted sign and the other should be nough to the sign for the posted information to be legible in the picture.
		here if the department has waived the sign posting requirement. ative public notice details:

B.5 Pictures of Posted Notice

Space Development Agency Air Quality Construction Permit Application
Public Notice Requirements – Yellow Sign
Photos taken 9 OCT 2024





APPENDIX C. COMPLIANCE HISTORY DISCLOSURE FORM

C.1 Compliance History Disclosure Form



City of Albuquerque Environmental Health Department Air Quality Program



Air Quality Compliance History Disclosure Form

The Albuquerque-Bernalillo County Joint Air Quality Program ("Program") 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, including the New Mexico Air Quality Control Act ("AQCA"), NMSA 1978, Sections 74-2-1 to -17. In accordance with Sections 74-2-7(P) and (S) of the AQCA, the Program may deny any permit application or revoke any permit issued pursuant to the AQCA if, within ten years immediately preceding the date of submission of the permit application, the applicant or permittee meets any one of the criteria outlined in the AQCA. The Program requires applicants to file this Compliance History Disclosure Form in order for the Program to deem an air permit application administratively complete, or issue an air permit for those permits without an initial administrative completeness determination process. Additionally, an existing permit holder (permits issued prior to the Effective Date of this Form) shall provide this Compliance History Disclosure Form to the Program upon the Program's request. Note: Program Staff can answer basic questions about this Compliance History Disclosure Form but cannot provide specific guidance or legal advice.

Instructions

- 1. Applications filed pursuant to the following regulations shall include this Compliance History Disclosure Form, in accordance with Section 74-2-7(S) of the AQCA: Construction Permits (20.11.41 NMAC); Operating Permits (20.11.42 NMAC); Nonattainment Areas (20.11.60 NMAC); Prevention of Significant Deterioration (20.11.61 NMAC); Acid Rain (20.11.62 NMAC); and Fugitive Dust (20.11.20 NMAC) except this Form shall not be required for asbestos notifications under 20.11.20.22 NMAC.
- 2. The permittee identified on this Compliance History Disclosure Form shall match the permittee in the existing permit or new application. If the information in an existing permit needs to be changed, please contact the Program about revisions and ownership transfers.
- 3. Answer every question completely and truthfully, and do not leave any blank spaces. If there is nothing to disclose in answer to a particular question, check the box labeled "No." Failure to provide any of the information requested in this Compliance History Disclosure Form may constitute grounds for an incompleteness determination, application denial, or permit revocation.
- 4. Be especially careful not to leave out information in a way that might create an impression that you are trying to hide it. Omitting information, even unintentionally, may result in application denial or permit revocation.
- 5. If necessary, continue answers on a separate page and identify the question. If you submit any document in connection with your answer to any question, refer to it as, "Exhibit No.__", and attach it at the end of the Compliance History Disclosure Form, consecutively numbering each additional page at the top right corner.
- 6. The Program may require additional information to make a thorough review of an application. At all times before the Program 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 Program. 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 Program's review and decision. While the Program is processing an application, regardless of whether the Program has determined the application is administratively complete, if the Program determines that additional information is necessary to evaluate or make a final decision regarding the application, the Program may request additional information and the applicant shall provide the requested additional information.
- 7. Supplementary information required by the Program may include responses to public comment received by the Program during the application review process.
- 8. Any fees submitted for processing an application that has been denied will not be refunded. If the Program 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.

COMPLIANCE HISTORY						
A. Ap	plicant/Permittee Name: Kirtland Air Force Base	Check Applicable Box: A	oplicant × Permittee			
B. Time Period of Compliance Reporting (10 Years): 09/01/2014 to 09/01/2024 Instructions: For applicants, answer the following questions with information from within the 10 years preceding the current application. For existing permit holders, answer the following questions with information from within the 10 years preceding the Program's issuance of the permit.						
C. Qu	estions					
1	Knowingly misrepresented a material fact in an application for a permit	?	☐ Yes 🗷 No			
2	Refused to disclose information required by the provisions of the New M	ct? ☐ Yes 🗷 No				
3	Been convicted in any court of any state or the United States of a felony related to environmental crime?					
4	Been convicted in any court of any state or the United States of a crime defined by state or federal statute as involving or being in restraint of trade, price fixing, bribery, or fraud?		ute ☐ Yes 🗷 No			
5a	Constructed or operated any facility for which a permit was sought, including the current application, without the required air quality permit(s) under 20.11.41 NMAC, 20.11.42 NMAC, 20.11.60 NMAC, 20.11.61 NMAC, or 20.11.62 NMAC?					
5b	If "No" to question 5a, go to question 6. If "Yes" to question 5a, state whether each facility that was constructed or operated without the required air quality permit met at least one of the following exceptions: i. The unpermitted facility was discovered after acquisition during a timely environmental audit that was authorized by the Program or the New Mexico Environment Department; or ii. The operator of the facility, using good engineering practices and established approved calculation methodologies, estimated that the facility's emissions would not require an air permit, and the operator applied for an air permit within 30 calendar days of discovering that an air permit was required for the facility.		hat			
6	Had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States? ☐ Yes ☒ No					
7	For each "yes" answer, please attach an explanation and supporting documentation.					

I, the undersigned, hereby certify under penalty of law that this Compliance History Disclosure Form (Form) and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. I have knowledge of the information in this Form and it is, to the best of my knowledge and belief, true, accurate, and complete. I understand that there are significant penalties for submitting false information, including denial of the application or revocation of a permit, as well as fines and imprisonment for knowing violations. If I filed an application, I covenant and agree to promptly supplement and correct information in this Form until the Program makes a final decision regarding the application. Further, I certify that I am qualified and authorized to file this Form, to certify to the truth and accuracy of the information herein, and bind the permittee and source.

Signed on 10/04/2024

MICHAEL	1	POWER	Colonal	LICAE
MIII.HAEL		PUWER	C.OIODEI	

Print Name

POWER.MICHAEL.J.1017 Digitally signed by POWER.MICHAEL.J.1017246581 Date: 2024.10.04 14:34:05 -06'00'

Signature

Commander, 377th Air Base Wing

Print Title

Kirtland Air Force Base

Company Name

Kirtland Air Force Base Attachment A – Compliance History Form

Deviation	Deviation Deviation Cause of Deviation Correction Action Take		
Start Date	End date	Sums 01 2 0 7 miles	001100101111010111111011
14 Oct 2022	22 Mar 2023	A 20.11.41 NMAC Construction Permit was not obtained for one diesel-fired emergency. generator at Kirtland Air Force Base (KAFB). The generator was identified as a 10-kW dieselfired emergency generator located at 377th Medical Group and was used infrequently to provide back-up power to the Dental Clinic. The generator installation date is unknown. On 16 February 2023, KAFB received a Post-Inspection Notification (PIN) over the alleged violation. The PIN required the unit to be either permitted or decommissioned.	KAFB self-reported the discovery of the emergency generator to AEHD on 20 December 2022. The signed PIN was submitted to AEHD via email on 1 March 2023. On 28 April 2023, KAFB received documentation from 377th Medical Group indicating that the generator was decommissioned and abandoned in place on 22 March 2023. KAFB notified AEHD via email on the status of the decommissioned unit on 23 May 2023.
Prior to 1994	8 Oct 2021	Construction Permit #1759 did not include an existing fuel storage tank. The fuel storage tank was identified during communications between KAFB Environmental Management and Starfire Optical Range (SOR), who operates the facility where the fuel storage tank is located. The unit was identified as one, 250-gallon above ground storage tank containing gasoline with an associated single nozzle fuel dispenser. The fuel storage tank is no longer in use and has been emptied and cleaned. The fuel tank was installed prior to 1994 but the actual date is unknown.	KAFB self-reported the discovery of this tank to AEHD on 29 July 2022 as part of the Annual Compliance Certification. The tank was inspected by Liquid Fuels Management and was deemed out-of-service on 8 October 2021.
7 Feb 2020	23 Jun 2021	A 20.11.41 NMAC Construction Permit was not obtained for one diesel fired generator at KAFB. The generator was identified during communications between the KAFB Civil Engineering Power Production shop and the National Assessment Group who operates the facility where the generator is located. The unit was identified as a 60-kW generator with 80.9 horsepower (hp) engine located at Manzano Complex, a remote and secure area. At the time of discovery, the generator was not in use, and the battery and electrical panel were not installed. It was estimated that the generator was installed in 2001 but had not been operated for at least the last four years. The National Assessment Group determined that the generator was not needed for continued operations.	KAFB self-reported the discovery of this generator to AEHD on 28 July 2021 as a part of the Annual Compliance Certification. KAFB and the National Assessment Group coordinated with the Defense Logistics Agency (DLA) to remove and dispose of the generator. The generator was transferred to the DLA disposal facility holding yard on 23 June 2021.
2006	Jul 2019	A 20.11.41 NMAC Construction Permit was not obtained for one diesel fired non-emergency generator at KAFB. The generator was identified during a base wide inventory conducted specifically to identify any nonpermitted emission units as specified in a letter submitted to AEHD by KAFB on 31 January 2017. The 71 kW generator with 95.2 hp engine was located in a remote training area	On 28 December 2017, KAFB self-reported the discovery of the generator to AEHD. KAFB submitted a construction permit application on 10 January 2019. AEHD issued Construction Permit #3366 on 22 July 2019. The generator was decommissioned and

Reporting Period: 2014 to 2024

Page 1

Updated: 12-Aug-24

Kirtland Air Force Base Attachment A – Compliance History Form

Deviation Start Date	Deviation End date	Cause of Deviation	Correction Action Taken
		known as Bivouac Area 3. It was used to simulate a remote environment for training purposes. It was estimated that the generator was installed in early 2006. Onsite usage records and discussion with facility managers confirmed that the generator operated five to six times per year for three to four hours for training purposes.	removed from KAFB on 2 and 5 February 2022, respectively. Construction Permit #3366 was cancelled 31 October 2023.
1993	12 Dec 2016	A 20.11.41 NMAC Construction Permit was not obtained for two natural gas generators at KAFB. The two natural gas generators were identified by an Air Force Research Laboratory (AFRL) Unit Environmental Coordinator after being contacted by the building tenants. The two 100kW generators with 168 horsepower (hp) engines had provided emergency back-up power to AFRL buildings 30134 and 30136 and were installed in 1993. Onsite usage records confirmed that the generators had operated as emergency engines through 2016.	On 16 December 2016, KAFB self-reported the discovery of the two generators to AEHD. On 12 December 2016 KAFB met with the current tenant of buildings 30134 and 30136 to determine if the generators were still in use and connected to natural gas. After inspecting the generators and interviewing the tenant it was determined that the generators were still operational but not necessary for current operations. On 12 December 2016, Power Production shut down the generators, disconnected them from the natural gas lines, and disconnected the battery packs.

APPENDIX D. FACILITY LOCATION AND AERIAL PHOTOGRAPH

D.1 Facility Location and Aerial Photograph



APPENDIX E. ZONING REQUIREMENTS

The property that Kirtland AFB's emergency generator is located on is owned by the Space Defense Agency. The 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.

CITY OF ALBUQUERQUE

CODE ENFORCEMENT

Plaza Del Sol Building, Suite 500 600 2nd Street NW Albuquerque, NM 87102 Tel: (505) 924-3850 Fax: (505) 924-3847



Date: March 15, 2024

VIA Email, <u>Carina.munoz-dyer@us.af.mil</u> Carina G. Munoz-Dyer 2050 Wyoming Blvd SE, B20685, Room A-106 Kirtland AFB, NM 87117

RE: City of Albuquerque Zoning Regulations and Federally Owned Properties

To Whom It May Concern:

This letter shall certify that the City of Albuquerque zoning regulations are not applicable for properties owned by U.S. Federal Government, U.S. Federal Government entities, and properties within Kirtland Air Force Base.

If you have any questions regarding this matter, please feel free to contact Code Enforcement by email at codeenforcement@cabq.gov

Sincerely,

Angelo Metzgar

Code Compliance Manager

Planning Department City of Albuquerque

Planning & Development Services Department

415 Silver Ave. SW, 2nd Floor Albuquerque, New Mexico 87102

Office: (505) 314-0350 Fax: (505) 314-0480 www.bernco.gov

February 29, 2024

Carina G. Munoz-Dyer 377 MSG/CEIEC, Air Quality Program Manager 2050 Wyoming Blvd SE, B20685, Room A-106 Kirtland AFB, 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.

Sincerely,

Maggie Gould

Zoning Administrator

CC: Carina.munoz-dyer@us.af.mil

County Commissioners

Barbara Baca, Chair, District 1 • Adriann Barboa, Vice-Chair, District 3 Steven Michael Quezada, District 2 • Walt Benson, District 4 • Eric C. Olivas, District 5

Elected Officials

Damian R. Lara, Assessor • Linda Stover, Clerk • Cristy J. Carbón-Gaul, Probate Judge John D. Allen, Sheriff • Nancy M. Bearce, Treasurer

County Manager
Julie Morgas Baca

