



Kirtland Air Force Base

20.11.41 NMAC Application to Modify
Permit No. 3470

Existing Emergency Generator and
Gasoline Dispensing Operations
898th Munitions Squadron

377 MSG/CE Environmental
Kirtland AFB, New Mexico

KT

Application received July 13, 2026

Contents

Section 1 – Executive Summary	2
Section 2 – General Information.....	3
Section 2.1 – Facility Description.....	3
Section 2.2 – Process Flow Diagrams and Emission Unit Locations	4
Section 2.3 – Emissions Calculations and Methodology.....	5
Section 2.3.1 – Emergency Generator	5
Section 2.3.2 – Storage Tank and Fuel Dispensing.....	6
Section 2.4 – Federal Applicability.....	6
Section 2.5 – Operational Plan – Air Emissions During SSM.....	6
Section 2.5.1 - Emergency Generator Startup Procedure	6
Section 2.5.2 - Emergency Generator Shutdown Procedure.....	7
Section 2.5.3 - Emergency Generator Maintenance	7
Section 2.5.4 – Gasoline AST Operations	7
Section 3 – Attachments.....	8

Section 1 – Executive Summary

Kirtland Air Force Base (AFB) is submitting an application to modify Permit #3470 in accordance with 20.11.41.13.E New Mexico Administrative Code (NMAC). The requested modification seeks to consolidate permitted equipment and operational limits under Permit #3470 by incorporating gasoline dispensing operations originally authorized under Permit #3101-2AR. Permit #3101-2AR currently authorizes gasoline dispensing equipment and a boiler that has since been permanently removed from service. The removed boiler has been replaced with two comfort heat boilers that are exempt from permitting requirements and are identified in application forms. The permit modification requests to reduce operating limits for the existing emergency generator authorized under Permit #3470 from 200 hours per year to 100 hours per year. In addition, the modification requests an increase in the annual throughput for gasoline dispensing operations from 20,000 gallons per year to 30,000 gallons per year. Emissions estimates for the emergency generator were calculated using the same methodology used in the previous application for Permit #3470, where applicable standards from 40 CFR 60 Subpart IIII were utilized with AP-42 Section 3.4 values and manufacturer's data. Emissions estimates for the gasoline dispensing operations were calculated using the original methodology from Permit #3101-2AR, where emissions factors were obtained from AP-42 Section 5.2. The emergency generator is subject to 40 CFR 60 Subpart IIII, and the gasoline dispensing operations are subject to 40 CFR 63 Subpart CCCCCC. Application forms, emissions calculations, and all required elements under 20.11.41 NMAC are included in the following sections.

Section 2 – General Information

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

- Application form
- Owner and operator's name and mailing address
- Application date
- Sufficient attachments including calculations, potential emission rate, nature of all regulated contaminants, and actual emissions
- Operational and maintenance strategy
- Facility map
- Aerial photograph of location of each emission unit
- Complete description of all sources of regulated air contaminants and process flow diagram
- Full description of air pollutant control equipment
- Description of equipment or method used for emission measurements
- Maximum and normal operating time schedules of the sources
- Other relevant information
- Applicant signature
- Registration fee

An evaluation of Best Achievable Control Technology (BACT) applicability for the proposed modification to the gasoline dispensing operation was conducted pursuant to 20.11.72 NMAC. Additionally, air dispersion modeling is not required for the gasoline fuel dispensing operation in accordance with the City of Albuquerque Air Quality Program's May 2024 Air Dispersion Modeling Guidelines and correspondence with the Air Dispersion Modeling staff. All application forms, the BACT applicability evaluation, and air dispersion modeling applicability review are included in Attachment A.

Section 2.1 – Facility Description

898th Munitions Squadron contains an emergency generator and gasoline fuel dispensing operations. The emergency generator located in Building 27497 is used to provide electric power to the building in the event that normal electric service is disrupted. The unit has a maximum power rating of 755 horsepower (HP) and is equipped with a 150-gallon diesel fuel belly tank, which is supplied from a 5,000-gallon diesel compartment within a below-grade split vaulted aboveground storage tank (AST). The diesel compartment is also used for motor vehicle fueling operations.

The motor vehicle fuel dispensing operation located adjacent to Building 27497 is used to dispense fuel to all-terrain vehicles (ATVs), off-roading vehicles (HMMWVs), and occasionally pick-up trucks. Operations involve transferring fuel from delivery trucks into the vaulted AST

and transferring fuel from the vaulted AST into vehicles via the dispenser. The split-vault AST stores unleaded gasoline and diesel in separate compartments, with a gasoline compartment capacity of 1,000 gallons, and the diesel compartment capacity of 5,000 gallons. The AST is equipped with a submersible pump that delivers fuel to a dispenser with one gasoline nozzle and one diesel nozzle. For air quality purposes, evaporative emissions standards apply only to the gasoline dispensing operation.

This modification request includes two (2) currently permitted emission sources that are under the control of the 898th Munitions Squadron. The emission sources are identified by the process Equipment Unit No. and Kirtland AFB Unit ID (AQUIS ID) and are used consistently throughout the application submittal.

Section 2.2 – Process Flow Diagrams and Emission Unit Locations

Diagram for Generator Engine

The emergency generator utilizes Kirtland AFB utility power for facility power. The generator supplies power in the event of a power outage. The simplified process flow diagram represents the normal operating and loss of utility power conditions.

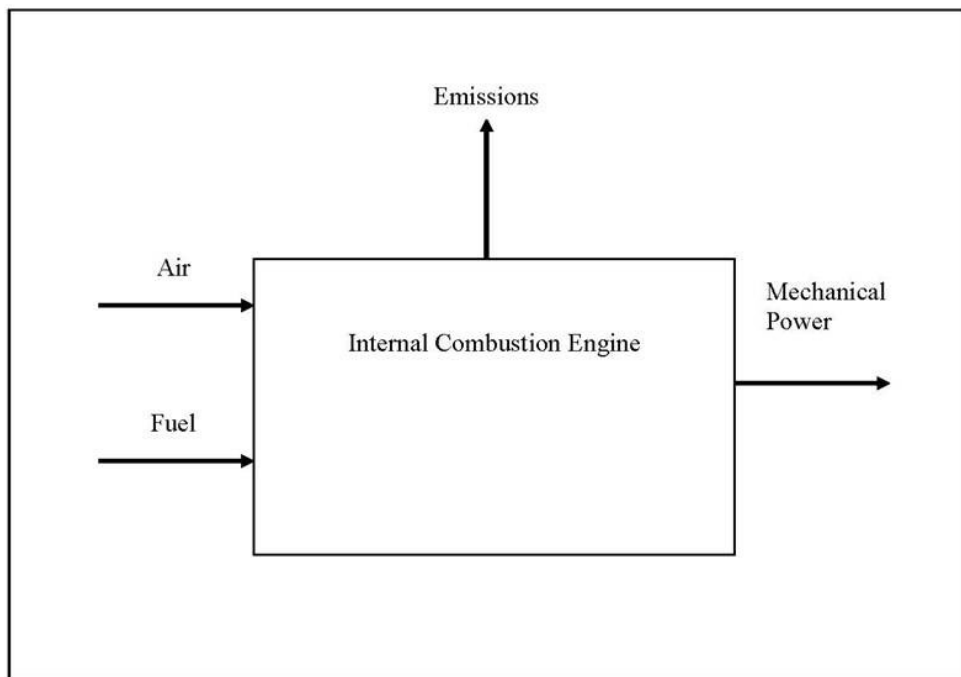
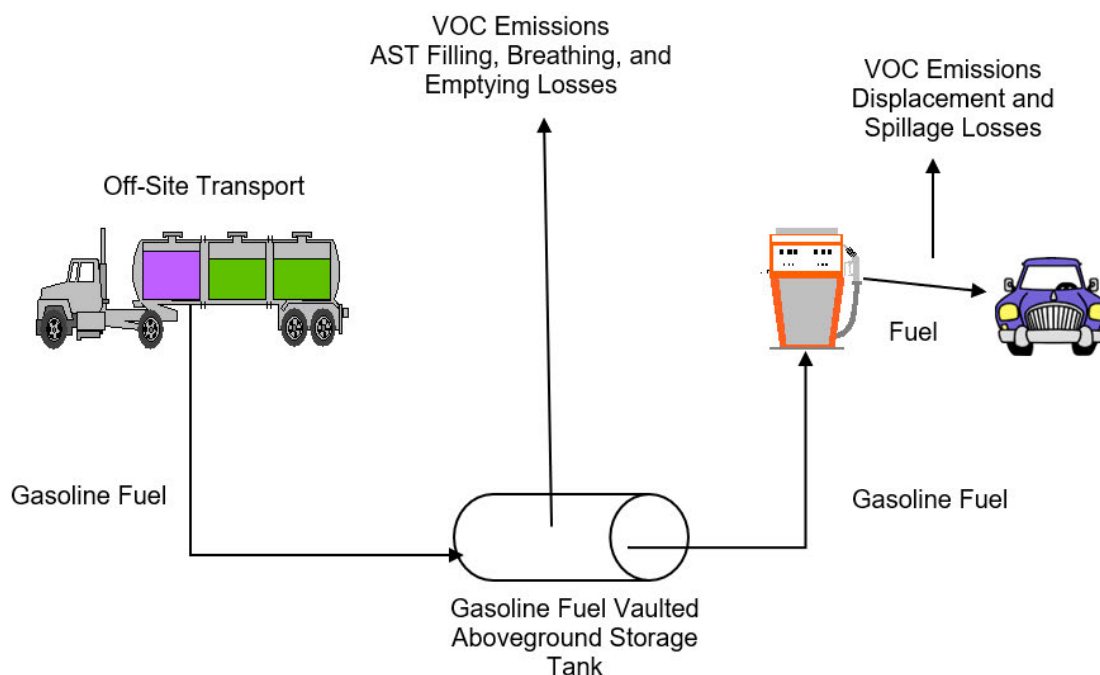


Diagram for Storage Tank and Fuel Dispensing Operations

The storage tank and fuel dispensing operation involves transferring fuel from delivery trucks into the vaulted AST and transferring fuel from the vaulted AST into vehicles via the dispenser. The simplified process flow diagram represents the normal operations of fuel transfer and dispensing.



Additionally, a scaled map of Kirtland AFB illustrating the locations of 898th Munitions Squadron equipment is in Attachment B. Refer to the emission unit list in the Permit Application Form to identify the AQUIS ID.

Section 2.3 – Emissions Calculations and Methodology

Hourly, annual, and potential emissions, including detailed emissions calculation methodologies for each emission source are included in Attachment C. Total emissions for the 898th Munitions Squadron are also summarized in Attachment C for reference. The following sections summarize the methodologies for each emission unit.

Section 2.3.1 – Emergency Generator

The emissions calculation methodology remains unchanged from the original application submitted for 898th Munitions Squadron Permit #3470. This update reflects a reduction in permitted operating hours from 200 to 100 hours per year for the emergency generator. Unit 1 is subject to 40 CFR 60 Subpart IIII, and certified NSPS limits were utilized as emission factors for calculating emission limits for CO and NO_x+NMHC. To provide an emissions standard for NO_x

and NMHC separately, NMHC was considered to be 5% of the combined NOx+NMHC standard. NOx was considered to be 95% of the combined NOx+NMHC standard. Emissions estimates for PM were calculated using manufacturer's emission data. SOx and HAP emissions were calculated using factors from AP-42 Section 3.4 Large Stationary Diesel Engines (April 2025). Supporting documentation for Unit 1 is included in Attachment D.

Section 2.3.2 – Storage Tank and Fuel Dispensing

The emissions calculation methodology for the gasoline storage tank and fuel dispensing operations utilizes emission factors from AP-42 Section 5.2: Transportation and Marketing of Petroleum Liquids, Table 5.2-7 (June 2008). The calculations utilize the same methodology previously used in Permit #3101-2AR. The same nozzle dispensing rate of 10 gal/min and AP-42 emission factors were retained. This update requests an increase in permitted throughput from 20,000 gallons per year to 30,000 gallons per year. Although a higher throughput of 35,000 gallons per year was discussed during the pre-application meeting, this application requests authorization for a maximum annual throughput of 30,000 gallons per year. Supporting documentation for Unit 2 is included in Attachment D.

Section 2.4 – Federal Applicability

A process equipment table listing applicable federal regulations are in Attachment E. The emergency generator is subject to 40 CFR 60 Subpart IIII NSPS. The gasoline fuel dispensing operation is subject to 40 CFR 63 Subpart CCCCCC NESHAP.

Section 2.5 – Operational Plan – Air Emissions During SSM

The 898th Munitions Squadron is owned and operated by the U.S. Government in conjunction with Kirtland AFB. As soon as a malfunction occurs, applicable equipment will be shut down to ensure no excess emissions or non-permitted emissions are released. The facility will only start up again once it is identified that the malfunction is addressed, and the facility will operate as normal and permitted.

Section 2.5.1 - 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 gases and taking the unit offline for repairs upon the observation of abnormal soot coming out of the stacks.

Section 2.5.2 - Emergency Generator Shutdown Procedure

A shutdown event for a RICE occurs when the unit is shut down after a period of operation. The entire shutdown process is monitored to ensure safety and minimize airborne emissions. The following actions included in the operational plan are critical for minimizing emissions during engine shutdown:

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

Section 2.5.3 - Emergency Generator Maintenance

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

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

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

Section 2.5.4 – Gasoline AST Operations

The gasoline AST operates as a passive storage and dispensing unit. Operation consists of routine gasoline deliveries to the AST and dispensing of gasoline for vehicles supporting the 898th Munitions Squadron's operations. The AST is operated and maintained in accordance with established facility procedures designed to minimize emissions and prevent releases.

Operational and maintenance practices critical to minimizing emissions and preventing releases include, but are not limited to, the following:

- Monthly visual inspections of the tank, associated equipment, and secondary containment to identify leaks, damaged fittings, missing caps, or other deficiencies.
- Maintaining gasketed seals on all openings and fittings while the AST is not actively in use.
- Implementing spill prevention practices during fuel delivery and dispensing activities.
- Performing prompt cleanup of spills, as expeditiously as practicable, in accordance with facility procedures.

These practices ensure proper operation of the AST and minimize emissions through good housekeeping, routine inspection, and timely corrective action.

Section 3 – Attachments

Attachment A – Agency Forms and Documentation

- A-1 Permit Application
- A-2 Permit Application Checklist
- A-3 Permit Review Fee Checklist
- A-4 Zoning Certification Documentation
- A-5 Compliance History Disclosure Form
- A-6 Pre-Application Meeting Checklist and Supporting Documentation
- A-7 Public Notice Documentation
- A-8 Notice of Intent
- A-9 BACT Applicability
- A-10 Air Dispersion Modeling Applicability Correspondence

Attachment B – Facility Map

Attachment C – Emissions Calculations

Attachment D – Supporting Documentation

- D-1 Unit 1 AQUIS ID 19186
- D-2 Unit 2 AQUIS IDs 15008 and 25017

Attachment E – Applicable Federal Regulations

Attachment A
Agency Forms

Attachment A-1
Permit Application



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: 13 July 2026

Owner/Corporate Information ☐ Check here and leave this section blank if information is exactly the same as Facility Information below.

Company Name: U.S. Air Force - Kirtland Air Force Base (AFB)			
Mailing Address: 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-112	City: Kirtland AFB	State: NM	Zip: 87117-5270
Company Phone: (505) 846-8546	Company Contact: Isreal 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: 898th Munitions Squadron			
Facility Physical Address: 7500 Prairie Road, Bldg. 27497	City: Kirtland AFB	State: NM	Zip: 87117-5270
Facility Mailing Address (if different): 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-112	City: Kirtland AFB	State: NM	Zip: 87117-5270
Facility Contact: Isreal Tavarez	Title: Chief, Environmental Management		
Phone: (505) 846-8546	E-mail: isreal.tavarez@us.af.mil		
Authorized Representative Name ¹ : Isreal 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 (AFB)			
Mailing Address: 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-106	City: Albuquerque	State: NM	Zip: 87117-5270
Billing Contact: Carina G. Munoz-Dyer	Title: Air Quality 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: Elizabeth Pomo	Title: Air Quality Scientist IV		
Mailing Address: 105A Fordham Rd	City: Oak Ridge	State: TN	Zip: 37830
Phone: (505) 908-1483	Email: elizabeth.pomo.ctr@us.af.mil		

1. See 20.11.41.13(E)(13) NMAC.

Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 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 Current Permit #: 3470	☐ Technical Permit Revision Current Permit #:	☐ Administrative Permit Revision Current Permit #:	
☐ New Registration Certificate	☐ Modification Current Reg. #:	☐ Technical Revision Current Reg. #:	☐ Administrative Revision Current Reg. #:	
UTM coordinates of facility (Zone 13, NAD 83): AQ ID 19186: [REDACTED]; AQ IDs 15008 & 25017: [REDACTED]				
Facility type (i.e., a description of your facility operations): Emergency Generator and Gasoline Dispensing for National Security facility				
Standard Industrial Classification (SIC Code #): 9711		North American Industry Classification System (NAICS Code #): 928110		
Is this facility currently operating in Bernalillo County? Yes		If YES , list date of original construction: 2002 (est) If NO , list date of planned startup:		
Is the facility permanent? Yes		If NO , list dates for requested temporary operation: From Through		
Is the facility a portable stationary source? No		If YES , is the facility address listed above the main permitted location for this source?		
Is the application for a physical or operational change, expansion, or reconstruction (e.g., altering process, or adding, or replacing process or control equipment, etc.) to an existing facility? No				
Provide a description of the requested changes: Requesting to reduce permitted hours from 200 hr/yr to 100 hr/yr for the existing emergency engine, consolidate gasoline dispensing equipment from Permit #3101-2AR to Permit #3470 and increase throughput to 30,000 gal/yr.				
What is the facility's operation? ☐ Continuous ☒ Intermittent ☐ Batch				
Estimated percent of production/operation:	Jan-Mar: 25	Apr-Jun: 25	Jul-Sep: 25	Oct-Dec: 25
Requested operating times of facility:	24 hours/day	7 days/week	4 weeks/month	12 months/year
Will there be special or seasonal operating times other than shown above? This includes monthly- or seasonally-varying hours. No				
If YES , please explain: N/A				
List raw materials processed: N/A				
List saleable item(s) produced: N/A				

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.

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

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.

Unit Number and Description ¹		Manufacturer	Model #	Serial #	Manufacture Date	Installation Date	Modification Date ²	Process Rate or Capacity (Hp, kW, Btu, ft ³ , lbs, tons, yd ³ , etc.) ³	Fuel Type
Ex. 1.	Generator	Unigen	B-2500	A567321C	7/1996	7/1997	11/2020	250 Hp/HR	Diesel
Ex. 2.	Spray Gun	HVLP Systems	Spra-N-Stay 1100	K26-56-95	01/2017	11/2017	N/A	0.25 gal./HR	Electric Compressor
1	Emergency Engine AQ ID 19186	Cummins	QSX15-G9	80422315	05/2022	04/2023	N/A	755 HP	Diesel
	Generator	Cummins	DFEK*2170 339	E22008594 6	05/2022	04/2023	N/A	500 kW	
2	Gasoline Storage and Dispensing AQ IDs 25017/15008	N/A	N/A	N/A	N/A	10/2002	N/A	1,000 gal	Gasoline

NOTE: To add extra rows in Word, click anywhere in the 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.

- 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.
- 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.
- Basis for Equipment Process Rate or Capacity (e.g., Manufacturer's Data, Field Observation/Test, etc.) **Manufacturer's Data**
Submit information for each unit as an attachment.

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

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
Ex. 8b	Baghouse	3,4,5	Best Baghouses	C-12010 A16925	11/12/2019	PM ₁₀ , PM _{2.5}	99%	Manufacturer's Data	1,500 ACFM
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: To add extra rows in Word, click anywhere in the 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.

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

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

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, ft ³ , lbs, tons, yd ³ , etc.) ²	Fuel Type
Ex. 1.	Boiler	Unigen	B-2500	A567321C	7/1996	7/1997	11/2020	3.5 MMBtu/HR	Natural Gas
Ex. 2.	Hot Water Heater	HVLP Systems	6500A	K26-56-95	01/2017	11/2017	N/A	80 gal./HR	Natural Gas
1	Hot Water Heater	Raypak	H7-3007	V05250044 2	02/2025	01/2026	N/A	2.862 MMBtu/hr	Natural Gas
2	Hot Water Heater	Raypak	H7-3007	V05250013 6	02/2025	01/2026	N/A	2.862 MMBtu/hr	Natural Gas

NOTE: To add extra rows in Word, click anywhere in the 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.

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.) Field Observation
Submit information for each unit as an attachment.

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

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*	Nitrogen Oxides (NO _x)		Carbon Monoxide (CO)		Nonmethane Hydrocarbons/Volatile Organic Compounds (NMHC/VOCs)		Sulfur Dioxide (SO ₂)		Particulate Matter ≤ 10 Microns (PM ₁₀)		Particulate Matter ≤ 2.5 Microns (PM _{2.5})		Hazardous Air Pollutants (HAPs)		Method(s) used for Determination of Emissions (AP-42, Material Balance, Field Tests, etc.)
	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	
Example 1.	27.7	121.3	9.1	39.9	1.3	5.7	0.5	2.2	2.0	8.8	0.2	0.4	0.2	0.4	AP-42 Section 3.3
1 AQ ID 19186	7.59	33.24	4.33	18.95	0.40	1.75	0.0092	0.040	0.17	0.73	0.17	0.73	7.03E-03	3.08E-02	Tier 2 NSPS Non-Road, AP-42 Section 3.4, & Manufacturer's Emissions Factors
2 AQ IDs 25017 & 15008	N/A	N/A	N/A	N/A	12.00	52.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	AP-42 Section 5.2
Totals of Uncontrolled Emissions	7.59	33.24	4.33	18.95	12.40	54.31	0.0092	0.040	0.17	0.73	0.17	0.73	7.03E-04	3.08E-02	

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.

*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 ($\geq$) 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 or 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.

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

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	Nitrogen Oxides (NO _x)		Carbon Monoxide (CO)		Nonmethane Hydrocarbons/Volatile Organic Compounds (NMHC/VOCs)		Sulfur Dioxide (SO ₂)		Particulate Matter ≤ 10 Microns (PM ₁₀)		Particulate Matter ≤ 2.5 Microns (PM _{2.5})		Hazardous Air Pollutants (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		
Example 1.	27.7	55.4	9.1	18.2	1.3	2.6	0.5	1.0	2.0	4.0	0.2	0.088	0.2	0.088	Operating Hours	N/A
1 AQ ID 19186	7.59	0.38	4.33	0.22	0.40	0.020	0.0092	0.00046	0.17	0.0083	0.17	0.0083	7.03E-03	3.52E-04	100 hr/yr	N/A
2 AQ IDs 25017 & 15008	N/A	N/A	N/A	N/A	12.00	0.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30,000 gal/yr	N/A
Totals of Controlled Emissions	7.59	0.38	4.33	0.22	12.40	0.32	0.0092	0.00046	0.17	0.0083	0.17	0.0083	7.03E-03	3.52E-04		

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.

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

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

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.

Unit Number	Total HAPs															
	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
Example 1.	6.3	18.2	3.2	8.5	2.3	7.7	0.5	1.0	0.3	1.0	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Totals of HAPs for all units:																

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.

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

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
						(-)		(=)	
Example 1. Surface Coatings	Xylene	1330207	4.0 lbs/gal	SDS	lb/yr	(-)	lb/yr	(=)	lb/yr
					100 gal/yr		0 gal/yr		100 gal/yr
Example 2. Cleaning Solvents	Toluene	108883	70%	Product Label	lb/yr	(-)	lb/yr	(=)	lb/yr
					200 gal/yr		50 gal/yr		150 gal/yr
1. N/A	N/A	N/A	N/A	N/A	lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
2.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
3.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
4.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
5.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
6.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
7.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
8.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
9.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
.					lb/yr	(-)	lb/yr	(=)	lb/yr
					gal/yr		gal/yr		gal/yr
TOTALS						(-)	lb/yr	(=)	lb/yr
							gal/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.

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

Material and Fuel Storage Table

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

Storage Equipment		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
Ex. 1.	Tank	Diesel Fuel	5,000 gal.	Below	Welded/Brown	3/1993	3,000 gal/hr	500 gal/hr	N/A	N/A	N/A	N/A
Ex. 2.	Barrels	Solvent	55 gal. drum	Above	Welded/Green	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	Belly Tank for AQ ID 19186	Diesel	150 gal	Above	Welded/Black	04/2023	N/A	34.40 gal/hr	N/A	N/A	N/A	N/A
2	Vaulted AST AQ ID 25017 (split tank)	Gasoline	1,000 gal	Above	Welded/Unk.	10/2002	Unk.	600 gal/hr	N/A	N/A	N/A	N/A
		Diesel	5,000	Above	Welded/Unk.	10/2002	Unk.	600 gal/hr	N/A	N/A	N/A	N/A

NOTE: To add extra rows in Word, click anywhere in the 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.

1. Basis for Loading/Offloading Rate (*e.g.*, Manufacturer's Data, Field Observation/Test, etc.). **Manufacturer's Data, & 40 CFR 1090.1550**
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.

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

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.

Unit Number and Description		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
Ex. 1.	Generator	CO, NOx, PM ₁₀ , PM _{2.5} , SO ₂	349430.28	3884014.64	18	900 °F	150 fps	4524 acfm	0.8	Rain Cap
Ex. 2.	Spray Gun	PM ₁₀ , xylene, toluene	348540.1	3882928.5	9.2	Ambient	50 fps	589 acfm	0.5	Vertical
1	AQ ID 19186	CO, NOx, PM₁₀, PM_{2.5}, SO₂			14 ft	756 °F	712.62 fps	314.82 acfm	0.75 ft	Vertical

NOTE: To add extra rows in Word, click anywhere in the 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.

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

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 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 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 permittee'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 data 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 10th day of June, 2026

JUSTIN D. SECREST, Colonel, USAF

Print Name

Commander, 377th Air Base Wing

Print Title

SECREST.JUSTIN
.D.1078711082

Digitally signed by
SECREST.JUSTIN.D.1078711082
Date: 2026.06.10 14:03:26 -06'00'

Signature

Role: ☒ Owner ☒ Operator

☐ Other Authorized Representative

Attachment A-2
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: 15 January 2026	☒	☐	☐
Pre-application meeting agenda and public notice sign checklists included with application?	☒	☐	☐

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

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

Item	Included in Application	N/A ¹	Waived ²
(1) Provide public notice in accordance with the regulation, including 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. The public notice shall include all information required by Subsection C of 20.11.41.13 NMAC. One mile radius required by 20.11.72.9 NMAC.	☒	☐	☐
• Contact list of representative(s) of recognized neighborhood associations and recognized coalitions cannot be more than three months old from the application submittal date. • Include memo with contact list provided by Department in application submittal.	☒	☐	☐
• Provide notice using the Notice of Intent to Construct form and Applicant Notice Cover Letter.	☒	☐	☐
(2) In accordance with the regulation, post and maintain a weather-proof sign provided by the Department in a visible location. The applicant shall keep the sign posted until the Department takes final action on the permit application. Include pictures in application showing location of sign and close-up showing information on sign.	☒	☐	☐
Documentary proof of all public notice requirements listed above and required by 20.11.41.13(E)(15) included with application?	☒	☐	☐

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

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. If the original is printed double sided, then it must be printed head-to-toe (flip on the short edge).	☒
• 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.	☒
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.	☒

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.	☒	☐	☐
(2) The application form includes:			
a. The applicant's name, street and post office address, and contact information;	☒	☐	☐
b. The facility owner/ operator's name, street address and mailing address, if different from the applicant;	☒	☐	☐
c. The consultant's name and contact information, if applicable;	☒	☐	☐
d. All information requested on the application form is included (<i>i.e.</i> , the form is complete).	☒	☐	☐
(3) The date the application was submitted to the Department.	☒	☐	☐
(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). <i>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.</i>	☐	☒	☐
b. The air dispersion model has been executed pursuant to a protocol that was approved in advance by the Department.	☐	☒	☐
c. Air dispersion modeling approved (or 2 nd denied) protocol date:	☐	☒	☐
d. Basis or source for each emission rate (including manufacturer's specification sheets, EPA Tier Certification for engines, AP-42 section sheets, test data, or corresponding supporting documentation for any other source used).	☒	☐	☐
e. All calculations used to estimate potential emission rates and controlled/proposed emissions.	☒	☐	☐
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.	☒	☐	☐
g. Fuel data for each existing and/or proposed piece of fuel burning equipment.	☒	☐	☐
h. Anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.	☒	☐	☐
i. Stack and exhaust gas parameters for all existing and proposed emission stacks.	☒	☐	☐
(5) An operational and maintenance strategy detailing:	☒	☐	☐
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;	☒	☐	☐
b. the nature of emissions during routine startup or shutdown of the source and the source's air pollution control equipment; and	☒	☐	☐
c. the steps the applicant will take to minimize emissions during routine startup or shutdown.	☒	☐	☐
(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 the source. Show proposed/ existing process equipment locations on aerial photograph requested in item 7.	☒	☐	☐

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. 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. Include fugitive emission points as well.	☒	☐	☐
(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.	☒	☐	☐
(10) A description of the equipment or methods proposed by the applicant to be used for emission measurement.	☒	☐	☐
(11) The maximum and normal operating time schedules of the source after completion of construction or modification, as applicable.	☒	☐	☐
(12) Any other relevant information as the Department may reasonably require, including without limitation:	☒	☐	☐
a. Provide an applicability determination for all potentially applicable federal regulations.	☒	☐	☐
b. Applicants shall provide the Zoning Requirement Cover Letter Form, along with 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	☒	☐	☐
d. BACT Analysis, if applicable, for new permit or permit modification applications.	☒	☐	☐
(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.	☒	☐	☐
(14) A check or money order for the appropriate application fee or fees required by 20.11.2 NMAC, Fees. (Online fee payments are now accepted as well. Application must be submitted first, then Department will provide invoice for online payment. Check box on Application Review Fee Checklist form to request invoice.)	☒	☐	☐

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.

Attachment A-3
Permit Review Fee Checklist



City of Albuquerque
Environmental Health Department
Air Quality Program



Permit Application Review Fee Checklist Effective January 1, 2026 – December 31, 2026

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 have any questions concerning this checklist, please call (505) 768-1972.

I. COMPANY INFORMATION:

Company Name	U.S. Air Force - Kirtland Air Force Base		
Company Address	377 MSG/CEIEC, 2050 Wyoming Boulevard SE, Suite A-112A Kirtland AFB, NM 87117-5270		
Facility Name	898th Munitions Squadron		
Facility Address	7500 Prairie Road, Building 27497, Kirtland AFB		
Contact Person	Isreal Tavarez, Chief of Environmental Management		
Contact Person Phone Number	(505) 846-8546	Email	isreal.tavarez@us.af.mil
Are these application review fees for an existing permitted source located within the City of Albuquerque or Bernalillo County?	Yes ☒	No ☐	
If yes, what is the current permit/registration/AQN number for this facility?	Permit # 3470		
Is this application review fee for a Qualified Small Business as defined in 20.11.2 NMAC? (See Definition of Qualified Small Business on Page 4)	Yes ☐	No ☒	

II. STATIONARY SOURCE APPLICATION REVIEW FEES:

If the application is for a new stationary source facility, please check all that apply. If this application is for a modification to an existing permit please see Section III. For revisions or relocations please see Sections IV or V.

Check All That Apply	Stationary Sources	Review Fee	Program Element
Air Quality Notifications			
☐	AQN New Application	\$720.00	2801
☐	AQN Technical Amendment	\$393.00	2802
☐	AQN Transfer of a Prior Authorization	\$393.00	2803
☒	<i>Not Applicable</i>	<i>See Sections Below</i>	
Stationary Source Review Fees (Not Based on Proposed Allowable Emission Rate)			
☐	Source Registration required by 20.11.40 NMAC	\$734.00	2401
☐	A Stationary Source that requires a permit pursuant to 20.11.41 NMAC or other board regulations and are not subject to the below proposed allowable emission rates	\$1,467.00	2301
☒	<i>Not Applicable</i>	<i>See Sections Below</i>	
Stationary Source Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollutant)			
☐	Proposed Allowable Emission Rate equal to or greater than 1 tpy and less than 5 tpy	\$1,101.00	2302
☐	Proposed Allowable Emission Rate equal to or greater than 5 tpy and less than 25 tpy	\$2,201.00	2303
☐	Proposed Allowable Emission Rate equal to or greater than 25 tpy and less than 50 tpy	\$4,402.00	2304
☐	Proposed Allowable Emission Rate equal to or greater than 50 tpy and less than 75 tpy	\$6,603.00	2305
☐	Proposed Allowable Emission Rate equal to or greater than 75 tpy and less than 100 tpy	\$8,804.00	2306
☐	Proposed Allowable Emission Rate equal to or greater than 100 tpy	\$11,005.00	2307

☒	<i>Not Applicable</i>	<i>See Sections Below</i>	
-------------------------------------	-----------------------	---------------------------	--

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)	\$1,467.00	2308
☐	40 CFR 61 – “National Emission Standards for Hazardous Air Pollutants” (NESHAPs)	\$1,467.00	2309
☐	40 CFR 63 – (NESHAPs) Promulgated Standards	\$1,467.00	2310
☐	20.11.64 – (NESHAPs) Case-by-Case MACT Review (Major HAP sources)	\$14,674.00	2311
☐	20.11.61 NMAC – Prevention of Significant Deterioration (PSD) Permit	\$7,337.00	2312
☐	20.11.60 NMAC – Non-Attainment Area Permit	\$7,337.00	2313
☒	<i>Not Applicable</i>	<i>Not Applicable</i>	

III. MODIFICATION TO EXISTING PERMIT APPLICATION REVIEW FEES:

If the 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. For revisions or relocations please see Sections IV or V.

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 Source Registration required by 20.11.40 NMAC	\$734	2401
☒	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	\$1,467	2321
☐	<i>Not Applicable</i>	<i>See Sections Below</i>	
Modification Application Review Fees (Based on the Proposed Allowable Emission Rate for the single highest fee pollutant)			
☐	Proposed Allowable Emission Rate equal to or greater than 1 tpy and less than 5 tpy	\$1,101.00	2322
☐	Proposed Allowable Emission Rate equal to or greater than 5 tpy and less than 25 tpy	\$2,201.00	2323
☐	Proposed Allowable Emission Rate equal to or greater than 25 tpy and less than 50 tpy	\$4,402.00	2324
☐	Proposed Allowable Emission Rate equal to or greater than 50 tpy and less than 75 tpy	\$6,603.00	2325
☐	Proposed Allowable Emission Rate equal to or greater than 75 tpy and less than 100 tpy	\$8,804.00	2326
☐	Proposed Allowable Emission Rate equal to or greater than 100 tpy	\$11,005.00	2327
☒	<i>Not Applicable</i>	<i>See Sections Below</i>	
Major Modifications Review Fees (In addition to the Modification Application Review Fees above)			
☐	20.11.60 NMAC – Permitting in Non-Attainment Areas	\$7,337.00	2333
☐	20.11.61 NMAC – Prevention of Significant Deterioration	\$7,337.00	2334
☒	<i>Not Applicable</i>	<i>Not Applicable</i>	
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)	\$1,467.00	2328
☐	40 CFR 61 – “National Emission Standards for Hazardous Air Pollutants” (NESHAPs)	\$1,467.00	2329
☒	40 CFR 63 – (NESHAPs) Promulgated Standards	\$1,467.00	2330
☐	20.11.64 – (NESHAPs) Case-by-Case MACT Review (Major HAP sources)	\$14,674.00	2331
☐	20.11.61 NMAC – Prevention of Significant Deterioration (PSD) Permit	\$7,337.00	2332
☐	20.11.60 NMAC – Non-Attainment Area Permit	\$7,337.00	2333
☐	<i>Not Applicable</i>	<i>Not Applicable</i>	

IV. ADMINISTRATIVE AND TECHNICAL REVISION APPLICATION REVIEW FEES:

If the application is for an administrative or technical revision of an existing permit issued pursuant to 20.11.40 or 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
☒	Not Applicable	See Sections II, III or V	

V. PORTABLE STATIONARY SOURCE RELOCATION FEES:

If the 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	\$
Section III Total	\$2,934
Section IV Total	\$
Section V Total	\$
Total Application Review Fee	\$

☐ Check here if an invoice is requested so Application Review Fee can be paid online.

I, the undersigned, a responsible officer of the applicant company, certify that to the best of my knowledge, the information stated on this checklist gives 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 10 day of June, 20 26

JUSTIN D. SECREST, Colonel, USAF

Print Name

Commander, 377th Air Base Wing

Print Title

SECREST.JUSTIN
.D.1078711082

Digitally signed by SECREST.JUSTIN.D.1078711082
Date: 2026.06.10 14:02:18 -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.

Attachment A-4
Zoning Certification

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,

A handwritten signature in black ink, appearing to read "Maggie Gould", is written over a horizontal line.

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

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, Carina.munoz-dyer@us.af.mil

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

Attachment A-5
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. This Compliance History Disclosure Form is not site specific: responses shall be based on the applicant/permittee as an entity and not be limited to the application, site, facility or source.
3. 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.
4. 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” except for Question 5b. 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.
5. 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.
6. For any required explanations, be sure to identify the question to which the explanation is responsive. If you submit any document in connection with your answer to any question, refer to it as, “Exhibit No. ___”, and attach it after the explanation(s) at the end of the Compliance History Disclosure Form, consecutively numbering each additional page at the top right corner.
7. 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.
8. Supplementary information required by the Program may include responses to public comment received by the Program during the application review process.
9. 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. Applicant/Permittee Name: Kirtland Air Force Base		Check Applicable Box: ☒ Applicant ☒ Permittee
B. Time Period of Compliance Reporting (10 Years): May 1, 2016 to May 1, 2026 <i>Instructions: For applicants, answer the following questions with information from within the 10 years preceding the current application. For existing permit holders requested to submit this form by the Program outside of an application, answer the following questions with information from within the 10 years preceding the Program's issuance of each permit.</i>		
C. Questions		
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 Mexico Air Quality Control Act?	☐ Yes ☒ No
3	Been convicted in any court of any state or the United States of a felony related to environmental crime?	☐ Yes ☒ No
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?	☐ 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?	☒ Yes ☐ No
5b	If "No" to question 5a, mark N/A and 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.	☐ Yes ☒ No ☐ N/A
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, or "no" to 5b, 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

JUSTIN D. SECREST, Colonel, USAF

Print Name

SECREST.JUSTIN.D.107
8711082

Digitally signed by
SECREST.JUSTIN.D.1078711082
Date: 2026.06.10 14:01:14 -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 Start Date	Deviation End date	Cause of Deviation	Correction Action Taken
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 diesel-fired 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: 2016 to 2026

Page 1

Updated: 20-Apr-26

**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.

Attachment A-6

**Pre-Application Meeting Checklist and
Supporting Documentation**



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



Pre-Permit Application Meeting Request Form

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

Environmental Health Department
Air Quality Program
Permitting Division
P.O. Box 1293
Albuquerque, NM 87103

A copy of this form must be included as part of the application package.

Company/Organization:	Kirtland Air Force Base				
Current Permit #:	3470				
Point of Contact: (phone number and email): Preferred form of contact (check one): ☐ Phone ☒ E-mail	Name: Carina Munoz-Dyer Phone: 505-846-8781 Email: carina.munoz-dyer@us.af.mil				
Preferred meeting dates/times: (provide several dates/times when applicant/consultant are available in the 1-2 weeks after submitting this form)	1 st date/ time(s) 12/18 after 12PM	2 nd date/ time(s) 12/19 Morning	3 rd date/ time(s) 01/06 btwn 10&2	4 th date/ time(s) 01/07 btwn 10&2	5 th date/ time(s) 01/08 btwn 10&2
Preferred meeting type (Zoom/In Person):	In person				
Description of Project:	We have two permits for the same facility: 3101-RV1 and 3470. We want to combine permits into one by: • Reduce the hours of Unit 1 in Permit 3470 from 200 hours per year to 100 hours per year; • Adding Unit 1 -AST of Permit 3101-RV1 to Permit 3470; • Increase the throughput of Unit 1 from 20,000 gallons per year to 35,000 gallons per year based on a 12-month rolling period; • Remove Unit 2 – Boiler of Permit 3101-RV1. The boiler has been removed and we are in the process of replacing it with two small natural gas boilers with a capacity of 3 MMBTU/hr used for comfort heat and exempt in accordance to 20.11.41.2.B(2)((3)(a); and • Cancel permit 3101-RV1				



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



**Construction Permit (20.11.41 NMAC)
Pre-Permit Application Meeting Agenda Checklist & Public
Notice Sign Guidelines Checklist**

This entire document, including both completed checklists, must be included as part of the application package.

Any person seeking a new 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").

Prior to submitting an application, per 20.11.41.13(A) NMAC, the applicant (or their consultant) shall contact the Department in writing and submit a Pre-Permit Application Meeting Request Form to request a pre-application meeting. The Pre-Permit Application Meeting Request Form is available at <https://www.cabq.gov/airquality/air-quality-permits/air-quality-application-forms>. The purpose of the pre-application meeting is for the Department to provide the applicant with information regarding the contents of the application and the application process.

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

Also included in this document is the Public Notice Sign Guidelines Checklist, which contains requirements for how the applicant must display the required weather-proof sign.

The applicant should fill out and have this agenda checklist available at the pre-application meeting to be sure all items are covered. Check the boxes to acknowledge that each item from the agenda was discussed and that requirements for the weather-proof sign were followed.

Pre-Permit Application Meeting Agenda Checklist

Applicant Company Name: **Kirtland Air Force Base**

Facility Name: **898th Munitions Squadron**

☒ Fill out and submit a Pre-Permit Application Meeting Request form
Available online at <https://www.cabq.gov/airquality/air-quality-permits/air-quality-application-forms/air-quality-application-forms>

- I. ☒ Discuss Project:
 - a. Facility Location
 - b. Facility Description
 - c. Main Processes
 - d. Equipment
 - e. Proposed Schedule
- II. ☒ Discuss the requirement for a zoning certification or verifications for new permits and permit modifications. The Zoning Requirement Cover Page form is a required component of this part of the submittal:
 - a. For projects on property subject to City or County zoning laws (*i.e.*, **not** located on federal land, **not** located on State of New Mexico land, **not** located on Tribal land), a zoning certification from the appropriate planning department is required.
 - i. City Planning Form: <https://www.cabq.gov/planning/code-enforcement-zoning>
 - ii. County Planning Form: <https://www.bernco.gov/planning/planning-and-land-use/applications-forms/>
 - b. If the project's property is not subject to City or County zoning jurisdiction, a zoning verification from both planning departments is required.
 - i. City Planning Form: <https://www.cabq.gov/planning/code-enforcement-zoning>
 - ii. County Planning Form: <https://www.bernco.gov/planning/planning-and-land-use/applications-forms/>
 - c. The zoning certification or verifications **must** be obtained from the appropriate Planning Department, either City of Albuquerque or Bernalillo County. For more information, please visit the City's Planning Department website at <https://www.cabq.gov/planning> or Bernalillo County's Planning Department website at the <https://www.bernco.gov/planning/>.
- III. ☒ Discuss the requirement for a Compliance History Disclosure Form as of Nov. 6, 2023 for permit application submittals except for Administrative Revisions that are not transfers of ownership.
- IV. ☒ Discuss the potential requirement for a BACT Analysis for new permits and permit modifications per 20.11.72 NMAC.
 - a. Required if new or modifying stationary source is within a one-mile radius of an overburdened area, as described in 20.11.72.8(C) NMAC; or
 - b. Required if new or modifying stationary source emits any one, or combination of, the fifteen hazardous air pollutants (HAPs) listed in 20.11.72.8(D) NMAC.
- V. ☒ If permit modification or revision, review current permit:
 - a. Review Process Equipment Table and Emissions Table and discuss changes
 - b. Request information about the replacement or new equipment (for example, if it is an engine, we need to know if it is new, what year, fuel type, etc...) to give them an idea of the changes that will be needed
 - c. Discuss possible changes in permit conditions

- VI. ☒ Air Dispersion modeling process, procedures and options:
- When modeling is required and possibility of waivers
 - Protocol process, purpose, and time frame
 - Preliminary review, purpose, and time frame
 - Full review and time frame
 - Peer reviews
 - Assumptions in the modeling become permit conditions
 - NED data should be used instead of DEM data for assigning elevations to receptors, sources, buildings, etc.
- VII. ☒ Applicant's public notice requirements
- During the same month application package will be submitted, ask Department for memo of neighborhood associations/coalitions within 1 mile of facility
 - Fill out and send Notice of Intent to Construct form as attachment, with Applicant Notice Cover Letter as email body, to neighborhood associations/coalitions listed in memo:
<https://www.cabq.gov/airquality/air-quality-permits/air-quality-application-forms>
 - Post and maintain a weather-proof sign. Signs are available in the downtown Program office. The Public Notice Sign Guidelines Checklist can be found on the next page of this document.
- VIII. ☒ Regulatory timelines
- 30 days to rule application complete
 - 90 days after ruled complete for permitting decision
 - 30-day public comment period after application deemed complete
 - If public interest in application:
 - 30-day review of technical analysis
 - 90-day extension for permitting decision
 - Request for Public Information Hearing - 90-day extension for permitting decision
 - Complex technical issues in application - 90-day extension for permitting decision
 - If application ruled incomplete it stops timeline and restarts at beginning with updated submittal
- IX. ☒ Department Policies
- One original hard copy must be submitted along with a duplicate copy. If the original is printed double sided, then it must be printed head-to-toe (flip on the short edge). The duplicate copy should be a high-quality electronic duplicate submitted on thumb drive as one complete PDF with all application contents found in the hardcopy, including pages with signatures. However, do not include financial information, such as a copy of a check, in the electronic PDF. The electronic submittal should also include emission calculations Excel-compatible file(s) and modeling files, if applicable.
 - Applications will be ruled incomplete if any parts from Permit Application Checklist are missing
 - Review fees paid in full are part of the application package (Except as noted above)
 - Discuss payment format (by check, credit card or online)
 - Use the most recent Permit Application Checklist, found under Part 41 Implementation on this page:
<https://www.cabq.gov/airquality/air-quality-permits/air-quality-application-forms>
 - After three tries, permit application denied and application must start over including repayment of fees
- X. ☐ Additional Questions?



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.

Applicant Company Name: **Kirtland Air Force Base**

Facility Name: **898th Munitions Squadron**

- ☒ The sign must be posted at the more visible of either the proposed or existing facility entrance (or, if approved in advance and in writing by the department, at another location on the property that is accessible to the public)
- ☒ The sign shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times.
- ☒ The lower edge of the sign board should be mounted a minimum of 2 feet above the existing ground surface to facilitate ease of viewing
- ☒ Include at least two pictures of the completed, properly posted sign in the application package immediately following this document. One picture should show the location of the posted sign and the other should be close enough to the sign for the posted information to be legible in the picture.
- ☐ **Check here if the department has waived the sign posting requirement.**
Alternative public notice details:

Attachment A-7
Public Notice Documentation

Fill out the required highlighted information below. Then use the Subject as the Subject line of the required public notice email(s) sent to nearby neighborhood associations/neighborhood coalitions. Copy and paste the rest of the completed information on this page into the body of the email(s) and attach the completed NOI form. If providing notice by certified mail, use this page as the cover letter and attach the NOI form.

SUBJECT: Public Notice of Proposed Air Quality Construction Permit Application 898th Munitions Squadron

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 or permit modification 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. Public notice is required within a one mile radius by 20.11.72.9 NMAC.

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 (KAFB)
Site or Facility Name	898th Munitions Squadron
Site or Facility Address	7500 Prairie Road, Kirtland AFB, NM 87117
New or Existing Source	Existing
Anticipated Date of Application Submittal	17 June 2026
Summary of Proposed Source to Be Permitted	The application proposes to reduce permitted hours of operation for an existing 755 horsepower, EPA Tier II diesel-fired emergency generator from 200 hours per year to 100 hours per year. The emergency generator provides backup electrical power in the event of loss of commercial power. Additionally, the application proposes to consolidate existing permitted gasoline dispensing equipment under one permit and increase gasoline throughput from 20,000 gallons per year to 30,000 gallons per year.

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:

- KAFB 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



Timothy M. Keller,
Mayor

Public Participation

List of Neighborhood Associations and Neighborhood Coalitions MEMORANDUM

To: Carina Munoz-Dyer, Air Quality Program Manager
From: Michael McKinstry, Environmental Health-Air Quality Permitting Manager
Subject: Determination of Neighborhood Associations and Coalitions
within 0.5 mile of 7500 Prairie Road
Date: January 23, 2026

DETERMINATION:

On January 23, 2026, I used the City of Albuquerque Zoning Advanced Map Viewer (<http://coagisweb.cabq.gov/>) to verify which City of Albuquerque Neighborhood Associations (NA), Homeowner Associations (HOA) and Neighborhood Coalitions (NC) are located within 0.5 mile of 7500 Prairie Road in Bernalillo County, NM.

I then used the City of Albuquerque Office (COA) of Neighborhood Coordination's Monthly Master NA List dated January 2026 and the Bernalillo County (BC) Monthly Neighborhood Association January 2026 Excel file to determine the contact information for each NA and NC located within 0.5 mile of 7500 Prairie Road in Bernalillo County, NM.

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

COA/BC Association or Coalition	Name	Email or Mailing Address*
No Information was found		

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

Attachment A-8
Notice of Intent

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 (20.11.41.13(B) and 20.11.72.9 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 1 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 Air Quality Program. Currently, no application for this proposed project has been submitted to the Air Quality Program. Applicants are required to include a copy of this form and documentation of mailed notices with their Air Quality Construction Permit Application.

Proposed Project Information

Applicant's name and address:

Nombre y domicilio del solicitante: U.S. Air Force - Kirtland Air Force Base (AFB)
7500 Prairie Road, Kirtland AFB, NM 87117

Owner / operator's name and address:

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

Contact for comments and inquiries:

Datos actuales para comentarios y preguntas:

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

Address (*Domicilio*): 377 MSG/CEIEC, 2050 Wyoming Blvd SE, Suite A-112, Kirtland AFB,
Albuquerque, NM 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: 17 June 2026

Description of the source:

Descripción de la fuente: Existing emergency generator and gasoline dispensing operations for facility support

Exact location of the source or proposed source:

Ubicación exacta de la fuente o fuente propuesta: 7500 Prairie Road, Kirtland AFB, NM 87117

Nature of business:

Tipo de negocio: National security

Process or change for which the permit is requested:

Proceso o cambio para el cuál de solicita el permiso:

Reduce permitted hours of operation for existing 755 HP emergency generator from 200 hr/yr to 100 hr/yr in Permit #3470. Consolidate existing permitted gasoline equipment from Permit 33101-2AR to Permit #3470, and increase permitted gasoline throughput from 20,000 gal/yr to 30,000 gal/yr.

Maximum operating schedule:

Horario máximo de operaciones: 100 hr/yr for emergency generator and 30,000 gal/yr for gasoline throughput

Normal operating schedule:

Horario normal de operaciones: Intermittent use for routine gasoline deliveries and emergency operations during a power outage.

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

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

Air Contaminant <i>Contaminante de aire</i>	Proposed Construction Permit <i>Permiso de Construcción Propuesto</i>		Net Changes (for permit modification or technical revision) <i>Cambio Neto de Emisiones (para modificación de permiso o revisión técnica)</i>	
	pounds per hour <i>libras por hora</i>	tons per year <i>toneladas por año</i>	pounds per hour <i>libras por hora</i>	tons per year <i>toneladas por año</i>
NO_x	7.59	0.38	0	-0.38
CO	4.3	0.22	0	-0.21
VOC	12.40	0.32	0	+0.08
SO₂	0.0092	0.00046	0	-0.61
PM₁₀	0.17	0.0083	0	-0.012
PM_{2.5}	0.17	0.0083	0	-0.012
HAP	0.0070	0.00035	0	-0.00035

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. To check the status of an Air Quality Construction Permit application, call 311 and provide the Applicant's information, or visit <https://www.cabq.gov/airquality/air-quality-permits>.

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

Air Quality Construction Permitting Overview

This is the typical process to obtain an Air Quality Construction Permit for Synthetic Minor and Minor sources of air pollution from the Albuquerque – Bernalillo County 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 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 application 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 deem the application incomplete 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 to which the Applicant sent notices, as well as interested parties who have requested notification of application submittals, and is 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, request to review the draft technical analysis, 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 and modeled impact is compared to state and federal air quality standards and informs the decision on whether to approve or deny the Applicant's permit application.

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.

Possible Public Notice from the Department: If individuals request to review the draft technical analysis for a permitting action during the first 30-day public comment period in Step 2, there will be an additional public notice step. 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 possible 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.

During this possible 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.

Air Quality Construction Permitting Overview

Step 4: Public Comment Evaluation and Response: The Air Quality Program evaluates all public comments received during the 30-day public comment period(s) 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 permitting 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.

If there is public participation for a permit application and a response document is prepared, notification 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 permitting process. If there is no public participation, no notification of the final decision is provided.

The Department is legally required to 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

898th Munitions Squadron
Air Quality Construction Permit Application to Modify 30470
Public Notice Requirements – Yellow Sign
Photos taken 08 June 2026





Proposed Air Quality Construction Permit

Permiso de Construcción de Calidad del Aire Propuesto



U.S. Air Force Base (AFB)

1. Applicant's Name: U.S. Air Force Base (AFB)
 Nombre del solicitante: _____
 Owner or Operator's Name: U.S. Air Force Base (AFB)
 Nombre del Propietario u Operador: _____
2. Actual or Estimated Date the Application will be Submitted to the Department: 17 June 2026
 Fecha Actual o Estimada en que se Entregará la Solicitud al Departamento: _____
3. Exact Location of the Source or Proposed Source: 7500 Prairie Rd, Kirtland AFB, 8117
 Ubicación Exacta de la Fuente o Fuente Propuesta: _____
4. Description of the Source: Existing emergency generator & gas dispensing
 Descripción de la Fuente: _____
 Nature of Business: National Security operations
 Tipo de Negocio: _____
 Process or change for which a permit is requested: Reduce permitted hours to emergency generator, and increase permitted gasoline throughput
 Proceso o cambio para el cual se solicita el permiso: _____

Preliminary estimate of the maximum quantities of each regulated air contaminant the source will emit:
 Estimación preliminar de las cantidades máximas de cada contaminante de aire regulado que la fuente va a emitir:

Air Contaminant Contaminante de Aire	Proposed Construction Permit Permiso de Construcción Propuesto		Net Change Emissions (for permit modification or technical revision) Cambio Neto de Emisiones (para modificación de permiso o revisión técnica)	
	Pounds per hour libras por hora	Tons per year toneladas por año	Pounds per hour libras por hora	Tons per year toneladas por año
NO _x	7.59	0.38	0	- 0.38
CO	4.33	0.22	0	- 0.21
VOC	12.40	0.52	0	+ 0.08
SO ₂	0.0092	0.0046	0	- 0.61
PM ₁₀	0.17	0.0083	0	- 0.012
PM _{2.5}	0.17	0.0083	0	- 0.012
HAP	0.0070	0.0035	0	- 0.0035

5. Maximum Operating Schedule: 100 hr/yr → Emergency generator / 30,000 gallons per year gasoline throughput
 Horario Máximo de Operaciones: _____
 Normal Operation Schedule: Intermittent use for routine gasoline deliveries & emergency operations
 Horario Normal de Operaciones: _____
6. Current Contact Information for Comments and Inquiries
 Datos actuales para Comentarios y Preguntas
 Name (Nombre): Isreal Tavaréz, Chief Environmental Management
 Address (Domicilio): 311 MS4/CEIEC, 2050 Wyoming Blvd, Suite B-10, Kirtland AFB, NM 8117-50
 Phone Number (Número Telefónico): 505-846-8546
 Email Address (Correo Electrónico): isreal.tavarez@us.af.mil

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

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

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

Attachment A-9
BACT Applicability

Facility/Project Description

898th Munitions Squadron is located at 7500 Prairie Road at Kirtland Air Force Base and currently operates under Permit #3470 and #3101-2AR. The permit modification application requests to move existing permitted gasoline dispensing operations from Permit #3101-2AR to Permit #3470. Specifically, to increase gasoline throughput for an existing vaulted aboveground storage tank (AST) associated with gasoline dispensing operations. The vaulted AST consists of a split-compartment tank containing both gasoline and diesel fuel with secondary containment. The gasoline compartment has a 1,000-gallon capacity, and the diesel compartment has a 5,000-gallon capacity. For air quality purposes, evaporative emission standards apply only to the gasoline dispensing operation. The proposed modification requests an increase in the permitted gasoline throughput from 20,000 gallons per year to 30,000 gallons per year. The BACT applicability evaluation applies only to the proposed increase in gasoline dispensing throughput at the existing gasoline AST.

Best Available Control Technology (BACT) Considerations

The proposed modification involves an increase in annual gasoline throughput at an existing gasoline dispensing facility. The applicability of Best Available Control Technology (BACT) requirements under 20.11.72 New Mexico Administrative Code (NMAC) was evaluated for the proposed modification. The primary regulated pollutant for the gasoline dispensing operation is volatile organic compounds (VOCs). While gasoline vapors contain constituent HAPs as a fraction of total VOC emissions, the BACT provisions under 20.11.72 NMAC are triggered based on a source's geographic proximity to a designated overburdened area. The nearest designated overburdened area is located more than three miles from the facility, as shown in Attachment B. Since the facility is located outside of the regulatory distance threshold of one mile, the HAP-specific BACT provisions under 20.11.72.8.C NMAC are not triggered. Therefore, a BACT determination is not applicable for this project.

Existing Design Features and Operating Practices

Although BACT is not applicable to the proposed modification, the gasoline dispensing facility incorporates design features and operating practices that minimize emissions and are appropriate for a source of this size and throughput. The gasoline AST is equipped with submerged filling to minimize turbulence and vapor generation during fuel deliveries. The tank and dispensing system utilize tight-fitting caps and closures to reduce evaporative losses, and the system is properly vented in accordance with applicable requirements.

The gasoline AST is subject to 40 CFR 63 NESHAP Subpart CCCCCC (Gasoline Dispensing Facilities) and will continue to comply with all applicable requirements. Compliance with Subpart CCCCCC provides established controls and operating standards that minimize emissions associated with gasoline storage and dispensing activities. Additionally, the facility maintains monthly throughput records and conducts routine inspections to verify proper operation of the

tank and dispensing equipment. These inspections and records support early identification and correction of any conditions that could result in unnecessary emissions and provide ongoing assurance that the AST is operating as intended.

Conclusion

The applicability of BACT under 20.11.72 NMAC was evaluated for the proposed throughput increase at the gasoline dispensing facility at 898th Munitions Squadron. Given that the facility is located more than one mile away from the nearest overburdened area, and the limited scope of the modification, no additional BACT requirements apply to the proposed modification. Existing design features, operating practices, and compliance with applicable regulatory requirements provide appropriate emission minimization for the gasoline dispensing operations at the 898th Munitions Squadron facility.

Attachment A-10

Air Dispersion Modeling Correspondence

[Non-DoD Source] RE: 3470 Modification - Modeling Determination Request

From Tumpane, Kyle <ktumpane@cabq.gov>

Date Fri 1/16/2026 12:05 PM

To MUNOZ-DYER, CARINA G CIV USAF AFGSC 377 MSG/CEIEC <carina.munoz-dyer@us.af.mil>

Cc POMO, ELIZABETH M CTR USAF AFGSC 377 MSG/CEIEC <elizabeth.pomo.ctr@us.af.mil>; McKinstry, Michael W. <mmckinstry@cabq.gov>

Hello Carina,

Based on the information you provided, no air dispersion modeling will be required for this permitting action by the Air Quality Program (AQP). The AQP modeling guidelines state that exempt comfort heat boilers and emergency generators do not need to be modeled. VOCs are also not modeled by the AQP.

Thank you,
Kyle



KYLE TUMPANE

senior environmental health scientist

o 505-768-2872

m 505-366-9985

e ktumpane@cabq.gov

cabq.gov/ehd

From: MUNOZ-DYER, CARINA G CIV USAF AFGSC 377 MSG/CEIEC <carina.munoz-dyer@us.af.mil>

Sent: Friday, January 16, 2026 9:00 AM

To: Tumpane, Kyle <ktumpane@cabq.gov>

Cc: POMO, ELIZABETH M CTR USAF AFGSC 377 MSG/CEIEC <elizabeth.pomo.ctr@us.af.mil>

Subject: 3470 Modification - Modeling Determination Request

Good morning Kyle,

We met with Michael yesterday to go over a permitting action.

We have two permits for the same facility: 3101-RV1 and 3470. We want to combine permits into one by:

- Reduce the hours of Unit 1 – Emergency generator in Permit 3470 from 200 hours per year to 100 hours per year;
- Adding Unit 1 -AST of Permit 3101-RV1 to Permit 3470;
- Increase the throughput of Unit 1 from 20,000 gallons per year to 35,000 gallons per year based on a 12-month rolling period;
- Remove Unit 2 – Boiler of Permit 3101-RV1. The boiler has been removed and we are in the process of replacing it with two small natural gas boilers with a capacity of 3 MMBTU/hr used for comfort heat and

exempt in accordance to 20.11.41.2.B(2)((3)(a); and

- Cancel permit 3101-RV1
- These changes will result in the following:
 - The boilers 3101 that will be moved to 3470 will become exempt sources.
- The emissions from the generator will be cut roughly in half
- The only increase in emission will be the VOCs from the gas station.

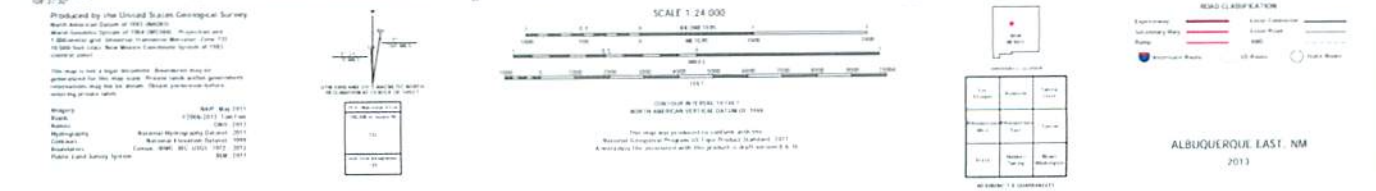
We are respectfully requesting AEHD's determination regarding the modeling requirements for this action.

Let me know if you have any questions,

Carina

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

Attachment B
Facility Map



Attachment C
Emissions Calculations

***Kirtland Air Force Base
Permit #3470 Modification
Emissions Summary for All Units***

Pollutant	Hourly Emissions (lb/hr)	Uncontrolled Emissions (tpy)	Controlled Emissions (tpy)
NO _x	7.59	33.24	0.38
CO	4.33	18.95	0.22
PM ₁₀	0.17	0.73	0.0083
PM _{2.5}	0.17	0.73	0.0083
VOC	12.40	54.31	0.32
SO ₂	0.0092	0.040	0.00046
Total HAPS	0.0070	0.031	0.00035

***Kirtland Air Force Base
Net Changes for 898th Munitions Squadron Equipment***

Pollutant	Existing lb/hr	Existing tpy ¹	Proposed lb/hr	Proposed tpy ²	Net Change tpy
NO _x	7.59	0.76	7.59	0.38	-0.38
CO	4.33	0.43	4.33	0.22	-0.21
PM ₁₀	0.17	0.020	0.17	0.0083	-0.012
PM _{2.5}	0.17	0.020	0.17	0.0083	-0.012
VOC	12.40	0.24	12.40	0.32	0.08
SO ₂	6.11	0.61	0.0092	0.00046	-0.61
Total HAPS	0.0070	0.00070	0.0070	0.00035	-0.00035

¹ Existing emissions reflect currently permitted emissions from AQUIS IDs 19186, 25017, and 15008.

² Proposed emissions reflect requested controlled emission rates listed in the permit application.

***Kirtland Air Force Base - Emergency Generator
Unit 1 AQUIS ID 19186
Emissions Summary***

Pollutant	Hourly Emissions (lb/hr)	Uncontrolled Emissions (tpy)	Controlled Emissions (tpy)
NO _x	7.59	33.24	0.38
CO	4.33	18.95	0.22
PM ₁₀	0.17	0.73	0.0083
PM _{2.5}	0.17	0.73	0.0083
VOC	0.40	1.75	0.020
SO ₂	0.0092	0.040	0.00046
Total HAPS	7.03E-03	3.08E-02	3.52E-04

***Kirtland Air Force Base - Gasoline Dispensing
Unit 2 AQUIS IDs 25017 & 15008
Emissions Summary***

Pollutant	Hourly Emissions (lb/hr)	Uncontrolled Emissions (tpy)	Controlled Emissions (tpy)
NO _x	-	-	-
CO	-	-	-
PM ₁₀	-	-	-
PM _{2.5}	-	-	-
VOC	12.00	52.56	0.30
SO ₂	-	-	-
Total HAPS	-	-	-

***Kirtland Air Force Base - Emergency Generator
Unit 1 AQUIS ID 19186***

Parameter	Value	Unit of Measurement
Uncontrolled Annual Hours of Operation	8,760	Hours/Yr
Requested Hours of Operation	100	Hours/Yr
Engine Nameplate Horsepower:	755	HP
Brake Specific Fuel Consumption Value ¹	7,000	Btu/hp-hr
Diesel Heat Value ² :	137,000	Btu/gal
Diesel Fuel Usage ³ :	34.40	gal/hr
Heat Input ⁴	4.71	MMBtu/hr

¹ Brake Specific Fuel Consumption tested value from AP-42 3.4 (April 2025)

²Diesel Heat Value from AP-42 Appendix A: Miscellaneous Data & Conversion Factors (September 1985)

³Fuel consumption value from manufacturer

⁴The following equation was used to calculate Heat Input:

Heat Input = Fuel Usage (gal/hr) * Diesel Heat Value (Btu/gal) / 1,000,000

Kirtland Air Force Base - Emergency Generator
Unit 1 AQUIS ID 19186
Criteria Pollutant Emissions

Pollutant	Emission Factor (g/hp-hr)	Hourly Emissions (g/hr) ¹	Hourly Emissions (lb/hr) ¹	Uncontrolled Emissions (tpy) ²	Controlled Emissions (tpy) ³	Emission Factor Source
NO _x ⁴	4.56	3442.80	7.59	33.24	0.38	TIER 2 NSPS Non-Road Engine
CO	2.60	1963.00	4.33	18.95	0.22	TIER 2 NSPS Non-Road Engine
PM ₁₀ ⁵	0.10	75.50	0.17	0.73	0.0083	Manufacturer
PM _{2.5} ⁵	0.10	75.50	0.17	0.73	0.0083	Manufacturer
VOC ⁶	0.24	181.20	0.40	1.75	0.020	TIER 2 NSPS Non-Road Engine
SO ₂ ⁷	0.0055	4.16	0.0092	0.040	0.00046	AP-42 Table 3.4-1

¹The following equation was used to calculate hourly emissions for each criteria air pollutant:

Hourly emissions (g/hr) = EF (g/hp-hr) * HP

Hourly emissions (lb/hr) = Hourly emissions (g/hr) / 453.60 g

²The following equation was used to calculate annual uncontrolled emissions for each pollutant:

Annual emissions (ton/yr) = Hourly Emissions (lb/hr) * Uncontrolled Hours of Operation (8760 hr/yr) / (2000 lb/ton)

³The following equation was used to calculate annual controlled emissions for each pollutant:

Annual emissions (ton/yr) = Hourly Emissions (lb/hr) * Controlled Hours of Operation (100 hr/yr) / (2000 lb/ton)

⁴NO_x breakdown from NO_x+NMHC is 95% of the 4.80 g/hp-hr EF (CARB, 06/2004)

⁵Assumed PM_{2.5}=PM₁₀ = PM

⁶VOC breakdown from NO_x+NMHC is 5% of the 4.80 g/hp-hr EF (CARB, 06/2004)

⁷SO₂ emission factor from AP-42 3.4-1 converted from 0.00809S lb/hp-hr using a conversion factor of 453.60 g/lb, where S = 1.5% to represent sulfur content
Previous permit application for #3470 did not apply a site-specific sulfur content value to SO₂ emissions

Kirtland Air Force Base - Emergency Generator

Unit 1 AQUIS ID 19186

HAP Emissions

Pollutant	Diesel Emission Factor (lb/MMBtu)	Potential Emissions (lb/hr) ¹	Uncontrolled Emissions (tpy) ²	Controlled Emissions (tpy) ²	Emission Factor Source
Benzene	7.76E-04	3.66E-03	1.60E-02	1.83E-04	AP-42 Table 3.4-3
Toluene	2.81E-04	1.32E-03	5.80E-03	6.62E-05	AP-42 Table 3.4-3
Xylenes	1.93E-04	9.10E-04	3.98E-03	4.55E-05	AP-42 Table 3.4-3
Formaldehyde	7.89E-05	3.72E-04	1.63E-03	1.86E-05	AP-42 Table 3.4-3
Acetaldehyde	2.52E-05	1.19E-04	5.20E-04	5.94E-06	AP-42 Table 3.4-3
Acrolein	7.88E-06	3.71E-05	1.63E-04	1.86E-06	AP-42 Table 3.4-3
Naphthalene	1.30E-04	6.13E-04	2.68E-03	3.06E-05	AP-42 Table 3.4-4
Total	1.49E-03	7.03E-03	3.08E-02	3.52E-04	-

¹The following equation was used to calculate HAP hourly emissions:

Hourly emissions (lb/hr) = EF (lb/MMBtu) * Heat Input (MMBtu/hr)

²The following equation was used to calculate annual uncontrolled emissions for each pollutant:

Annual emissions (ton/yr) = Hourly Emissions (lb/hr) * Uncontrolled Hours of Operation (8760 hr/yr) / (2000 lb/ton)

³The following equation was used to calculate annual controlled emissions for each pollutant:

Annual emissions (ton/yr) = Hourly Emissions (lb/hr) * Controlled Hours of Operation (100 hr/yr) / (2000 lb/ton)

***Kirtland Air Force Base - Gasoline Dispensing
Unit 2 AQUIS IDs 15008 and 25017***

AP-42 Emission Methodology for Volatile Organic Compounds (VOC)

Parameter	Value	Unit of Measurement
Nozzle Dispensing Rate	10	gal/min ¹
Uncontrolled Annual Hours of Operation	8,760	Hours/Yr
Requested Annual Throughput	30,000	gal/yr

¹ Nozzle dispensing rate based on standard rate specified in 40 CFR 1090.1550(b), which superceded 40 CFR 80.22(j) in original permit application.

***Kirtland Air Force Base - Gasoline Dispensing
Unit 2 AQUIS IDs 15008 and 25017
VOC Emissions***

Loss Category	VOC Emission Factor (lb/1,000-gal)	Hourly Emissions (lb/hr) ¹	Annual Emissions (ton/yr) ²	Potential to Emit (ton/yr) ³	Emission Factor Source
UST Submerged Filling ⁴	7.30	4.38	0.11	19	AP-42 Table 5.2-7
UST Breathing & Emptying	1.00	0.60	0.015	3	AP-42 Table 5.2-7
Displacement Losses from Vehicle Fueling ⁵	11.00	6.60	0.17	29	AP-42 Table 5.2-7
Spillage during Vehicle Fueling	0.70	0.42	0.011	2	AP-42 Table 5.2-7
Total Loss from Vehicle Fueling	20.00	12	0.30	52.56	-

¹ The following equation was used to calculate hourly VOC emissions:

Hourly Emissions (lb/hr) = VOC Emission Factor (lbs/1,000-gal) * Nozzle Dispensing Rate (gal/min) * 60 (min/hr) / 1,000

² The following equation was used to calculate annual emissions:

Annual emissions (ton/yr) = Annual Throughput (gal/yr) / 1,000 * VOC Emission Factor (lb/1,000-gal) / 2,000 (lb/ton)

³ Potential to emit (PTE) was calculated based on the number of hours in a year (8,760 hr/yr)

The following equation was used to calculate PTE:

PTE (ton/yr) = Hourly emissions (lb/hr) * 8,760 (hr/yr) / 2,000 (lb/ton)

⁴ EF for UST Filling is for unbalanced, submerged filling

⁵ EF for Displacement Losses is for uncontrolled losses

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

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

Effective date June 28, 2004

Definitions The following is a list of associated definitions.

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

Table 3.4-1. GASEOUS EMISSION FACTORS FOR LARGE STATIONARY DIESEL AND ALL STATIONARY DUAL-FUEL ENGINES^a

Pollutant	Diesel Fuel (SCC 20200401) Emission Factor (lb/hp-hr) (power output)	Diesel Fuel (SCC 20200401) Emission Factor (lb/MMBtu) (fuel input)	Diesel Fuel (SCC 20200401) Emission Factor Rating	Dual Fuel ^b (SCC 20200402) Emission Factor (lb/hp-hr) (power output)	Dual Fuel ^b (SCC 20200402) Emission Factor (lb/MMBtu) (fuel input)	Dual Fuel ^b (SCC 20200402) Emission Factor Rating
NO _x - Uncontrolled	0.024	3.2	B	0.018	2.7	D
NO _x - Controlled	0.013 ^c	1.9 ^c	B	ND	ND	NA
CO	5.5 E-03	0.85	C	7.5 E-03	1.16	D
SO _x	8.09 E-03S ₁	1.01S ₁	B	4.06 E-04S ₁ + 9.57E-03S ₂	0.05S ₁ + 0.895S ₂	B
CO ₂	1.16	165	B	0.772	110	B
PM	0.0007 ^c	0.1 ^c	B	ND	ND	NA
TOC (as CH ₄)	7.05 E-04	0.09	C	5.29 E-03	0.8	D
Methane	f	f	E	3.97 E-03	0.6	E
Nonmethane	f	f	E	1.32 E-03	0.2 ^g	E

^aBased on uncontrolled levels for each fuel, from References 2,6-7. When necessary, the average heating value of diesel was assumed to be 19,300 Btu/lb with a density of 7.1 lb/gallon. The power output and fuel input values were averaged independently from each other, because of the use of actual brake-specific fuel consumption (BSFC) values for each data point and of the use of data possibly sufficient to calculate only 1 of the 2 emission factors (e. g., enough information to calculate lb/MMBtu, but not lb/hp-hr). Factors are based on averages across all manufacturers and duty cycles. The actual emissions from a particular engine or manufacturer could vary considerably from these levels. 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.

^bDual fuel assumes 95% natural gas and 5% diesel fuel.

^cReferences 8-26. Controlled NO_x is by ignition timing retard.

^dAssumes that all sulfur in the fuel is converted to SO₂. S₁ = % sulfur in fuel oil; S₂ = % sulfur in natural gas. For example, if sulfur content is 1.5%, then S = 1.5.

^eAssumes 100% conversion of carbon in fuel to CO₂ with 87 weight % carbon in diesel, 70 weight % carbon in natural gas, dual-fuel mixture of 5% diesel with 95% natural gas, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and natural gas heating value of 1050 Btu/scf.

^fBased on data from 1 engine, TOC is by weight 9% methane and 91% nonmethane.

^gAssumes that nonmethane organic compounds are 25% of TOC emissions from dual-fuel engines. Molecular weight of nonmethane gas stream is assumed to be that of methane.

Table 3.4-3. SPECIATED ORGANIC COMPOUND EMISSION FACTORS FOR LARGE UNCONTROLLED STATIONARY DIESEL ENGINES^a

EMISSION FACTOR RATING: E

Pollutant	Emission Factor (lb/MMBtu) (fuel input)
Benzene ^b	7.76 E-04
Toluene ^b	2.81 E-04
Xylenes ^b	1.93 E-04
Propylene	2.79 E-03
Formaldehyde ^b	7.89 E-05
Acetaldehyde ^b	2.52 E-05
Acrolein ^b	7.88 E-06

^aBased on 1 uncontrolled diesel engine from Reference 7. Source Classification Code 20200401. Not enough information to calculate the output-specific emission factors of lb/hp-hr. To convert from lb/MMBtu to ng/J, multiply by 430.

^bHazardous air pollutant listed in the *Clean Air Act*.

Table 3.4-4. PAH EMISSION FACTORS FOR LARGE
UNCONTROLLED STATIONARY DIESEL ENGINES^a

EMISSION FACTOR RATING: E

PAH	Emission Factor (lb/MMBtu) (fuel input)
Naphthalene ^b	1.30 E-04
Acenaphthylene	9.23 E-06
Acenaphthene	4.68 E-06
Fluorene	1.28 E-05
Phenanthrene	4.08 E-05
Anthracene	1.23 E-06
Fluoranthene	4.03 E-06
Pyrene	3.71 E-06
Benz(a)anthracene	6.22 E-07
Chrysene	1.53 E-06
Benzo(b)fluoranthene	1.11 E-06
Benzo(k)fluoranthene	<2.18 E-07
Benzo(a)pyrene	<2.57 E-07
Indeno(1,2,3-cd)pyrene	<4.14 E-07
Dibenz(a,h)anthracene	<3.46 E-07
Benzo(g,h,i)perylene	<5.56 E-07
TOTAL PAH	<2.12 E-04

^a Based on 1 uncontrolled diesel engine from Reference 7. Source Classification Code 20200401. Not enough information to calculate the output-specific emission factors of lb/hp-hr. To convert from lb/MMBtu to ng/J, multiply by 430.

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

TYPICAL PARAMETERS OF VARIOUS FUELS^a

Type Of Fuel	Heating Value		Sulfur % (by weight)	Ash % (by weight)
	kcal	Btu		
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/lb	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 x 10 ⁶ /m ³	150,000/gal	0.5-4.0	0.05-0.1
Distillate Oil	9.30 x 10 ⁶ /m ³	140,000/gal	0.2-1.0	N
Diesel	9.12 x 10 ⁶ /m ³	137,000/gal	0.4	N
Gasoline	8.62 x 10 ⁶ /m ³	130,000/gal	0.03-0.04	N
Kerosene	8.32 x 10 ⁶ /m ³	135,000/gal	0.02-0.05	N
Liquid Petroleum Gas	6.25 x 10 ⁶ /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.

Table 5.2-7 (Metric And English Units). EVAPORATIVE EMISSIONS FROM GASOLINE SERVICE STATION OPERATIONS^a

Emission Source	Emission Rate	
	mg/L Throughput	lb/10 ³ gal Throughput
Filling underground tank (Stage I)		
Submerged filling	880	7.3
Splash filling	1,380	11.5
Balanced submerged filling	40	0.3
Underground tank breathing and emptying ^b	120	1.0
Vehicle refueling operations (Stage II)		
Displacement losses (uncontrolled) ^c	1,320	11.0
Displacement losses (controlled)	132	1.1
Spillage	80	0.7

^a Factors are for VOC as well as total organic emissions, because of the methane and ethane content of gasoline evaporative emissions is negligible.

^b Includes any vapor loss between underground tank and gas pump.

^c Based on Equation 6, using average conditions.

A second source of vapor emissions from service stations is underground tank breathing. Breathing losses occur daily and are attributable to gasoline evaporation and barometric pressure changes. The frequency with which gasoline is withdrawn from the tank, allowing fresh air to enter to enhance evaporation, also has a major effect on the quantity of these emissions. An average breathing emission rate is 120 mg/L (1.0 lb/1000 gal) of throughput.

5.2.2.3 Motor Vehicle Refueling -

Service station vehicle refueling activity also produces evaporative emissions. Vehicle refueling emissions come from vapors displaced from the automobile tank by dispensed gasoline and from spillage. The quantity of displaced vapors depends on gasoline temperature, auto tank temperature, gasoline RVP, and dispensing rate. Equation 6 can be used to estimate uncontrolled displacement losses from vehicle refueling for a particular set of conditions.¹⁴

$$E_R = 264.2 [(-5.909) - 0.0949 (\Delta T) + 0.0884 (T_D) + 0.485 (RVP)] \quad (6)$$

where:

E_R = refueling emissions, mg/L
 ΔT = difference between temperature of fuel in vehicle tank and temperature of dispensed fuel, °F
 T_D = temperature of dispensed fuel, °F
RVP = Reid vapor pressure, psia

Note that this equation and the spillage loss factor are incorporated into the *MOBILE* model. The *MOBILE* model allows for disabling of this calculation if it is desired to include these emissions in the stationary area source portion of an inventory rather than in the mobile source portion. It is estimated that the uncontrolled emissions from vapors displaced during vehicle refueling average 1320 mg/L (11.0 lb/1000 gal) of dispensed gasoline.^{5,13}

Spillage loss is made up of contributions from prefill and postfill nozzle drip and from spit-back and

Attachment D

Supporting Documentation for

Emission Units

Attachment D-1
Unit 1 AQUIS ID 19186

Generator set data sheet



Model: DFEK
Frequency: 60 Hz
Fuel type: Diesel
kW rating: 500 Standby
 455 Prime
Emissions level: EPA NSPS Stationary Emergency Tier 2

Exhaust emission data sheet:	EDS-173
Exhaust emission compliance sheet:	EPA-1005
Sound performance data sheet:	MSP-177
Cooling performance data sheet:	MCP-105
Prototype test summary data sheet:	PTS-145
Standard set-mounted radiator cooling outline:	0500-3326
Optional set-mounted radiator cooling outline:	
Optional heat exchanger cooling outline:	
Optional remote radiator cooling outline:	

Fuel consumption	Standby				Prime				Continuous
	kW (kVA)				kW (kVA)				kW (kVA)
Ratings	500 (625)				455 (569)				
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full	Full
US gph	11.6	18.8	25.7	34.4	10.9	17.6	23.7	30.4	
L/hr	44	71	97	130	41	67	90	115	

Engine	Standby rating	Prime rating	Continuous rating
Engine manufacturer	Cummins Inc.		
Engine model	QSX15-G9		
Configuration	Cast iron with replaceable wet cylinder liners, in-line 6 cylinder		
Aspiration	Turbocharged with air-to-air charge air-cooling		
Gross engine power output, kWm (bhp)	563.0 (755.0)	507.3 (680.0)	
BMEP at set rated load, kPa (psi)	2433.9 (353.0)	2213.2 (321.0)	
Bore, mm (in.)	136.9 (5.39)		
Stroke, mm (in.)	168.9 (6.65)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	10.1 (1995.0)		
Compression ratio	17.0:1		
Lube oil capacity, L (qt)	83.3 (88.0)		
Overspeed limit, rpm	2150 ± 50		
Regenerative power, kW	52.00		

Fuel flow

	Standby rating	Prime rating	Continuous rating
Maximum fuel flow, L/hr (US gph)	423.9 (112.0)		
Maximum inlet restriction, mm Hg (in Hg)	127.0 (5.0)		
Maximum return restriction, mm Hg (in Hg)	165.1 (6.5)		

Air

Combustion air, m ³ /min (scfm)	41.6 (1470.0)	38.8 (1370.0)	
Maximum air cleaner restriction, kPa (in H ₂ O)	6.2 (25.0)		
Alternator cooling air, m ³ /min (scfm)	62.0 (1290.0)		

Exhaust

Exhaust flow at set rated load, m ³ /min (cfm)	102.6 (3625.0)	88.7 (3135.0)	
Exhaust temperature, °C (°F)	482.8 (901.0)	466.7 (872.0)	
Maximum back pressure, kPa (in H ₂ O)	10.2 (41.0)		

Standard set-mounted radiator cooling

Ambient design, °C (°F)	40 (104)		
Fan load, kW _m (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m ³ /min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H ₂ O)	0.12 (0.5)		

Optional set-mounted radiator cooling

Ambient design, °C (°F)	50 (122)		
Fan load, kW _m (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m ³ /min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H ₂ O)	0.12 (0.5)		

Optional heat exchanger cooling

Set coolant capacity, L (US Gal.)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, after-cooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated room, MJ/min (Btu/min)			
Maximum raw water pressure, jacket water circuit, kPa (psi)			
Maximum raw water pressure, after-cooler circuit, kPa (psi)			
Maximum raw water pressure, fuel circuit, kPa (psi)			
Maximum raw water flow, jacket water circuit, L/min (US gal/min)			
Maximum raw water flow, after-cooler circuit, L/min (US gal/min)			
Maximum raw water flow, fuel circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, after-cooler circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US gal/min)			



2021 EPA Tier 2 Exhaust Emission Compliance Statement 500DFEK Stationary Emergency 60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with Tier 2 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII.

Engine Manufacturer: Cummins Inc.
EPA Certificate Number: MCEXL015.AAJ-024
Effective Date: 06/10/2020
Date Issued: 06/10/2020
EPA Engine Family (Cummins Emissions Family): MCEXL015.AAJ

Engine Information:

Model:	QSX/QSX15/QSX15-G/QSX15-G9	Bore:	5.39 in. (137 mm)
Engine Nameplate HP:	755	Stroke:	6.65 in. (169 mm)
Type:	4 Cycle, In-line, 6 Cylinder Diesel	Displacement:	912 cu. in. (15 liters)
Aspiration:	Turbocharged and CAC	Compression ratio:	17.0:1
Emission Control Device:	Electronic Control	Exhaust stack diameter:	8 in. (203 mm)

Diesel Fuel Emission Limits

D2 Cycle Exhaust Emissions

	Grams per BHP-hr			Grams per kWm-hr		
	<u>NO_x + NMHC</u>	<u>CO</u>	<u>PM</u>	<u>NO_x + NMHC</u>	<u>CO</u>	<u>PM</u>
Test Results	4.3	0.4	0.10	5.7	0.6	0.13
EPA Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20

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

Diesel fuel specifications: Cetane number: 40-50, Reference: ASTM D975 No. 2-D, 300-500 ppm Sulfur

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

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



SAFETY DATA SHEET

1. Identification

Product identifier	DIESEL FUELS
Other means of identification	
SDS number	102-GHS
Synonyms	Diesel Fuels All Grades * Diesel Fuel No. 2 * Diesel Fuel Oil No. 2 * High Sulfur Diesel Fuel * Low Sulfur Diesel Fuel * Ultra Low Sulfur Diesel Fuel * CARB (California Air Resource Board) Diesel Fuel * Off-Road Diesel Fuel * Dyed Diesel Fuel * X Grade Diesel Fuel * X-1 Diesel Fuel * R5 ULSD * B5 ULSD
Recommended use	Motor fuels. Blendstock for motor fuels. Heating fuels. Refinery feedstock.
Recommended restrictions	No other uses are advised.
Manufacturer/Importer/Supplier/Distributor information	
Distributor	Valero Marketing & Supply Company and Affiliates
Address	One Valero Way San Antonio, TX 78269-6000
General Assistance	210-345-4593
E-Mail	CorpHSE@valero.com
Contact Person	Industrial Hygienist
Emergency Telephone	24 Hour Emergency 866-565-5220 1-800-424-9300 (CHEMTREC USA)

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2 (thymus, liver, bone marrow)
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		

Signal word Danger

Hazard statement Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. Harmful if inhaled. Suspected of causing cancer. May cause damage to organs (thymus, liver, bone marrow) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction. Collect spillage.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Hydrogen sulfide (H ₂ S) can accumulate in the headspace of storage tanks and reach potentially hazardous concentrations.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Fuels, diesel, no. 2	68476-34-6	85 - 100

Hazardous Components of Complex Mixtures

Chemical name	Common name and synonyms	CAS number	%
Biodiesel - Fatty acid methyl esters		67762-38-3	0 - 10
Fuels, diesel, C9-18-alkane branched and linear		1159170-26-9	0 - 5
n-Nonane		111-84-2	1 - 3
Octane (All isomers)		111-65-9	1 - 2
Hexane (Other isomers)		96-14-0	0 - 1
Naphthalene		91-20-3	0 - 1
n-Heptane		142-82-5	0 - 1
n-Hexane		110-54-3	0 - 1

Composition comments	Note: Components of hazardous substances/mixtures are listed for disclosure purposes. Ranges may represent maximum regulatory limits or apply to multiple product grades (see Synonyms - Section 1). Typical and actual concentrations of individual components may be substantially less than the maximum values shown or zero, depending on the product grade or specifications.
-----------------------------	--

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized. Sulphur oxides. Nitrogen Oxides (NO _x). Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Flammable liquid and vapor.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Retain and dispose of contaminated wash water. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is immiscible with water and will spread on the water surface. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Before entering storage tanks and commencing any operation in a confined area check the atmosphere for oxygen content and flammability. (Subject to applicability) If sulfur compounds are suspected to be present in the product, check the atmosphere for H₂S content. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment.

Do not breathe mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)****Hazardous Components of Complex Mixtures****Type****Value**

Octane (All isomers) (CAS 111-65-9)

PEL

2350 mg/m³

500 ppm

Naphthalene (CAS 91-20-3)

PEL

50 mg/m³

10 ppm

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Hazardous Components of Complex Mixtures	Type	Value
n-Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3 500 ppm

US. ACGIH Threshold Limit Values (TLV)

Material	Type	Value	Form
n-Hexane	TWA	100 mg/m3	Inhalable fraction and vapor.

Components	Type	Value	Form
Fuels, diesel, no. 2 (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.

Hazardous Components of Complex Mixtures	Type	Value
n-Nonane (CAS 111-84-2)	TWA	200 ppm
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm
Hexane (Other isomers) (CAS 96-14-0)	TWA	200 ppm
Naphthalene (CAS 91-20-3)	TWA	10 ppm
n-Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Hazardous Components of Complex Mixtures	Type	Value
Octane (All isomers) (CAS 111-65-9)	IDLH	1 % 1000 ppm
Naphthalene (CAS 91-20-3)	IDLH	0.9 % 250 ppm
n-Heptane (CAS 142-82-5)	IDLH	1.05 % 750 ppm
n-Hexane (CAS 110-54-3)	IDLH	1.1 % 1100 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Hazardous Components of Complex Mixtures	Type	Value
n-Nonane (CAS 111-84-2)	TWA	1050 mg/m3 200 ppm
Octane (All isomers) (CAS 111-65-9)	Ceiling	1800 mg/m3 385 ppm
	TWA	350 mg/m3 75 ppm
Hexane (Other isomers) (CAS 96-14-0)	Ceiling	1800 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards
Hazardous Components
of Complex Mixtures

	Type	Value
		510 ppm
	TWA	350 mg/m3
		100 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3
		15 ppm
	TWA	50 mg/m3
		10 ppm
n-Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3
		440 ppm
	TWA	350 mg/m3
		85 ppm
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3
		50 ppm

Biological limit values

ACGIH Biological Exposure Indices (BEI)
Hazardous Components
of Complex Mixtures

Value	Determinant	Specimen	Sampling Time
n-Hexane (CAS 110-54-3) 0.5 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Fuels, diesel, no. 2 (CAS 68476-34-6)	Danger of cutaneous absorption
Naphthalene (CAS 91-20-3)	Danger of cutaneous absorption
n-Hexane (CAS 110-54-3)	Danger of cutaneous absorption

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves. Viton® or nitrile rubber gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

DIESEL FUELS

913579 Version #: 08 Revision date: 27-September-2024 Print date: 27-September-2024

Prepared by 3E Company

Physical state	Liquid.
Form	Liquid.
Color	Clear. Straw.
Odor	Kerosene (strong).
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-60.07 °F (-51.15 °C) Estimated
Initial boiling point and boiling range	325 - 700 °F (162.78 - 371.11 °C)
Flash point	> 100 °F (> 37.78 °C) Closed Cup
Evaporation rate	0.02
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	0.4 %
Explosive limit - upper (%)	8 %
Vapor pressure	< 1 mm Hg (20°C)
Vapor density	3 (Air = 1)
Relative density	0.82 - 0.87
Relative density temperature	60 °F (15.56 °C)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	494.96 °F (257.2 °C)
Decomposition temperature	Not available.
Viscosity	2 - 4.5 mm ² /s
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled.
Skin contact	Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

May be fatal if swallowed and enters airways. Harmful if inhaled. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.

Components	Species	Test Results
Fuels, diesel, no. 2 (CAS 68476-34-6)		
<u>Acute</u>		
Inhalation		
LC50	Rat	4.1 mg/l, 4 hours
Hazardous Components of Complex Mixtures	Species	Test Results
Naphthalene (CAS 91-20-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2 g/kg
Oral		
LD50	Rat	490 mg/kg
n-Heptane (CAS 142-82-5)		
<u>Acute</u>		
Inhalation		
Vapor		
LC50	Rat	> 29.29 mg/l, 4 Hours
Oral		
LD50	Rat	15000 mg/kg
n-Hexane (CAS 110-54-3)		
<u>Acute</u>		
Oral		
LD50	Rat	28710 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Suspected of causing cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Fuels, diesel, no. 2 (CAS 68476-34-6)	3 Not classifiable as to carcinogenicity to humans.	
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.	
NTP Report on Carcinogens		
Naphthalene (CAS 91-20-3)	Known To Be Human Carcinogen.	
	Reasonably Anticipated to be a Human Carcinogen.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	May cause damage to organs (thymus, liver, bone marrow) through prolonged or repeated exposure.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.	

Further information May be absorbed through the skin.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species		Test Results
Fuels, diesel, no. 2 (CAS 68476-34-6)			
Aquatic			
Acute			
Crustacea	EL50	Daphnia magna	68 mg/l, 48 hours
Fish	LL50	Oncorhynchus mykiss	65 mg/l, 96 hours
Hazardous Components of Complex Mixtures	Species		Test Results
Octane (All isomers) (CAS 111-65-9)			
Aquatic			
Crustacea	LC50	Daphnia magna	0.38 mg/l, 48 hours
Naphthalene (CAS 91-20-3)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	0.95 - 1.62 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	>= 2.101 - <= 2.981 mg/l, 96 hours
Persistence and degradability	Expected to be inherently biodegradable.		
Bioaccumulative potential	The product is not bioaccumulating.		
Mobility in soil	No data available.		
Other adverse effects	Oil spills are generally hazardous to the environment. The product contains volatile organic compounds which have a photochemical ozone creation potential.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 °F The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
US RCRA Hazardous Waste U List: Reference	
Naphthalene (CAS 91-20-3)	U165
Waste from residues / unused products	Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	
UN number	NA1993
UN proper shipping name	Combustible liquid, n.o.s. (Diesel fuels)
Transport hazard class(es)	
Class	Combustible liquid
Subsidiary hazard	-
Label(s)	None

DIESEL FUELS

913579 Version #: 08 Revision date: 27-September-2024 Print date: 27-September-2024

Prepared by 3E Company

Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	148, IB3, T1, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	241
DOT BULK	
BULK	
UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	3
Subsidiary hazard	-
Label(s)	3
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	144, B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
IATA	
UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	3
Subsidiary hazard	-
Packing group	III
Environmental hazards	Yes
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
IMDG	
UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	3
Subsidiary hazard	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.
General information	DOT Regulated Marine Pollutant. Shipping descriptions in this section are offered as examples only. Classification for transport must accurately reflect the material hazards as designated under a variety of regulations and is solely the responsibility of the person offering the material for transport into commerce.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Pursuant to the 2023 amendments to the Toxic Release Inventory (TRI) affecting supplier notifications, the substances below may be present in this product up to the following concentrations: Benzo(g,h,i)perylene- 0.1 ppm, Lead and Lead Compounds- 1 ppmw, Mercury and Mercury Compounds- 2 ppb, Polycyclic aromatic compounds (PACs)- 20 ppm

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

n-Nonane (CAS 111-84-2) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Hexane (Other isomers) (CAS 96-14-0)	Listed
Naphthalene (CAS 91-20-3)	Listed
n-Heptane (CAS 142-82-5)	Listed
n-Hexane (CAS 110-54-3)	Listed
n-Nonane (CAS 111-84-2)	Listed
Octane (All isomers) (CAS 111-65-9)	Listed

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA)

All components of the mixture on the TSCA 8(b) inventory are designated "active".

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard
Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Benzo(g,h,i)perylene-	191-24-2	0.1 ppm
Lead and Lead Compounds	7439-92-1	1 ppmw
Mercury and Mercury Compounds	7439-97-6	2 ppb
Polycyclic aromatic compounds	130498-29-2	20 ppm
Naphthalene	91-20-3	0 - 1
n-Hexane	110-54-3	0 - 1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Naphthalene (CAS 91-20-3)
n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

US. Massachusetts RTK - Substance List

Hexane (Other isomers) (CAS 96-14-0)
Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

US. New Jersey Worker and Community Right-to-Know Act

Fuels, diesel, no. 2 (CAS 68476-34-6)
Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Fuels, diesel, no. 2 (CAS 68476-34-6)
Hexane (Other isomers) (CAS 96-14-0)
Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

US. Rhode Island RTK

Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

California Proposition 65



WARNING: This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2)	Listed: February 27, 1987
Lead and Lead Compounds (CAS 7439-92-1)	Listed: October 1, 1992
Naphthalene (CAS 91-20-3)	Listed: April 19, 2002

California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2)	Listed: December 26, 1997
Lead and Lead Compounds (CAS 7439-92-1)	Listed: February 27, 1987
Mercury and Mercury Compounds (CAS 7439-97-6)	Listed: July 1, 1990
Toluene (CAS 108-88-3)	Listed: January 1, 1991

California Proposition 65 - CRT: Listed date/Female reproductive toxin

Lead and Lead Compounds (CAS 7439-92-1)	Listed: February 27, 1987
---	---------------------------

California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2)	Listed: December 26, 1997
Lead and Lead Compounds (CAS 7439-92-1)	Listed: February 27, 1987
n-Hexane (CAS 110-54-3)	Listed: December 15, 2017

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

n-Heptane (CAS 142-82-5)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	13-May-2013
Revision date	27-September-2024
Version #	08
NFPA ratings	



References

CONCAWE

Disclaimer

The information in this Safety Data Sheet (SDS) was obtained from sources believed to be reliable and accurate, and is not represented as being absolutely complete. The end user of this product has the responsibility for evaluating the adequacy of the data for the intended application and conditions of use; for determining the safety, toxicity, regulatory requirements, and suitability of the product under these conditions; and for obtaining additional or clarifying data where uncertainty exists. The data serves as general guidance only, and is to be used in combination with professional judgement of persons experienced in a specific application, use or process; and additional data may be required.

Attachment D-2

Unit 2 AQUIS IDs 15008 & 25017

This content is from the eCFR and is authoritative but unofficial.

Title 40 —Protection of Environment

Chapter I —Environmental Protection Agency

Subchapter U —Air Pollution Controls

Part 1090 —Regulation of Fuels, Fuel Additives, and Regulated Blendstocks

Subpart P —Retailer and Wholesale Purchaser-Consumer Provisions

Refueling Hardware

Authority: 42 U.S.C. 7414, 7521, 7522-7525, 7541, 7542, 7543, 7545, 7547, 7550, and 7601.

Source: 85 FR 78469, Dec. 4, 2020, unless otherwise noted.

§ 1090.1550 Requirements for gasoline dispensing nozzles used with motor vehicles.

The following requirements apply for any nozzle installation used for dispensing gasoline into motor vehicles:

- (a) Nozzles must meet the following hardware specifications:
 - (1) The outside diameter of the terminal end must not be greater than 21.3 mm.
 - (2) The terminal end must have a straight section of at least 63 mm.
 - (3) The retaining spring must terminate at least 76 mm from the terminal end.
- (b) The dispensing flow rate must not exceed a maximum value of 10 gallons per minute. The flow rate may be controlled through any means in the pump/dispenser system, as long as it does not exceed the specified maximum value.

[88 FR 4718, Jan. 24, 2023]

Attachment E
Applicable Federal Regulations

Permits 3101-2AR and 3470 Emission Units			
Feature Description	AQUIS ID	Permit Number	Applicable Federal Regulation
FUEL – 15008– Gasoline Dispensing - B27497 - Gasoline - 30,000 gal/yr	15008	3101-2AR	40 CFR 63 NESHAP, Subpart CCCCCC
ICOM - 19186 - Emergency Generator B27497 - Diesel - 755 hp	19186	3470	40 CFR 60 NSPS, Subpart IIII
FUEL – 25017– Gasoline Storage - B27497 - Gasoline - 30,000 gal/yr	25017	3101-2AR	40 CFR 63 NESHAP, Subpart CCCCCC