

CLARK COUNTY
DEPARTMENT OF AIR QUALITY
4701 West Russell Road, Suite 200, Las Vegas, Nevada 89118

Part 70 Operating Permit

Source: 114

Issued in accordance with the
Clark County Air Quality Regulations (AQR)

ISSUED TO: 99 Civil Engineer Squadron, Nellis Air Force Base

SOURCE LOCATION:

Nellis Air Force Base
Nevada 89191
T21S, R62E, Section 4
Hydrographic Basin Numbers: 212, 215

COMPANY ADDRESS:

4430 Grissom Avenue, Suite 101
Nellis AFB, NV 89191-6520

NATURE OF BUSINESS:

SIC Code 9711: National Security
NAICS: 928110: National Security

RESPONSIBLE OFFICIAL:

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Permit Issuance: September 18, 2015

Expiration Date: September 17, 2020

Permit Revision: January 3, 2017

ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY



Richard D. Beckstead
Permitting Manager, Clark County Department of Air Quality

EXECUTIVE SUMMARY

Nellis Air Force Base (NAFB) is located in Clark County, Nevada, near the City of Las Vegas. The NAFB is a major source located in Hydrographic Area (HA) 212 (Las Vegas Valley) and HA 215 (Black Mountains Area). The Las Vegas Valley and the Black Mountains Area are in attainment for all criteria pollutants. NAFB is permitted as a Part 70 major source of NO_x, a synthetic minor source for CO, and a minor source for all other regulated pollutants. NAFB is a source of greenhouse gases (GHG). NAFB is not a categorical stationary source, as defined by AQR 12.2.2(j). All of the activities and emission units at NAFB are classified as Standard Industrial Code (SIC) and North American Industry Classification System (NAICS) Code 9711: National Security.

The emission units and activities at NAFB base are divided into three geographic areas, which vary both in size and purpose. Area I (the Main Base) consists of the flight line and a wide variety of commercial and industrial use in support of the base's mission. Area II is located to the east of the Main Base and includes the munitions storage and the Red Horse Squadron complex along with its mineral processing, asphalt batch plant, and concrete batch plant activities. Area III is a 1.9 square mile portion to the north of the Main Base and includes the bulk fuels storage area, Security Police Squadron facilities, open space and other support facilities. NAFB submitted its first Title V application on June 14, 1996.

The following table summarizes the source-wide potential to emit (PTE) for each regulated air pollutant:

PM₁₀	PM_{2.5}	NO_x	CO	SO₂	VOC	HAP
40.40	17.27	206.74	60.49	4.14	73.29	13.51

The Department of Air Quality (Air Quality) issued an initial Part 70 OP on April 30, 2009. Since that time, NAFB applied for a series of minor revisions of its Part 70 OP. Due to a significant increase in emissions and numerous changes to monitoring and testing conditions Air Quality proceeded with issuance of a significant revision of the Part 70 OP on October 28, 2013. On September 26, 2013, NAFB submitted a complete application for a renewal of the Part 70 OP with minor revision applications submitted January 28, 2014, and September 26, 2014. The renewed Part 70 OP was issued on September 18, 2015, with a minor revision issued On April 20, 2016. On May 18, 2016, NAFB submitted the minor revision application this permitting action is based on.

Pursuant to AQR 12.5, all terms and conditions in all the Sections and the Attachments in this permit are federally enforceable unless explicitly denoted otherwise.

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I. ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulations
AST	Aboveground Storage Tank
ATC	Authority to Construct
ATC/OP	Authority to Construct/Operating Permit
Bhp	Brake Horsepower
CARB	California Air Resources Board
CE	Control Efficiency
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
EF	Emission Factor
EO	Executive Order
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HP	Horse Power
HVLP	High-Volume, Low-Pressure
MMBtu	Millions of British Thermal Units
NO _x	Nitrogen Oxides
NRS	Nevada Revised Statutes
NSR	New Source Review
OP	Operating Permit
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
scf	Standard Cubic Feet
SIP	State Implementation Plan
SO _x	Sulfur Oxides
TCS	Toxic Chemical Substance
TDS	Total Dissolved Solids
TSD	Technical Support Document
UST	Underground Storage Tank
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid

II. GENERAL CONDITIONS

A. General Requirements

1. The Permittee shall comply with all conditions of the Part 70 Operating Permit. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations, Nevada law, and the Clean Air Act and is grounds for the following: enforcement action; permit termination; revocation and reissuance; revision; or denial of a permit renewal application. *[AQR 12.5.2.6(g)(1)]*
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid. *[AQR 12.5.2.6(f)]*
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. *[AQR 12.5.2.6(h)]*
4. The permit does not convey any property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*
5. The Permittee agrees to allow inspection of the premises, to which this permit relates, by the Control Officer at any time during the Permittee's hours of operation without prior notice. The Permittee shall not obstruct, hamper or interfere with any such inspection. *[AQR 4.3.3; AQR 4.9; AQR 5.1.1; AQR 12.5.2.8(b)]*
6. The Permittee shall allow the Control Officer, upon presentation of credentials to: *[AQR 4.3 AQR 12.5.2.8(b)]*
 - a. Have access to and copy any records that must be kept under the conditions of the permit;
 - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and
 - d. Document alleged violations using devices such as cameras or video equipment. (Upon receipt and approval of a Certification of Confidentiality per AQR 12.6.1, such information will be treated as confidential.)
7. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR Section 12.5.2.4. *[AQR 12.5.2.2]*
8. The Permittee who has been issued a permit under Section 12.5 shall post such permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. *[AQR 12.5.2.6(m)]*

B. Modification, Revision, Renewal Requirements

1. No person shall begin actual construction of a New Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an ATC Permit from the Control Officer. *[AQR 12.4.1.1(a)]*
2. The permit may be revised, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*
3. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*
 - a. The Permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal, except that a complete application need not be received before a Part 70 general permit is issued pursuant to Section 12.5.2.20; and
 - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5.
4. The Permittee shall not build, erect, install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere reduces or conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR 60.12]*
5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*
6. Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*
7. For purposes of permit renewal, a timely application is a complete application that is submitted at least six (6) months and not greater than eighteen (18) months prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 OP. *[AQR 12.5.2.1(a)(2)]*

C. Reporting/Notifications/Providing Information Requirements

1. The Permittee shall submit all compliance certifications to EPA and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
2. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under AQR 12.5 shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*
3. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for

revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [AQR 12.5.2.6(g)(5)]

4. Upon request of the Control Officer, the Permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.4]
5. The Permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1]
 - a. The annual emissions inventory must be submitted to Air Quality by March 31 of each calendar year; and
 - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.
6. The Permittee shall make all production, emission and monitoring calculations available to the Control Officer for inspection within 30 days from the end of each month. [AQR 12.5.2.8]
7. The Permittee shall submit semi-annual reports to the Department of Air Quality based on the following requirements. [AQR 12.5.2.6(d)]
 - a. The report shall include a semi-annual summary of each items listed in Condition E-1 of Recordkeeping for Sections IV through XVII;
 - b. The report shall be based on six calendar months, and
 - c. The report shall be received by the Air Quality within 30 calendar days after the reporting period.

Table II-1: Required Submission Dates for Various Reports

Required Report	Applicable Period	Due Date
Semi-annual Report for 1st Six-Month Period	January, February, March, April, May, June	July 30 each year ¹
Semi-annual Report for 2 nd Six-Month Period. Any additional annual records required.	July, August, September, October, November, December	January 30 each year ¹
Annual Compliance Certification Report	12 Months	January 30 each year ¹
Annual Emission Inventory Report	Calendar Year	March 31 each year ¹
Notification of Malfunctions, Startup, Shutdowns or Deviations with Excess Emissions	As Required	Within 24 hours of the Permittee learns of the event

Required Report	Applicable Period	Due Date
Report of Malfunctions, Startup, Shutdowns or Deviations with Excess Emissions	As Required	Within 72 hours of the notification
Deviation Report without Excess Emissions	As Required	Along with semi-annual reports ¹
Performance Testing	As Required	Within 60 days from the end of the test ¹

¹If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

8. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to the Control Officer upon request. *[AQR 12.5.2.6(d)(2)(B)]*
9. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. *[AQR 4.4 and AQR 12.5.2.6(d)(4)]*

D. Compliance Requirements

1. The Permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[AQR 12.5.2.6(g)(2)]*
2. Any person who violates any provision of the AQR, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by Air Quality is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. *[AQR 9.1; NRS 445B.640]*
3. Any person aggrieved by an order issued pursuant to AQR Section 9.1 is entitled to review as provided in Chapter 233B of NRS. *[AQR 9.12]*
4. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. *[AQR 13.1(b)(8)]*
5. The Permittee shall certify compliance with terms and conditions contained in the Part 70 Operating Permit, including emission limitations, standards, work practices, and the means for monitoring such compliance. *[AQR 12.5.2.8(e)]*
6. The Permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W Russell Road, Suite 200, Las Vegas, NV 89118) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30th of the following year and shall include the following: *[AQR 12.5.2.8(e)]*
 - a. The identification of each term or condition of the permit that is the basis of the certification;

- b. The identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period. The methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR 70.6(a)(3). If necessary, the Permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and
 - c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in subsection II.D.6(b). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.
7. The Permittee shall report to the Control Officer (4701 West Russell Road, Suite – 200, Las Vegas, NV 89118) any startup, shutdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below: *[AQR 12.5.2.6(d)(4)(B); AQR 25.6.1]*
 - a. within twenty-four (24) hours of the time the Permittee learns of the excess emissions, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email: airquality@clarkcountynv.gov; and
 - b. within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
8. The Permittee shall report to the Control Officer with the semi-annual monitoring report all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. *[AQR 12.5.2.6(d)(4)(B)]*
9. The owner or operator of any source required to obtain a permit under Section 12 shall report to the Control Officer emissions that are in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health, safety or the environment as soon as possible, but in no case later than twelve (12) hours after the deviation is discovered, with a written report submitted within two (2) days of the occurrence. *[AQR 25.6.2]*

E. Performance Testing Requirements

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the Air Quality regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. [AQR 4.5]
2. Upon request of the Control Officer, the Permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. [AQR 4.6]
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (4701 West Russell Road, Suite 200, Las Vegas, NV 89118) not less than 45, nor more than 90 days prior to the anticipated date of the performance test, unless otherwise specified in the Performance Testing sections of Section IV through XVII. [AQR 12.5.2.8]
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA, to demonstrate compliance with a requirement under 40 CFR Part 60. [40 CFR 60.8(b)]
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. [AQR 12.5.2.8]

III. STORAGE TANKS/LOADING RACKS/FUEL DISPENSING

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables III-A-1, III-A-2 and III-A-3. [AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Applications for Minor Revision of Part 70 OP (08/30/12) and (07/16/14); and Application for Renewal of Part 70 OP (09/26/13)]

Table III-A-1: List of Emission Units – Fuel Dispensing

Emission Unit Number	Building	Make	Model	Serial Number	Capacity	Units	Fuel Type
J016	235				2	dispensers	Jet Fuel
J017	267				1	dispensers	Jet Fuel
J018	890				9	dispensers	Diesel
J019	1590				1	dispensers	Diesel
J020	1590				1	dispensers	Gasoline
J021	905				1	dispensers	Diesel
J022	10511				1	dispensers	Diesel
J023	10511				1	dispensers	Gasoline
J026-J034	890				9	dispensers	Gasoline
J035	2349				1	dispensers	Diesel
J038	8448				1	dispensers	E-85

Table III-A-2: List of Emission Units – Loading Racks

Emission Unit Number	Building	Make	Model	Serial Number	Capacity	Units	Fuel Type
J007	Flightline				48	racks	Jet Fuel
J008	891				1	racks	Gasoline
J009	895				2	racks	Diesel
J010	893				1	rack	Diesel

Table III-A-3: List of Emission Units – Storage Tanks

Emission Unit Number	Building	Emission Unit Type	Make	Model	Serial Number	Capacity	Units	Fuel Type
J001	891	AST	Highland Tank			20,000	gal	Gasoline
J002	1590	AST				500	gal	Gasoline
J003	10511	AST				2,000	gal	Gasoline
J004	890	UST				25,000	gal	Gasoline
J039	8448	AST				10,000	gal	E-85

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not allow the actual emissions from each storage tank, fuel loading rack, and dispensing operation to exceed the PTE Tables III-B-1, III-B-2, and III-B-3, in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Applications for Minor Revision of Part 70 OP (08/30/12) and (07/16/14); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]*

Table III-B-1: Throughput Limitations and PTE for Fuel Dispensing (tons per year)

Emission Unit Number	Type	Fuel	Annual Throughput Gallons	VOC	HAP
J016	Fuel Dispensing	Jet Fuel	416,000	0.19	0.01
J017	Fuel Dispensing	Jet Fuel	520,000	0.24	0.01
J018	Fuel Dispensing	Diesel	712,329	0.33	0.01
J019	Fuel Dispensing	Diesel	182,500	0.08	0.01
J020	Fuel Dispensing	Gasoline	30,000	0.18	0.01
J021	Fuel Dispensing	Diesel	109,200	0.05	0.01
J022	Fuel Dispensing	Diesel	312,000	0.14	0.01
J023	Fuel Dispensing	Gasoline	95,999	0.56	0.01
J026-J034	Fuel Dispensing	Gasoline	3,000,000	4.95	0.01
J035	Fuel Dispensing	Diesel	150,000	0.07	0.01
J038	Fuel Dispensing	E-85	500,000	1.50	0.08

Table III-B-2: Throughput Limitations and PTE for Fuel Loading Racks (tons per year)

Emission Unit Number	Type	Fuel	Annual Throughput Gallons	VOC	HAP
J007	Fuel Loading Rack	Jet Fuel	180,000,000	1.82	0.01
J008	Fuel Loading Rack	Gasoline	200,000	0.24	0.01
J009	Fuel Loading Rack	Diesel	7,300,000	3.04	0.01
J010	Fuel Loading Rack	Diesel	500,000	0.01	0.01

Table III-B-3: Throughput Limitations and PTE for Fuel Storage Tanks (tons per year)

Emission Unit Number	Type	Fuel	Annual Throughput Gallons	VOC	HAP
J001	AST	Gasoline	3,000,000	4.08	0.76
J002	AST	Gasoline	30,000	0.13	0.02
J003	AST	Gasoline	95,999	0.71	0.01
J004	UST	Gasoline	3,000,000	3.44	0.64
J039	AST	E-85	500,000	0.77	0.03

Table III-B-4: Total Source PTE for Fueling Operations¹

	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
Tons/year	0	0	0	0	22.60	1.69

¹Emissions listed in this table are for information purposes only.

2. Production Limits

- a. The Permittee shall limit the annual throughput for each storage tank, loading rack, and fuel dispenser to the throughputs listed in Tables III-B-1, III-B-2, and III-B-3 during any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Applications for Minor Revision of Part 70 OP (08/30/12), (07/16/14), and (12/07/15); Application for Renewal of Part 70 OP (09/26/13)]*
- b. The Permittee shall store only the product in each storage tank, loading rack, and fuel dispenser as listed in Tables III-B-1, III-B-2, and III-B-3. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Applications for Minor Revision of Part 70 OP (08/30/12), (07/16/14), and (12/07/15); Application for Renewal of Part 70 OP (09/26/13)]*

3. Emission Controls

- a. The Permittee shall equip and operate each of the gasoline storage tanks (EUs: J001, J004, and J039) with Phase I vapor recovery controls, and the gasoline dispensing units (EUs: J026 through J034) with Phase II vapor recovery controls. *[ATC/OP, Modification 46, Revision 1 (11/17/08); Application for Minor Revision of Part 70 OP (12/07/15); and AQR 12.5.2.6(a)]*
- b. The Permittee shall comply with the requirements of 40 CFR 63, Subpart BBBBBB and 40 CFR 63, Subpart CCCCCC (EUs: J001 through J004, J008, and J039). *[AQR 12.5.2.6(a)]*
- c. The Permittee shall implement control technology requirements on gasoline storage tanks and dispensing equipment as follows: *[40 CFR 63.11116 and 12.5.2.6(a)]*
 - i. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Preventative measures to be taken include, but are not limited to, the following: *[40 CFR 63.11116, 40 CFR 63.11117, and 40 CFR 63.11086(d)]*
 1. Minimize gasoline spills.
 2. Clean up spills as expeditiously as practicable.
 3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use.
 4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

5. Only load gasoline into storage tanks a using submerged filling where the greatest distance from the bottom of the storage tank to the point of opening of the fill tube is no more than 6 inches.
- ii. The Permittee shall install, maintain and operate a Phase I Vapor Recovery System on the gasoline storage tanks (EUs: J001, J004, and J039) that meets the following requirements: *[AQR 12.5.2.6(a)]*
6. The Phase I vapor recovery system shall be rated with at least 95.0 percent control efficiency when in operation. This system shall be certified by an industry recognized certification body, i.e., California Air Resources Board (CARB) or equivalent.
 7. All Phase I vapor recovery equipment shall be installed and operated in accordance with the manufacturer's specifications and certification requirements.
 8. All Phase I vapor recovery equipment shall be maintained and in good working order.
 9. All vapor connections and lines on storage tanks shall be equipped with closures that seal upon disconnect.
 10. The vapor line from the gasoline storage tanks to the gasoline cargo tank shall be vapor-tight, as defined in 40 CFR 63.11132.
 11. The vapor balance system shall be designed such that the pressure in the cargo tank does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
 12. The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
 13. If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the tank as the fill tube.
 14. Liquid fill connections for all systems shall be equipped with vapor-tight caps.
 15. A pressure/vacuum (PV) vent valve on each gasoline storage tank system shall be installed, maintained and operated in accordance with the manufacturer's specifications. The pressure specifications for PV vent valves shall comply with:
 - a. a positive pressure setting of 2.5 to 6.0 inches of water, and a negative pressure setting of 6.0 to 10.0 inches of water; and
 - b. the total leak rate of all PV vent valves at the affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water. *[AQR 12.5.2.6(a)]*
 16. The vapor balance system shall be capable of meeting the static pressure performance requirement in 40 CFR 63, Subpart CCCCCC, Table 1, Part 1 and comply with the equation: $P_f = 2e^{-500.887/v}$
- iii. Cargo tanks unloading at the source must comply with management practices as follows: *[AQR 12.5.2.6(a)]*
1. All hoses in the vapor balance system are properly connected.

2. The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect.
 3. All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight.
 4. All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank.
 5. All hatches on the tank truck are closed and securely fastened.
 6. The filling of storage tanks shall be limited to unloading from vapor-tight gasoline cargo tanks with documentation carried onboard that it has met the specifications of EPA Method 27.
- iv. The Permittee shall implement a Phase II Vapor Recovery System on gasoline dispensing equipment (EUs: J026 through J034) that meets the following requirements: *[AQR 12.5.2.6(a)]*
1. The source shall install, maintain and operate a Phase II Vapor Recovery System that is certified to meet at least 95.0 percent control efficiency when in operation that is approved by the Control Officer. This system shall be certified by an industry recognized certification body, i.e., California Air Resources Board (CARB) or equivalent.
 2. All Phase II vapor recovery equipment shall be installed and operated in accordance with the manufacturer's specifications and certification requirements.
 3. All Phase II vapor recovery equipment shall be maintained and in good working order.
 4. The gasoline product and vapor return hoses shall be coaxial.
 5. Hose breakaway(s) shall be approved by the certification body.
 6. The maximum allowable hose length shall be in accordance to the certification requirements.
 7. Each Assist or Balance or Healy Phase II Vapor Recovery System dispenser shall limit each nozzle's gasoline dispensing rate to the corresponding certification values. Dispenser fuel flow restrictors shall be installed as necessary and must be approved by an industry recognized certification body, i.e., California Air Resources Board (CARB) or equivalent.

C. Monitoring

1. The Permittee shall perform a monthly leak inspection of all equipment in gasoline service (EUs: J001 through J004, J008, and J039) as defined in 40 CFR 63.11089 and 40 CFR 63.11120 as applicable. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. *[40 CFR 63.11089 and 40 CFR 63.11120]*
2. The Permittee shall operate fuel dispensers with non-resettable meters. *[AQR 12.5.2.6(d)]*

D. Testing

1. The Permittee shall comply with the general performance testing requirements in Section II-E of this permit. *[AQR 12.5.2.6(d)]*

2. The Permittee shall comply with the applicable testing requirements contained in 40 CFR 63.11120. [40 CFR 63.11118(e)]
3. The Permittee shall conduct testing on the Vapor Control Systems associated with EUs: J001, J004, and J026 through J034, and J039 as described in Table III-D-1. [AQR 4.5]
4. The Permittee shall schedule each vapor recovery test with the Stationary Sources Compliance Supervisor at least 30 calendar days prior to the anticipated date of testing, unless otherwise specified in this permit. [AQR 12.5.2.8]
5. Any prior approved scheduled vapor recovery system test cannot be canceled and/or rescheduled except with the prior approval of the Control Officer, Compliance Division. [AQR 12.5.2.8]
6. If the source fails a vapor recovery system test, the Permittee shall comply with the following:
 - a. The Permittee shall notify the Control Officer within 24 hours of equipment test failure, make all necessary repairs and re-test the affected facility. After re-testing, the Permittee shall notify the Control Officer to advise of the re-test and submit test results within 15 days of completion.
 - b. The process of re-testing shall continue until the affected facility successfully passes all aspects of the vapor recovery system test.
 - c. The Control Officer may require the Permittee to conduct any test after a failed vapor recovery system test in the presence of an Air Quality representative. [AQR 12.5.2.8]

Table III-D-1: Required Performance Test Criterion: Vapor Recovery System

EU	Description	CARB Test Procedure	Standard	Frequency
J004	Pressure decay/leak: vapor control system including nozzles and underground tanks	TP-201.3	Initial: 2" wc Final: Referenced Value	Every three years
J001 and J039	Pressure decay/leak: vapor control system including aboveground tanks	TP-201.3B	Initial: 2" wc Final: Referenced Value	
J001, J004, and J039	Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves	TP-201.1E	3.0 ± 0.5 inches H ₂ O Positive Pressure 8.0 ± 2.0 inches H ₂ O Negative Pressure Leakrate at +2.0 inches H ₂ O ≤ 0.17 CFH Leakrate at -4.0 inches H ₂ O ≤ 0.21 CFH Total Additive Leakrate from All P/V Valves ≤ 0.17 CFH at 2.0 inches H ₂ O	
J026-J034	Dynamic Back Pressure: include all vapor piping from dispenser to the tanks	TP-201.4	0.35" wc @ 60 SCFH, N ₂ 0.62" wc @ 80 SCFH, N ₂	
J026-J034	Dispensing nozzle flow rate	As Specified in EO	10 gpm (max.)	

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. excess emissions, notifications, malfunctions, leaks, leak testing etc. as required by 40 CFR 60.7, 40 CFR 60.502, 40 CFR 60.505, 40 CFR 63.11089, 40 CFR 63.11094, and 40 CFR 63.11095;
 - b. monthly and yearly product throughput for each storage tank in gallons, in any consecutive 12-months, to demonstrate compliance with corresponding emission limits; and
 - c. daily, monthly, and yearly throughput for gasoline loading rack in any consecutive 12-months (EU: J008).
2. The Permittee shall maintain records on-site that include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. log of maintenance and/or repair of the tanks;
 - b. a record of any maintenance on any part of the Phase I or Phase II equipment, including a general description of the maintenance;
 - c. the date and time the equipment was taken out-of-service
 - d. the date of repair or replacement;
 - e. a general description of the part location (pump, tank, nozzle number);
 - f. a description of the problem;
 - g. the results of the daily inspections; and
 - h. records of all performance tests conducted. *[40 CFR 63.11125]*
3. The Phase II Vapor Recovery Tester shall use an approved Audit Form to record the type of tests conducted, as well as, the results of the tests. An approved form may be obtained from the Control Officer. The Permittee shall retain the completed Audit Form for each test performed. *[AQR 12.5.2.6(d)]*
4. A log book shall be used and shall be signed by the Permittee at the completion of each inspection. Each detection of a liquid or vapor leak shall be recorded in the log. An initial attempt to repair the leak shall be made as soon as practicable, but, no later than 5 calendar days after the leak is detected. If repairs cannot be completed within 5 days, the Permittee shall comply with 40 CFR 63.11089.c & .d. *[AQR 12.5.2.6(d) and 40 CFR 63.11089]*
5. The Permittee shall maintain records of all performance tests conducted. *[AQR 12.5.2.6(d) and 40 CFR 63.11125]*
6. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition III-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month

exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

2. The Permittee must submit a Notification of Compliance per 40 CFR 63.11086(f) unless the Permittee meets the requirements of 40 CFR 63.11086(g). *[40 CFR 63.11086]*

IV. EXTERNAL COMBUSTION

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables IV-A-1. *[AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (08/30/12) and (07/16/14), (07/29/15), and (12/07/15); and Application for Renewal of Part 70 OP (09/26/13)]*

Table IV-A-1: List of Emission Units

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB190	002	0.66	Camus	BFNH660-E00	10501418	
RB260	002	0.076	Bradford	75T80B3N	AF4870941	
RB004a	011	1.5	Patterson-Kelley	N-1500-2	CY30-07-31338	Low NOx
RB004b	011	1.5	Patterson-Kelley	N-1500-2	CY30-07-31339	Low NOx
RB519	18	0.1	Carrier	58MXA100-20	2895A11462	
RB520	18	0.1	Carrier	58MXA100-20	2895A11484	
RB191	020	0.076	Bradford White	M2XR75S6BN	GG13668338	
RB370	020	0.9	RBI	DB900	111057500	Low NOx
RB371	020	0.5	RBI	FHN-500-SV	7988497	
RB521	045	0.06	Carrier	48GS-03606031	0404G31144	
RB522	045	0.072	Carrier	48TCADGA2A3A0A0A0	4109G10180	
RB523	045	0.072	Carrier	48TCADGA2A3A0A0A0	4109G10179	
RB261	060	0.07	Lochinvar	PRN075	DF9347101	
RB524	060	0.12	Carrier	58MVB120-20	3607A04743	
RB525	060	0.12	Carrier	58MVB120-20	3607A04731	
RB526	060	0.12	Carrier	58MVB120-20	3607A04738	
RB527	060	0.12	Carrier	58MVB120-20		
RB006	066	0.04	Bradford White	MI40T6EN12	ZE3215084	
RB192	094	0.25	RBI	SW0250	120437383	
RB372	094	0.04	American	G51-50T40-3N	9544353009	
RB008	098	0.215	Thermopak	GWA-215	9N1	
RB193	098	0.04	Bradford White	MI40T6FBN7	CC7540553	
RB194	100	0.299	LAARS	PNCH0300NACC1CXN	C08198763	
RB195	100	0.04	Bradford White	MI40T6FBN	LC34228152	
RB196	102	0.076	Bradford White	M2XR75S6BN	HA14400866	
RB373	102	0.16	Parker	T300	48351	
RB374	118	0.24	Raypak	H30242	209198977	
RB636	119	0.6	Lochinvar	FTX600N		
RB637	119	0.6	Lochinvar	FTX600N		
RB638	119	0.076	A.O. Smith	BTX80		
RB528	122	0.09	Carrier	48GX048090301	2499G11591	
RB197	124	0.04	Bradford White	MI40T6FBN	FH12302930	
RB529	124	0.4	Carrier	48EWD034	2001F84360	
RB375	180	0.15	AO Smith	BTH150100	1242M000109	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB376	180	0.333	Buderus	GB162-100	08082742774601053A9	
RB377	180	0.333	Buderus	GB162-100	08082744774601053A9	
RB378	180	0.333	Buderus	GB162-100	08082745774601053A9	
RB379	180	0.333	Buderus	GB162-100	08082743774601053A9	
RB530	180	0.08	American Standard	AUC1B0B8A9421AE	15163TM12G	
RB531	180	0.1	American Standard	AUC1B0B8A9421AE	13145NKG2G	
RB532	180	0.1	American Standard	AUC1B0B8A9421AE	13145NKR2G	
RB533	180	0.12	Trane	TUC18120A9601AE	12255KHW7G	
RB534	180	0.752	Landa	VNGB-30024C		
RB198	190	2.4	LAARS	RHCH2400NACF2EXX	A08197950	Low NOx
RB199	190	0.565	Power VT	800 N125A-PVL	808125225	
RB010	199	0.133	Armstrong	GFH-100	202	
RB011	199	0.133	Armstrong	GFH-100	201	
RB012	199	0.133	Armstrong	GFH-100	203	
RB013a	199	2.5	Patterson-Kelley	C-2500	H906-11-6409	Low NOx
RB013b	199	2.5	Patterson-Kelley	C-2500	H906-11-6405	Low NOx
RB380	200	0.9	Patterson Kelley	Mach C-900	W746-12-8903	
RB381	200	0.9	Patterson Kelley	Mach C-900	W746-12-8909	
RB016	201	1.05	Rite	105W	29456	Low NOx
RB200	201	0.04	Bradford White	M440T6FBN	FK12553512	
RB018	202	0.97	Lattner	HE	52292	
RB018a	202	0.5	Raypak	H3-0502	306209003	
RB018b	202	0.5	Raypak	H3-0502	306209004	
RB382	202	0.15	Lochinvar	CGN150022100	1232M000350	
RB165	204	0.27	AAON	RN-025-8-0-EA09-349	201004-ANGR09712	
RB535	209	0.06	Tempster	PGAA36C1K3	L952591109	
RB536	214	0.18	Carrier	48HJD012-571	2504611585	
RB537	214	0.224	Carrier	48HJD014-561	0507G11861	
RB538	214	0.224	Carrier	48HJD014-561	4505G40911	
RB539	215	0.15	Trane	YSC12QA3ELA16	33001271L	
RB540	215	0.275	Carrier	48TMV016-511YA	2208U14760	
RB541	217	0.075	Trane	YCC036F3MOBC	K4623W91H	
RB542	217	0.15	Trane	YCH150C3LOAB	L19105048D	
RB543	220	0.125	York	ZFD48N10N1AAA1A	N1H0279002	
RB544	220	0.125	Lochinvar	SNR150-100	B11C20025053	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB545	220	0.18	York	ZF102N15N2FZZ50001A	N1D1977192	
RB546	220	0.18	York	ZF102N15N2FZZ50001A	N1D1977193	
RB020	222	0.399	RBI	LBO400NOE2AOCA	90436551	
RB201	222	0.032	Bradford White	MI30T6FBN	LB34068074	
RB021	224	0.399	RBI	LB0400N0E2A2CA	100436593	
RB383	224	0.028	Reliance	130NOPT97OC	H97496797	
RB022a	226	0.75	RBI	FB0750NOR2A2CA	90436543	
RB202	226	0.036	Vanguard	1PLV7	VGLN0307508458	
RB547	228	0.275	Carrier	48TJD024-581YA	1603F27452	
RB203	230	0.075	State	SBT75 75 NEI	C95685203	
RB384	230	0.076	Bradford White	75T80B3N	JD16503097	
RB548	230	0.115	Carrier	48TCEA06A2A3A0A0A0	211620356	
RB549	230	0.115	Carrier	48TCEA06A2A3A0A0A0	0211G20357	
RB024	232	1.75	RBI	FB 1750	120437366	Low NOx
RB204	232	0.34	American Water Heater	G51-40T34-3N	9441302496	
RB385	232	1.75	RBI	FB 1750	120437366	
RB263	232	0.15	Lochinvar	SNR150-100	A11C200124315	
RB550	232	0.108	York	D2NY060N09046NXA	N1F1140199	
RB551	232	0.108	York	D2NY060N09046NXA	N1F1140197	
RB552	232	0.108	York	D2NY060N09046NXA	N1F1140198	
RB553	232	1.75	RBI Water Heaters	FB1750	120437366	
RB026	233	0.225	RBI	LB0225	120437419	
RB386	237	0.034	Bradford White	MI40T5LN8	HLR127241	
RB554	237	0.12	Carrier	48HJD012-671	304650492	
RB387	239	0.046	State	CV40NRT1H	D80028128	
RB555	241	0.27	Carrier	48TJD024-581YA	4595F78139	
RB164	244	0.4	Lochinvar	KBN400	J11H1099252	
RB172	244	0.399	Knight	KBN399	NA	Low NOx
RB388	244	0.399	Lochinvar	KBN400	J11H10199252	
RB031	245	1.95	RBI	FB1950	120437381	Low NOx
RB032	245	1.95	RBI	FB1950	120437382	
RB205	245	0.04	Bradford White	MI40T6FBN	GD13320522	
RB389	245	1.5	Patterson-Kelley	Mach C-1500	H601-13-8969	Low NOx
RB390	245	1.5	Patterson-Kelley	Mach C-1500	H601-13-8975	Low NOx

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB033	250	0.301	Thermopak	GWA-301	3R8	
RB206	250	0.076	Bradford White	MI75S6BN	FB11614084	
RB391	250	0.04	Bradford White	MI40T6FBN2	ZM3994724	
RB134	252	0.76	Parker	7760	52993	
RB392	252	0.3	Laars	PNCH0300NACKICXX	C06179695	
RB393	252	0.53	Westernair	MCH-120	W-01-101-15	
RB394	252	0.3	Laars	PNCH0300NACKICXX	C06179696	
RB395	252	0.53	Raypak	HI-0260	303206045	
RB556	252	0.25	Westernaire	NCH-50	W-01-101-2	
RB557	255	0.443	Greenheck	DG-120-H30-HZ	0SK22404	
RB036	256	1.95	RBI	FB1950	110436943	Low NOx
RB037	256	1.95	RBI	FB1950	20537821	Low NOx
RB169	256	0.7	Patterson Kelley	D-700	AZ-45-09-34063	
RB396	256	1.5	Patterson-Kelley	Mach C-1500	H601-13-8970	
RB397	256	1.5	Patterson-Kelley	Mach C-1500	H601-13-8968	
RB558	256	2.635	JBI	CFA-225	225-4	
RB559	256	2.365	JBI	CFA-225	225-5	
RB038	258	0.4	RBI	LB0400NOE2A2CA	100436594	
RB398	258	0.076	Bradford White	MI75S6BN12	ZM3976761	
RB399	259	0.125	Bradford White	EF60T125E3N2	KD18096444	
RB400	259	2	Bradford White	EF60T199E3N2	KE18247057	Low NOx
RB401	259	2	Bradford White	EF60T199E3N2	KD18168697	Low NOx
RB402	259	2	Raypak	H7-2005	1303354199	Low NOx
RB403	259	2	Raypak	H7-2005	1303354200	Low NOx
RB560	260	0.06	Trane	YSC04BA4RLA2XC000A1A00000	803101331L	
RB561	260	0.06	Trane	YSC04BA4RLA2XC000A1A00000	803101325L	
RB040	262	2	Patterson-Kelley	N-2000-2	CL47-02-24302	Low NOx
RB264	262	0.04	Bradford White	M440T6FBN	GC13074571	
RB041	264	0.559	Thermopak	GWA559	2R32	
RB265	264	0.04	Bradford White	NA	NA	
RB042	270	0.75	RBI	FB 0750	110437044	Low NOx
RB043	270	0.75	RBI	FB 0750	100436870	Low NOx
RB044	270	0.75	RBI	FB 0750	120437333	Low NOx
RB207	270	0.03	Vanguard	3WA59	VGLN0806528253	
RB163	272	0.726	Raypak	H-0724A-CCARCCA	1088106940	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB173	277	0.75	LAARS	PNCH0750NACK2CXN	C07 182107	Low NOx
RB266	277	0.075	Rheem	G75-75N-2	RRLN1210100650	
RB267	277	0.075	Rheem	G75-75N-2	RRLN1210100644	
RB208	278	0.215	Thermo-Pak	GWA-215	11P26	
RB404	278	0.07	Vanguard	1PZ63	VGLN0502139557	
RB209	282	2.066	Lochinvar	CBN2066	C06H00185191	Low NOx
RB210	282	0.181	Raypak	H1-0182	205194448	
RB268	282	0.085	Lochinvar	ETN100	CK8374330	
RB405	282	0.045	Rheem	81V-80HE-1	0794C07247	
RB406	282	2	Patterson-Kelley	C2000	M841-12-8830	
RB407	282	0.3	Patterson-Kelley	C300	M549-12-8924A	
RB562	282	0.3	Patterson Kelly	C-300	M549-12-8922	
RB563	282	0.36	Rheem	65706	VGNG0300181071	
RB269	283	0.4	RBI	SW0400	60539017	
RB047	283	0.04	Bradford White	MI40T6FBN4	AD4531699	
RB211	283	0.04	Bradford White	MI40T6FBN	EG10807225	
RB408	283	0.75	Patterson-Kelley	C750	W638128777	
RB409	283	0.76	Rite	76X	7616246	
RB564	283	0.04	Bradford White	MI40T6FBN	LF34557887	
RB565	283	0.135	Trane	YCH120C4L0AB	L09103774D	
RB212	284	0.075	Reliance	5100NRRT970	B98485725	
RB410	284	0.136	Raypak	H1-0133	205194445	
RB048	285	0.36	Lochinvar	RWN360PM	C014100	
RB049	285	2	Parker	T1995L	52994	Low NOx
RB213	290	0.15	Republic	211	D3N835293	
RB412	290	0.75	Janitrol	82075	2631	
RB050	292	1.995	Parker	T1995-LR	964611	Low NOx
RB414	292	1.5	Patterson Kelley	C-1500H	H604139027	Low NOx
RB415	292	0.037	AO Smith	BTR365A104	LE990840631	
RB566	292	0.04	Bradford White	MI40T6FBN	KB17902358	
RB567	292	0.072	Carrier	48HJD006-531AA	3600G20311	
RB416	294	0.037	AO Smith	BTR365A104	LE990840631	
RB051	295	0.04	Bradford White	MI40T6FBN4	JM17526832	
RB417	295	0.254	Raypak	H1-0253C-CEAHBAA	9501121275	
RB568	295	0.1	Unknown	D3CG076N08225B	NDXM116226	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB175	297	0.999	LAARS	PNCH1000NACN2CXN	C08199319	Low NOx
RB176	297	0.3	A.O. Smith	BTH300A100	0838M000631	
RB214	300	0.076	Bradford White	M2XR75S6BN	FK12550485	
RB418	300	0.399	Teledyne Laars	HH0400MN20CBAKX	M97A00925	
RB053	312	2	PK Thermific	N-2000-2	CY30-07-31337	Low NOx
RB215	312	0.04	Bradford White	MI40T6FBN	EK11193400	
RB419	312	1.5	Patterson-Kelley	Mach C-1500	H601-13-8972	
RB216	320	0.04	Bradford White	MI40T6FBN	EH11037161	
RB420	320	0.52	Teledyne Laars	HHO520MN20CBABX	M97B01419	
RB217	322	0.04	A.O. Smith	GCV40100	9211681003	
RB218	324	0.399	RBI	LB0400	40538448	
RB421	324	1.8	Rite	180X	9797N9	Low NOx
RB422	324	0.715	Teledyne Laars	HHO715EN09FBACW	C97D02924	
RB569	324	0.04	Carrier	4855-030040521AA	2097G10868	
RB570	324	0.08	Carrier	4855-0600-80531AA	0797G10055	
RB571	324	0.08	Carrier	4855-048080541AA	1997G10269	
RB138	328	0.7	Patterson-Kelley	N-700	AY02-0831993	Low NOx
RB423	328	0.45	Patterson-Kelley	Mach C-450	M702-13-9011A	
RB271	328	0.034	American	G61-40T34-3N	9940102355	
RB272	330	0.075	Rheem	21VR75	RHNG0103116932	
RB273	332	0.52	Teledyne Laars	HH0520MN20CBABX	M97B01416	
RB274	332	0.076	Rheem	G100-80N	RRLN0309D04698	
RB424	332	0.52	Teledyne Laars	HH0520MN20CBABX	M97B01514	
RB139	334	0.2	RBI	EF-6OT-199	NA	
RB149	334	1.35	RBI	DB1350	100851533	Low NOx
RB425	334	0.25	LAARS	PW0250CN12CBABN	C09209973	
RB275	336	0.75	LAARS	PNCH0750NACK2CXX	C09215753	
RB276	336	0.399	LAARS	PNCH0400NACC1CXX	C09215952	
RB277	340	0.399	PVI Industries	500D250A-TP	1204114826	
RB426	340	1.75	RBI	MB1750	11466795	Low NOx
RB427	340	1.75	RBI	MB1750	11466795	Low NOx
RB278	350	0.13	Rheem-Ruud	HE80-130N	0708T2028N	
RB055	362	0.7	Patterson-Kelley	N-700	AL26-03-25166	Low NOx
RB056	362	0.04	Bradford White	M440T6FBN	FM12799249	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB428	362	0.45	Patterson-Kelley	Mach C-450	M702-13-9014A	
RB639	414	0.15	A.O. Smith	BTH-150(a)		
RB058	415	0.45	Ajax	WNG450	54813	
RB219	415	0.525	Ajax	SGX-525S	87-39910	
RB429	415	0.353	Landa Pressure Washer	VHG4-2200B	11095360-160813	
RB328	415	0.4	Landa Pressure Washer	VHG42202A	P0904-89885	
RB279	423	0.399	Aerco	EST 399	AE 1088	Low NOx
RB280	423	0.399	Aerco	EST 399	AE1089	Low NOx
RB060	425	0.399	Raypack	WH1-0401	912303779	
RB220	428	0.04	Bradford White	MI40T6FBN	EG10875810	
RB431	428	0.399	Teledyne Laars	HH0400MN20CBAKX	M97A00941	
RB572	429	0.901	A.O. Smith	BTP150-400000	1437R00088	
RB286	341	0.078	A.O. Smith	BT100110	MA02-1435315-110	
RB282	431	0.06	A.O. Smith	BT65104	MB02-1469332-104	
RB284	431	0.078	A.O. Smith	BT100110	MB02-1520976-110	
RB285	431	0.078	A.O. Smith	BT100110	MB02-1496297-110	
RB287	431	0.032	A.O. Smith	FSG30248	GJ01-0161974-248	
RB573	431	0.85	Bradford White	NOOT88B3N	MA35593963	
RB222	439	0.04	Bradford White	MI40T6FBN	HK15661792	
RB432	439	0.04	Bradford White	MI40T6FBN	GB13053593	
RB223	442	0.2	Bradford White	D100L1993N	EE10606894	
RB574	442	0.4	Trane	4CH301L4HOCA	826100372D	
RB575	443	0.25	American Standard	YCH240B3LOPB	P27100645D	
RB434	445	0.7	Ajax	WGFD-700	89-42100	
RB224	451	0.399	RBI	DB0400	120437131	
RB435	451	0.04	Bradford White	M440T6FBN	JE16674929	
RB576	451	0.125	Carrier	48TMD008-501	350SG30678	
RB225	453	0.04	AO Smith	FCV 50 100	GG03-1661114-100	
RB577	453	0.15	Trane	TCH150D3LOBA	335100998D	
RB578	453	0.15	Trane	TCH150D3LOBA	333100525E	
RB579	454	0.15	Trane	TCH150D3LOBA	333100474D	
RB580	454	0.15	Trane	TCH150D3LOBA	335100923D	
RB581	462	1.1	Modine	MDB127AC1375BB1CA5BH2GH	861886-01-3112	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB065a	467	4	Patterson-Kelley	C-4000	K240-12-8806	Low NOx
RB226	470	0.525	Ajax	WG0FD-525	88-40416	
RB437	470	0.45	Patterson Kelley	C450LNx	M702-13-9009A	
RB227	523	0.3	RBI	LB300	111057384	
RB228	523	0.399	Raypak	WHI-0401	1007312048	
RB067	536	0.7	Patterson-Kelley	N-700	AL22-03-25014	
RB438	536	0.399	Raypak	WH1-0400	305208313	
RB351	540	0.45	Mach	C450LNx	M743-11-7537	
RB177	545	0.399	Raypak	WH1 0400	603248609	Low NOx
RB229	545	0.399	Raypak	WH1-0401	912303780	Low NOx
RB140	552	1.25	RBI	FW1250	80746949	Low NOx
RB142	552	1.25	RBI	FW1250	80746906	Low NOx
RB143	552	1.25	Patterson-Kelley	N-1500-2	CY35-07-31469	Low NOx
RB144	552	1.25	Patterson-Kelley	N-1500-2	CY35-07-31470	Low NOx
RB439	552	1.5	Patterson-Kelley	Mach C-1500	H601-13-8974	
RB440	552	1.05	Patterson-Kelley	Mach C-1050	W838-12-8764	
RB075	554	0.27	Rheem	G100-270A	URNG0601G04386	
RB145	554	0.7	Patterson-Kelley	N-700	AL22-03-25021	Low NOx
RB170	554	0.27	Rheem	G100-270A	URNG0306G01488	
RB230	554	0.27	Rheem	G100-270A	URNGA111403320	
RB077a	556	3	Patterson Kelley	Mach C-3000	K943-12-8856	Low NOx
RB078a	556	3	Patterson Kelley	Mach C-3000	K901-13-8985	Low NOx
RB079a	556	3	Patterson Kelley	Mach C-3000	K940-12-8800	Low NOx
RB442	558	0.32	Teledyne Laars	HH032MN20CBAKX	M97A01035	
RB443	565	0.06	Carrier	48GS-036060501	2399G10675	
RB582	565	0.072	Carrier	48TCDA04A2A3A0A0A0	1113C60727	
RB080	567	1.5	Patterson-Kelley	N-1500-2	CY02-06-28964	Low NOx
RB081	567	1.5	Patterson-Kelley	N-1500-2	CY02-06-28965	Low NOx
RB444	567	0.399	Teledyne Laars	HH0320MN20CBAKX	M97A00924	
RB068	584	0.085	Bradford White	100T88B3N	DD9039402	
RB445	584	0.3	Patterson-Kelley	Mach C-300	M549-12-8932A	
RB583	584	0.25	Carrier	48PMDM16-F-50CQ	4509G40036	
RB086	585	2	Patterson-Kelly	N-2000-2	CY30-07-31336	Low NOx
RB446	585	0.199	Bradford White	D100L1993N	EL11270373	

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RB231	586	0.52	Teledyne Laars	HH0520MN20CBABX	M97B01512	
RB447	586	0.04	Bradford White	MI40T6FBN2	JJ17143237	
RB087	588	0.04	Bradford White	MI40T6FBN4	AF4818726	
RB448	588	0.399	Teledyne Laars	HH0400MN20CBAKX	M97A00670	
RB088	589	0.7	Patterson-Kelley	N-700	AY46-08-33043	Low NOx
RB449	595	0.99	Lochinvar	CBN0985	C974226	
RB450	595	0.99	Lochinvar	CBN0985	C974227	
RB451	595	0.034	Bradford White	MI40T6LN10	NM8159673	
RB584	595	0.04	Bradford White	M140T6FBN	LE34388051	
RB452	600	0.9	Patterson-Kelley	C-900	W746-12-8908	
RB232	600	0.076	Bradford White	M2XR75S6BN	HA14455287	
RB089	600	1.14	Parker	T1140LR	964612	Low NOx
RB453	600	0.04	Bradford White	M45036FBN	KH18687499	
RB291	604	0.04	Bradford White	MI40T6FBN7	BJ6664530	
RB454	604	0.034	Whirlpool	N40T61-343	1316T450270	
RB586	604	0.18	York	DF120N15N2FAA3C	NDE7830020	
RB234	610	0.032	Bradford White	MIMH30T6FLX	FB11633167	
RB587	610	0.18	Carrier	48HJD012	2902840667571	
RB092	615	0.07	Vanguard	3WA54	VGLN010619568	
RB455	616	0.32	Teledyne Laars	HH0320MN20CBAKX	M97A01040	
RB588	616	0.125	Carrier	48HJD008-531AA	2196G30238	
RB094	620	1.6	Camus	MFNH 1600-E-02	20501489	Low NOx
RB235	620	0.04	Bradford White	MI5036FBN	GE13368073	
RB589	623	0.09	Carrier	48GX0-04809031	2499G11596	
RB590	623	0.125	Carrier	48HJD008-531AA	2195G30560	
RB095	625	0.399	Raypak	WH1-0400	409225732	
RB456	625	1.05	Patterson-Kelley	Mach C-1050	W845-12-8886A	
RB457	625	1.05	Patterson-Kelley	Mach C-1050	W838-12-8773A	Low NOx
RB458	625	0.1964	Johnston	H190129	S3381	
RB459	625	0.1964	Johnston	H190129	S3380	
RB236	704	1.223	Raypak	H2-1223	9810152937	Low NOx
RB460	704	1.63	Raypak	W1-1631	9810152936	Low NOx
RB292	715	0.7	Patterson-Kelley	N-700	AL26-03-25165	
RB293	715	0.399	Raypak	WH1-0400	305208314	

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RB461	727	0.399	Raypak	WH1-0400	603248608	
RB462	727	0.7	Patterson Kelley	N700	AL26-03-25168	
RB463	727	0.7	Patterson Kelley	N700	AL22-03-25023	
RB464	745	0.7	Patterson Kelley	N700	AY010831936	
RB591	745	0.325	Laars	PW0325CN12CVACN	D02CB0039	
RB465	767	0.7	Patterson Kelley	N700	AY07-10-34309	
RB466	767	1.7	Lochinvar	PFN1701	L12H00245112	Low NOx
RB467	767	1.7	Lochinvar	PFN1701	L12H00245113	Low NOx
RB468	775	0.399	Teledyne Laars	HH0400MN20CBAKX	M97A00669	
RB469	775	0.399	Teledyne Laars	HH0400MN20CBAKX	M97A00940	
RB470	777	0.35	Weben-Jarco	AC035NG	70866	
RB471	777	1.65	RBI	LB1650NOR2A2CA	70435795	
RB640	781	0.75	Laars	NTH-750-NJX3		
RB641	781	0.75	Laars	NTH-750-NJX3		
RB238	790	0.399	RBI	SW400	11157893	
RB294	790	0.4	Lochinvar	NA	221 DD1	
RB592	790	0.18	York	DJ1501N15Q4BMA4B	NDH8211452	
RB593	790	0.22	Carrier	48HCDDZ4ABA6A0P0A0	4413PZ1262	
RB594	790	0.533	York	Z33ANS4N6DFB10D01A	N1A0485051	
RB239	791	0.715	Laars	HH0715EN09KBACCQ	C07194257	
RB240	791	0.715	Laars	HH0715EN09KBACCQ	C07194256	
RB472	805	0.264	Raypak	H1-0260	212202758	
RB101	807	1.9	RBI Futera II	FB1950N0R2A2C	100644266	Low NOx
RB241	807	0.03	Vanguard	3WA59	VGLN0107544360	
RB473	807	1.5	Patterson-Kelley	C-1500H	H601-13-8973	
RB178	808	0.3	RBI	LB300	11157934	Low NOx
RB295	808	0.032	Vanguard	1PLV6	VGLN0607A23101	
RB242	809	0.04	Bradford White	MI40T6EN12	ZC2886959	
RB595	809	0.18	Carrier	48HJD012-671	4008G11541	
RB596	809	0.25	Trane	YSH240F4R;A03	134110689D	
RB597	810	0.204	Central Environmental Systems	DCUC-T120N205C	NHBM056766	
RB243	811	0.04	Bradford White	MI40T6FBN	EG10807218	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB474	811	0.45	Patterson Kelley	C450	M702-13-9012A	
RB598	811	0.125	Carrier	48HGD016A-51ISN	2199G30338	
RB599	811	0.135	Trane	YCH120C3L0AC	P521011510	
RB600	811	0.15	Intellichoice	132P.6.O.HA	A1000043	
RB601	811	0.25	Carrier	48HGDD116A-5N	2505G30012	
RB602	811	0.365	Carrier	48HGE028AC-5112G	5005G50025	
RB475	812	0.12	AO Smith	BTC 120 920	MD93-0266091-920	
RB476	812	0.675	Smith Castiron	G300-S/W-10 INT	A93-166	
RB477	813	0.325	Hydroblasters	42000EHGV	96060030	
RB244	814	0.04	Bradford White	MI40T6FBN	FF12089275	
RB296	826	0.264	Raypak	H1-0260	304206977	
RB478	828	0.399	Raypak	WH1-0400	305208316	
RB297	828	0.04	Bradford White	M140T6FBN	DH9563295	
RB603	828	0.125	Carrier	48HJD008-531	2199G30338	
RB245	831	0.199	AO Smith	BTR200110	9280737002	
RB161	832	0.199	AO Smith	BTR 200 110	H04M017576	
RB246	840	0.04	Bradford White	MI40T6FBN7	BL6944271	
RB604	843	0.12	Trane	YSC102E3RLA12D000A180080	112412321L	
RB605	848	0.022	Carrier	48TCDD24AFA5A0A0A0	4511U48786	
RB606	849	0.08	Trane	YHC072A3ELA2R		
RB479	854	0.032	Bradford White	MI30T6FBN	KAI7674058	
RB299	858	0.036	Vanguard	3WA62	VGLN0406503599	
RB300	858	0.04	Bradford White	MI40T6FBN7	CC7508254	
RB480	858	0.6	Ajax	WG-600	90-42319	
RB481	867	0.04	Bradford White	M440T6FBN	JM17547017	
RB482	868	3.025	Rupp Industries	RAM30	S85181A	
RB607	868	0.39	Hotsy	1832SS-208	110966-100150	
RB248	870	0.327	Raypak	H3-0330	709271480	
RB302	873	0.04	Bradford White	MI40T6FBN2	ZM3994643	
RB336	873	0.15	Lennox	G2005/GE-150-2	5893C13420	
RB608	877	0.18	Carrier	48TJD012-511GA	4599G30912	
RB609	877	0.3	Carrier	48TJF016-591AA	0404F13121	
RB610	877	0.3	Carrier	48TJF016-591AA	0404F13119	
RB303	878	0.25	Ajax	WNG250	57547	

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RB304	880	0.04	Bradford White	MI40T6FBN	EA10049337	
RB484	880	0.25	Rite	48	8319045	
RB485	882	0.04	Bradford White	M440T6FBN	JM17475328	
RB486	882	0.25	Rite	48	8319046	
RB306	899	0.3	Patterson-Kelley	C-300	M516-07-1793A	
RB307	899	0.04	Rheem	22-40	0782M03529	
RB148	1037	0.199	LAARS	PNCH0200NACC1BXN	C08194822	Low NOx
RB491	1037	0.04	Bradford White	MI40T6FBN	LF34557891	
RB107	1100	0.075	American Water Heater	G62-75T75-4NV	401131700	
RB108	1100	0.45	Patterson-Kelley	C-450	M702-13-9008A	Low NOx
RB612	1106	0.013	Carrier	48TFD008611	2404G50931	
RB613	1106	0.013	Carrier	48TFD008611	1604G30608	
RB614	1106	0.013	Carrier	48TFD008611	1604G30609	
RB615	1106	0.013	Carrier	48TFD008611	2404G50932	
RB616	1107	0.18	York	DM090N154AAA4B	N0C8673583	
RB617	1107	0.18	York	DM090N154AAA4B	N0C8673584	
RB618	1107	0.18	York	DM090N154AAA4B	N0B8649522	
RB619	1107	0.18	York	DM090N154AAA4B	N0B8661713	
RB493	1300	1.5	Thermal Solutions	EVCA-1500 BNI-UCC	6544953	Low NOx
RB494	1300	1.5	Thermal Solutions	EVCA-1500 BNI-UCC	6544952	Low NOx
RB495	1300	2	Thermal Solutions	EVCA-2000 BNI-UCC	6544954	Low NOx
RB496	1300	2	Thermal Solutions	EVCA-2000 BNI-UCC	6544955	Low NOx
RB112	1301 ¹	2.52	Fulton	ICS-60	112468	
RB113	1301 ¹	2.52	Fulton	ICS-60	112466	
RB114	1301 ¹	2.52	Fulton	ICS-60	112384	
RB620	1705	1	Raypak	WHP-1005	1109328742	
RB621	1705	2	Patterson Kelly	C2000H		
RB622	1705	2	Patterson Kelly	C2000H		
RB623	1705	2	Patterson Kelly	C2000H		
RB497	1706	0.199	AO Smith	ATI 510 100	1214 E000152	
RB498	1706	0.199	AO Smith	ATI 510 100	1303 E000001	
RB499	1706	0.5	Fulton	PHW 500	114861	
RB189	1730	0.399	Lochinvar	KBN400	K10H10159829	Low NOx

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RB166	1770	0.299	Laars	PNCH0300NACC1CXN	C08199032	Low NOx
RB167	1770	0.399	Laars	NTH399NXN2	G 10 130 223	Low NOx
RB168	1770	0.305	AO Smith	BTR 305A 118	0908M001669	
RB179	1770	0.4	Bradford White	D80L3993NA	CK8317251	
RB624	2064	0.263	Precision Boiler	M191780		
RB500	2935	0.2	Bradford White	D100L1993N	CH8103709	
RB501	2935	0.2	Bradford White	D100L1993N	LB33123945	
RB365	2945	0.715	Laars	PNCV0400N/ACC1BLN	C07190902	
RB502	2950	0.2	State	SBD100199NES	F06M001996	
RB503	2950	0.2	State	D100L1993N	KK28002280	
RB368	2955	0.715	Laars	HH0715EN09KBACCQ	C07190901	
RB369	2970	0.715	Laars	PNCV0400N/ACC1BLN	C07190900	
RB504	2975	0.2	Bradford White	D100L1993N	LA33846398	
RB505	2975	0.2	Bradford White	D100L1993N	CL8501822	
RB506	2996	0.085	Bradford White	100T88B3N	HJ15534569	
RB507	2999	0.04	Bradford White	MI5036FBN	DB8781090	
RB508	10118	0.04	Bradford White	MI5036FBN	HD14840055	
RB251	10120	0.038	GE	GG50T06AVH00	GELN0409Z00535	
RB252	10142	0.35	Rheem	ES120-36-G	0307E01063	
RB308	10146	0.36	International Comfort Products	PGE180HDA00AA	U0803020828	
RB135	10154	1.8	Lochinvar	CWN1796	C06H00184458	Low NOx
RB136	10154	1.8	Lochinvar	CWN1796	C06H00184459	Low NOx
RB309	10157	0.065	A.O. Smith	GCG65100	M06A065817	
RB117	10177	0.04	Rheem	RHLN0200141342	41VR40N	
RB509	10177	0.18	AO Smith	BTR180110	MB040002849	
RB625	10201	0.675	UL	WGB675	V556949	
RB150	10202	1.26	Raypak	H9-1262B	1005309323	Low NOx
RB310	10202	0.3	York	D2CG240N24025F	NMHM158659	
RB511	10210	0.216	Raypak	W1-0263B-BCDRAA	9309110415	
RB512	10210	0.514	Raypak	H1-0624C-CEARCAA	9309110498	
RB513	10234	0.505	Teledyne Laars	DSID525-80-1	A 902500302	
RB119	10236	0.475	Lochinvar	CWN0475	H913330	
RB626	10236	0.2	Rheem	G91-200M	URNG0998G01125	

EU	Building	Input Rating (MMBtu/hr)	Make	Model No.	Serial No.	Emission Controls Used
RB627	10246	0.075	Envirotemp	G2F7575T4NOV300	1309A006663	
RB628	10246	0.075	Envirotemp	G2F7575T4NOV300	1309A006555	
RB254	10301	0.3	Patterson Kelley	C300	M512-07-1718	
RB629	10369	0.616	Burnham	4FL-92-50-06P	9943	
RB255	10432	0.27	Lochinvar	RBN270	D015368	
RB630	10439 ²	0.25	Ajax	WFG250	55921	
RB257	10558	0.036	GE	G640T06AVG01	GELN1107V04545	
RB258	10564	0.032	GE	GG30T6A	GENG0303231149	
RB259	10570	0.036	GE	GG40T06AVG01	GELN0108V12293	
RB122	10650	1.2	Royce	6225	67035	Low NOx
RB122a	10650	0.075	Landa VNG Series	VNG8-300B	11095790-100046	
RB123	10650	1.2	Royce	6225	67036	Low NOx
RB123a	10650	0.075	Landa VNG Series	VNG8-300B	11095790-100045	
RB514	61663	0.2	American	DCG31-100T199-6N	ZF3288252	
RB515	61663	0.266	Raypak	W1-0333B-CCDRBDA	9301105478	
RB124	61664	1.46	Parker	T1460LR	NA	Low NOx
RB516	61664	1.05	Patterson-Kelley	C1050	W845-12-8885A	Low NOx
RB518	61664	0.0751	AO Smith	BT80203	NC93-0276371-202	
RB125	61697	0.76	Parker	T760R	55298	
RB160	61697	0.26	State	SBF100260NET	H02159238	
RB631	61698	0.249	Trane	MCCB010UA0C0UA	K05C31999	
RB632	61699	0.249	Trane	MCCB010UA0C0UB	K05C31992	
RB633	250B	0.15	Trane	YCH151C3L0EBB	642101703D	
RB634	250B	0.18	Carrier	48HUD014-561	1205G30657	
RB635	250B	0.36	Carrier	48TMD025-511EA	4607U34644	

¹ These emissions units may combust either natural gas or diesel fuel.

² This emission unit combusts propane only.

B. Emission Limitations and Standards

1. Emission Limits

The Permittee shall not allow the actual emissions from the external combustion units to exceed the PTE listed below in Table IV-B-1, in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (08/30/12), (07/16/14), (07/29/15), and (12/07/15); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]*

Table IV-B-1: Source PTE from External Combustion Units (tons per year)¹

PM₁₀	PM_{2.5}	NO_x	CO	SO_x	VOC	HAP
0.98	0.98	9.95	9.81	0.11	1.17	0.26

¹Based on a yearly facility cap of 225 million standard cubic feet of natural gas usage for natural gas-fired units.

- a. The Permittee shall not allow visible emissions in excess of 20 percent opacity, as determined by conducting observations in accordance with EPA Method 9, from the emission units listed in Table IV-A-1. *[AQR 26.1.1]*

2. Production Limits

- a. The Permittee shall limit operation using #2 diesel fuel for each dual fuel boiler located at Building #1301 (EUs: RB112 through RB114) to 1,020 hours in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- b. The Permittee shall limit the total amount natural gas consumed by the emission units listed in Table IV-A-1 to 225 MMscf in any consecutive 12-months. *[Application for Minor Revision of Part 70 OP (08/30/12)]*

3. Emission Controls

- a. The Permittee shall combust only natural gas in all the natural gas boilers. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.6(a)]*
- b. The Permittee shall combust either natural gas or diesel fuel with less than 0.05 percent sulfur by weight in each of the three (3) dual fuel boilers located at Building #1301 (EUs: RB112 through RB114). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.6(a)]*
- c. The Permittee shall combust only propane in the propane boiler (EU: RB630). *[Application for Minor Revision of Part 70 OP (08/30/12)]*
- d. The Permittee shall operate and maintain all boilers/water heaters in accordance with the manufacturer's specifications. *[AQR 12.5.2.6(a)]*

The Permittee shall maintain and operate each boiler listed in Table IV-B-2 with low-NO_x burners as listed in the table, as control devices. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); and AQR 12.5.2.6(a)]*

Table IV-B-2: Boilers Equipped with Emission Controls

Emission Unit	Input Rating (MMBtu/hr)	Emission Control(s) Used¹
RB004a	1.50	Low NOx
RB004b	1.50	Low NOx
RB370	0.90	Low NOx
RB198	2.40	Low NOx
RB013a	2.50	Low NOx
RB013b	2.50	Low NOx
RB016	1.05	Low NOx
RB024	1.75	Low Nox
RB172	0.399	Low Nox
RB031	1.95	Low Nox
RB389	1.50	Low NOx
RB390	1.50	Low NOx
RB036	1.95	Low NOx
RB037	1.95	Low NOx
RB400	2.00	Low NOx
RB401	2.00	Low NOx
RB402	2.00	Low NOx
RB403	2.00	Low NOx
RB040	2.00	Low NOx
RB042	0.75	Low NOx
RB043	0.75	Low NOx
RB044	0.75	Low NOx
RB173	0.75	Low NOx
RB209	2.066	Low NOx
RB049	2.00	Low NOx
RB414	1.50	Low NOx
RB175	1.00	Low NOx
RB053	2.00	Low NOx
RB421	1.80	Low NOx
RB138	0.70	Low NOx
RB426	1.75	Low NOx
RB427	1.75	Low NOx
RB055	0.70	Low NOx
RB279	0.399	Low NOx
RB280	0.399	Low NOx
RB065a	4.00	Low NOx
RB177	0.399	Low NOx
RB229	0.399	Low NOx
RB140	1.25	Low NOx
RB142	1.25	Low NOx
RB143	1.25	Low NOx
RB144	1.25	Low NOx
RB145	0.7	Low NOx
RB077a	3.00	Low NOx
RB078a	3.00	Low NOx
RB079a	3.00	Low NOx
RB080	1.50	Low NOx
RB081	1.50	Low NOx
RB086	2.00	Low NOx

Emission Unit	Input Rating (MMBtu/hr)	Emission Control(s) Used ¹
RB088	0.7	Low NOx
RB089	1.14	Low NOx
RB094	1.60	Low NOx
RB457	1.05	Low NOx
RB236	1.22	Low NOx
RB460	1.63	Low NOx
RB466	1.70	Low NOx
RB467	1.70	Low NOx
RB101	1.9	Low NOx
RB178	0.3	Low NOx
RB148	0.20	Low NOx
RB108	0.45	Low NOx
RB493	1.50	Low NOx
RB494	1.50	Low NOx
RB495	2.00	Low NOx
RB496	2.00	Low NOx
RB516	1.05	Low NOx
RB189	0.399	Low NOx
RB166	0.299	Low NOx
RB167	0.399	Low NOx
RB135	1.8	Low NOx
RB136	1.8	Low NOx
RB150	1.26	Low NOx
RB122	1.2	Low NOx
RB123	1.2	Low NOx
RB124	1.46	Low NOx
RB516	1.05	Low NOx

¹Low NO_x burners have a maximum of 50 ppm NO_x.

- e. The Permittee shall maintain and operate each boiler listed in Table IV-B-3 with burners that have manufacturer's maximum emission rates as stated in the table. *[NSR ATC/OP 11, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Application for Minor Revision of Part 70 OP (08/30/12); and application for Renewal of Part 70 OP (09/26/13)]*

Table IV-B-3: NO_x and CO Concentration Limitations for Boilers

EU	Rating (MMBtu/hr)	NO _x (ppmvd @ 3% O ₂)	CO (ppmvd @ 3% O ₂)
RB013a	2.5	10	50
RB013b	2.5	10	50
RB016	1.05	30	100
RB040	2.0	30	100
RB065a	4.00	10	50
RB077a	4.0	10	50
RB078a	4.0	10	50
RB079a	4.0	10	50
RB080	1.5	20	50
RB081	1.5	20	50
RB086	1.694	30	100
RB089	1.14	20	50
RB094	1.6	30	100
RB135	1.8	20	50

EU	Rating (MMBtu/hr)	NO _x (ppmvd @ 3% O ₂)	CO (ppmvd @ 3% O ₂)
RB136	1.8	30	100
RB144	1.25	10	50
RB148	0.199	20	200
RB149	1.35	20	200
RB160	0.26	20	200
RB164	0.40	40	100
RB165	0.27	20	400
RB166	0.299	20	400
RB167	0.399	20	400
RB168	0.305	20	400
RB169	0.70	20	100

C. Monitoring

1. The Permittee shall conduct a quarterly visual emissions check for visible emissions from external combustion emission units while they are in operation. If the units are not operating frequently enough for quarterly observations, then observations shall be conducted while the external combustion emission units are operating. [AQR 12.5.2.6(d)]
2. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
3. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
 - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60, Appendix A: Reference Method 9.
4. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. [AQR 12.5.2.6(d)]
5. All opacity observations that require observation with EPA Method 9 shall be performed by observers that hold a valid Visible Emissions (VE) certificate. [AQR 12.5.2.6(d)]
6. The Permittee shall operate each dual fuel boiler located at building #1301 (EUs: RB112 through RB114) with a non-resettable hour meter to monitor the duration of operation while using #2 diesel fuel. [AQR 12.5.2.6(d)(1)(B) and (C)]

D. Testing

1. Any performance testing that may be required by the Control Officer shall comply with the following performance testing requirements: [AQR 4.5]

Table IV-F-1: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
Boiler Exhaust Outlet Stack	NO _x	EPA Method 7E
Boiler Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Stack Gas Parameters	-	EPA Methods 1, 2, 3A, and 4

2. The Permittee shall comply with the general performance testing requirements in Section II of this permit. [AQR 12.5.2.6(d)]

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum [AQR 12.5.2.6(d)]:
 - a. monthly and on a consecutive twelve month basis, readings of the main natural gas fuel meter;
 - b. monthly, and, on a consecutive twelve month basis, calculations to derive fuel usage for all natural gas-fired boilers with Low-NO_x burners.
 - c. monthly, and, on a consecutive twelve month basis, fuel usage details of all natural gas- fired, uncontrolled boilers/water heaters including exempt units and calculations to derive the fuel usage.
 - d. monthly, and, on a consecutive twelve month basis, calculations to demonstrate compliance with limits, and
 - e. monthly, and, on a consecutive twelve month basis, the hours of operation of the dual fuel boilers located in Building 1301 (EUs: RB112 through RB114).
2. The Permittee shall maintain records on-site that include, at a minimum: [AQR 12.5.2.6(d)]
 - a. records of any performance testing and boiler tune-ups.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. [AQR 12.5.2.6(d)]

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition IV-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.8]

V. INTERNAL COMBUSTION

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables V-A-1 and V-A-2. [AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Applications for Minor Revision of Part 70 OP (08/30/12), (07/16/14), (07/29/15), (01/11/16) and (05/18/16); and Application for Renewal of Part 70 OP (09/26/13)]

Table V-A-1: Emission Units – Generators and Fire Pumps

EU	Building	Rating (bhp)	Make	Model No.	Serial No.	Manufacture Date
G001	002	68	Cummins	4B68-1800	60109911	2001
G002	006	288	Cummins	6CTAA8.3G3	46318225	2013
G003	047	99	Cummins	4BT3.9-G4	46378126	2004
G139	119	896	MTU	12V 1600G80S	95010600944	N/A
G004	199	287	Caterpillar	3306B	64Z08070	1989
G005	200	535	Cummins	NTA-855-G3	30355347	1993
G006	200	535	Cummins	NTA-855-G3	30357073	1996
G007	200	535	Cummins	NTA-855-G3	30370204	2003
G008	201	1750	Detroit Diesel	91237416	7A50452	1995
G009	202	1635	Mitsubishi	S12R-PTA2	88555-0903	N/A
G010	215	1350	Cummins	QST30-G3	37205939	2003
G011	216	380	Cummins	LTA-10G1	34873140	1997
G012	217	535	Cummins	NTA855G3	30369378	2002
G014	276	676	Caterpillar	3412	81Z15171	1993
G017	431	91	Detroit Diesel	DDFP-03DN5030	3D-300584	1995
G066	490	755	Cummins	QSX15-G9	79272601	2007
G021	620	317	Cummins	6CTAA8.3G3	46421200	2004
G140	801	20 kW	Cummins	DKAC	E040645625	N/A
		27 hp	Kubota	D1703-BG-ES	3G0024	
G022a	807	45	Kubota	F2803-EBG	1J1746	2001
G094	807	1,490	Cummins	QST30-G5	10909	N/A
G024	812	56	Cummins	B3.3-G1	68010192	2002
G025	814	68	Cummins	4B3.9-G2	46115329	2001
G028	856	102	Cummins	4BT3.9-G4	46058053	2000
G026	863	102	Cummins	4BT3.9-G4	46060047	2000
G029	890	99	Cummins	4BT3.9-G4	46415812	2004
G142	907	350 kW	Cummins	QSX15-G9	79408338	2009
		755 hp		DFEG-1902036	L09006768	
G032	1301	1586	Caterpillar	3512	24Z04351	1992
G033	1301	1586	Caterpillar	3512	24Z04354	1992
G034	1602	68	Cummins	4B3.9-G2	45745897	1998
G035a	1607	145	Cummins	QSB5-G3 NR3	73125796	2010
G036	1998	67	Waukesha	VRD220SU	365170	1981
G040	2340	102	Cummins	4BT3.9-G4	45947547	2000
G041	10307	1,220	Cummins	KTA38-G3	97494-6	1991
G042	10460	133	John Deere	DU4H-UFADPO	0721785F	2013
G141	10706-1	1,200	Cummins	QS23-G3	314180	2005
G046	61663	170	Cummins	6BT5.9-G6	46401060	2004
G047	61664	364	Cummins	QSL9-G2NR3	73121627	2010
G048	61672	208	Cummins	6BTA5.9-F1	44954338	1993
G049	61672	208	Cummins	6BTA5.9-F1	44958692	2005
G050	61697	380	Cummins	LTA10-G1	35086128	2003
G051	Fuel Hydrant (62120)	536	Caterpillar	3456	7WG03265	2005
G145 (New)	Inside South 1	64	Deutz	D2011L04I	11725906	2016
G052	Outside South 1	65	Wisconsin	V465D	6076092	2005
G054	Outside North 1	65	Wisconsin	V465D	6271424	N/A
G143	Inside North 1	64	Deutz	D2011L04I		N/A
G144	Inside North 2	64	Deutz	D2011L04I		N/A
G146 (New)	Inside South 2	64 hp	Deutz	D2011L04I	11725905	2016

EU	Building	Rating (bhp)	Make	Model No.	Serial No.	Manufacture Date
G053	Outside South 2	65	Wisconsin	V465D	6283620	2008
G055	Outside North 2	65	Wisconsin	V465D	2090162	N/A
G058	Inside South O/R 1	65	Wisconsin	V465D	6205460	2002
G117	Inside South O/R 2	65	Wisconsin	V465D	98051426	N/A
G062	Inside North O/R 1	65	Wisconsin	V465D	6263845	N/A
G063	Inside North O/R 2	65	Wisconsin	V465D	6153809	N/A
G148 (New)	Outside South O/R 2	64 hp	Deutz	D2011L04I		2016
G147 (New)	Outside South O/R 1	64 hp	Deutz	D2011L04I		2016
G104	Outside North O/R 1	65	Deutz	D2011I04	1143868	N/A
G105	Outside North O/R 2	65	Deutz	D2011I04	1143866	2012
A032	Mineral Processing	250	Cummins	M11	ESN60425136	2008
A033	Mineral Processing	250 kW 325 bhp	Perkins	GCD325	WS4486N1358 31	Pre-2007
A076	Mineral Processing	150 kW	Caterpillar	D150-8	CAT00C66AN 6D01653	N/A
		201 hp		C6.6	N/A	
A053	Concrete Plant	581	Caterpillar	C15	JJF00792	2012
G064	625	755	Cummins	QSL9-G3 NR3	79323537	2008
G067	2069	364	Cummins	QSL9-G2NR3	21800298	2007
G068	60936	399	Cummins	QSL9-G3 NR3	21806011	2007
G069	1050	399	Cummins	QSL9-G3 NR3	21806014	2007
G073	10113	364	Cummins	QSL9-G2NR3	46968660	2008
G077	822	145	Cummins	QSB5-G3 NR3	46942919	2008
G080	1740	250	Cummins	QS B7-63 NR3	46913308	2008
G081	283	149	Clarke	JU6H-UFG8	PE6068T7773 01	2010
G084	878	20.2	Kubota	D7703-M-BG-ET01	BE0960	2011
G085	282	27	Kubota	D1703-M-BG-ET01	BG0069	2011
G086	10301	27	Kubota	D1703-M-BG-ET01	BG0100	2011
G090	214	324	Cummins	DSGAD-1204816	E1200338411	2012
G091	277	145	Cummins	QSB5-G3 NR3	73228632	2011
G092	278	145	Cummins	QSB5-G3 NR3	73142987	2010
G095	696	99	Cummins	4BTA3.9-G3	46537788	2013
G102	1114	27	Kubota	D1703-M-BG-ET01	BG0013	2011
G120	1724	27	Kubota	D1703-BG-ES	03G0032	2004
G097	1730	157	Caterpillar	C4.4	E5M02588	2010
G098	10220	13.7	Cummins	7.5DKD-3CR	28296B	2004
G099	61697	106	John Deere	NA	NA	2012
G103	843	130	Cummins	4BTA3.9-G3	46571114	2006
G121	256	260	Cummins	QSB6.7	73080296	2010
G122	805	57.5	Kubota	F2803-EBG	XS8005	1999
G124	1058	34.5	Kubota	46623474	38869	2013
G125	1722	27.7	Kubota	V2203-EBG	OXN2636	2001
G126	2060	27.7	Kubota	D1703	0XAC0061	1999

EU	Building	Rating (bhp)	Make	Model No.	Serial No.	Manufacture Date
G038	2064	207	Cummins	6BTAA5.9-G1	46623474	2006
G127	2270	27	Kubota	D1703-BG-ES	03L0105	2004
G128	2353	27	Kubota	V2203-M-BG-ET02	BQ1279	2006
G129	2354	20.2	Kubota	D1703-BG-ES01	06L0418	N/A
G130	328	250	Cummins	QSB7-G5NR3	73526010	2013
G131	423	755	Cummins	QSX15-G9	73080296	2012
G132	1705	250	Cummins	QSB7-G3 NR3	73185951	2011
G133	222	20	Cummins	DNAF-5632181	I038542578	N/A
G134	252	27	Kubota	D1703-M-BG-ET01	BL2448	N/A
G135	10005	27	Kubota	D1703-BG-ES	03L0113	2004
G136	10215	145	Cummins	QSB5G3 NR3	73470433	2012
G137	2345	755	Cummins	QSX15-G9	79505091	2011

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall comply with the opacity standards that are applicable in 40 CFR 60 Subpart IIII, or shall not exceed 20 percent, whichever is most stringent, as determined by conducting observations in accordance with EPA Method 9, for the emission units listed in Tables V-A-1 and V-A-2. [AQR 26.1.1]
- b. The Permittee shall not allow the actual emissions from each internal combustion engine to exceed the PTE listed below in Table V-B-1, in any consecutive 12-months. [AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (08/30/12), (07/16/14), (05/29/15), (07/29/15), (01/11/16), and (05/18/16); and Application for Renewal of Part 70 OP (09/26/13)]

Table V-B-1: PTE for Generators (tons per year)

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
G001	0.04	0.04	0.28	0.18	0.01	0.01	0.01
G002	0.02	0.02	0.58	0.07	0.01	0.02	0.01
G003	0.01	0.01	0.50	0.06	0.01	0.02	0.01
G139	0.01	0.01	2.51	0.15	0.01	0.13	0.01
G004	0.16	0.16	2.22	0.48	0.01	0.18	0.01
G005	0.05	0.05	2.73	0.66	0.01	0.09	0.01
G006	0.05	0.05	2.73	0.66	0.01	0.09	0.01
G007	0.05	0.05	2.73	0.66	0.01	0.09	0.01
G008	0.31	0.31	10.50	2.41	0.01	0.31	0.01
G009	0.29	0.29	9.81	2.25	0.01	0.29	0.01
G010	0.06	0.06	5.64	0.16	0.01	0.14	0.01
G011	0.10	0.10	1.95	0.21	0.01	0.10	0.01
G012	0.05	0.05	2.73	0.66	0.01	0.09	0.01
G014	0.12	0.12	4.06	0.93	0.01	0.12	0.01
G017	0.05	0.05	0.71	0.15	0.01	0.06	0.01
G021	0.03	0.03	0.79	0.10	0.01	0.02	0.01
G140	0.01	0.01	0.14	0.11	0.01	0.01	0.01
G022a	0.02	0.02	0.35	0.08	0.01	0.03	0.01

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
G094	0.10	0.10	3.29	0.41	0.01	0.07	0.01
G024	0.01	0.01	0.12	0.01	0.01	0.01	0.01
G025	0.04	0.04	0.28	0.18	0.01	0.01	0.01
G028	0.01	0.01	0.51	0.07	0.01	0.02	0.01
G026	0.01	0.01	0.51	0.07	0.01	0.02	0.01
G029	0.01	0.01	0.50	0.06	0.01	0.02	0.01
G142	0.04	0.04	1.70	0.17	0.01	0.09	0.01
G032	0.21	0.21	7.80	1.14	0.01	0.98	0.01
G033	0.21	0.21	7.80	1.14	0.01	0.98	0.01
G034	0.04	0.04	0.28	0.18	0.01	0.01	0.01
G035a	0.01	0.01	0.16	0.05	0.01	0.01	0.01
G036	0.04	0.04	0.52	0.11	0.01	0.04	0.01
G040	0.01	0.01	0.51	0.07	0.01	0.02	0.01
G041	0.05	0.05	8.07	0.29	0.01	0.10	0.01
G042	0.07	0.07	1.03	0.22	0.01	0.08	0.01
G141	0.03	0.03	5.08	0.42	0.01	0.10	0.01
G046	0.03	0.03	0.84	0.22	0.09	0.01	0.01
G047	0.01	0.01	0.66	0.08	0.03	0.01	0.01
G048	0.06	0.06	0.70	0.26	0.11	0.02	0.01
G049	0.11	0.11	1.61	0.35	0.01	0.13	0.01
G050	0.10	0.10	1.95	0.21	0.12	0.10	0.01
G051	0.29	0.29	4.15	0.90	0.27	0.33	0.01
G145	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G052	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G054	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G143	0.01	0.01	0.05	0.02	0.01	0.01	0.01
G144	0.01	0.01	0.05	0.02	0.01	0.01	0.01
G146	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G053	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G055	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G058	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G117	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G062	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G063	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G148	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G147	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G104	0.01	0.01	0.11	0.04	0.01	0.04	0.01
G105	0.01	0.01	0.11	0.04	0.01	0.04	0.01
A032	0.57	0.57	8.06	1.74	0.01	0.64	0.01
A033	0.01	0.01	1.79	1.63	0.01	0.09	0.01
A076	0.02	0.02	0.39	0.09	0.01	0.02	0.01
A053	0.05	0.05	0.96	0.84	0.01	0.10	0.01
G064	0.02	0.02	2.02	0.09	0.01	0.05	0.01
G066	0.02	0.02	1.81	0.22	0.01	0.02	0.01
G067	0.20	0.20	2.82	0.61	0.01	0.22	0.01
G068	0.01	0.01	1.25	0.09	0.01	0.02	0.01
G069	0.01	0.01	1.25	0.09	0.01	0.02	0.01
G073	0.01	0.01	0.74	0.06	0.01	0.01	0.01
G077	0.01	0.01	0.16	0.05	0.01	0.01	0.01
G080	0.01	0.01	0.41	0.05	0.01	0.00	0.01
G081	0.02	0.02	0.41	0.03	0.01	0.02	0.01
G084	0.01	0.01	0.04	0.01	0.01	0.01	0.01

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
G085	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G086	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G090	0.01	0.01	0.65	0.04	0.01	0.01	0.01
G091	0.01	0.01	0.19	0.04	0.01	0.01	0.01
G092	0.01	0.01	0.17	0.04	0.01	0.01	0.01
G095	0.01	0.01	0.50	0.06	0.01	0.02	0.01
G102	0.01	0.01	0.08	0.05	0.01	0.11	0.01
G120	0.01	0.01	0.21	0.05	0.01	0.02	0.01
G097	0.09	0.09	1.22	0.26	0.01	0.10	0.01
G098	0.01	0.01	0.11	0.02	0.01	0.01	0.01
G099	0.01	0.01	0.29	0.02	0.01	0.02	0.01
G103	0.07	0.07	1.01	0.22	0.01	0.08	0.01
G121	0.14	0.14	2.02	0.43	0.01	0.16	0.01
G122	0.03	0.03	0.45	0.10	0.01	0.04	0.01
G124	0.02	0.02	0.27	0.06	0.01	0.02	0.01
G125	0.02	0.02	0.29	0.06	0.01	0.02	0.01
G126	0.02	0.02	0.21	0.05	0.01	0.02	0.01
G038	0.03	0.03	0.69	0.18	0.01	0.02	0.01
G127	0.02	0.02	0.27	0.06	0.01	0.02	0.01
G128	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G129	0.01	0.01	0.04	0.01	0.01	0.01	0.01
G130	0.01	0.01	0.27	0.11	0.01	0.02	0.01
G131	0.02	0.02	2.02	0.09	0.01	0.05	0.01
G132	0.01	0.01	0.27	0.11	0.01	0.02	0.01
G133	0.01	0.01	0.21	0.04	0.01	0.02	0.01
G134	0.01	0.01	0.05	0.01	0.01	0.01	0.01
G135	0.01	0.01	0.21	0.05	0.01	0.02	0.01
G136	0.01	0.01	0.17	0.05	0.01	0.01	0.01
G137	0.11	0.11	3.57	1.95	0.01	0.13	0.01

- c. The diesel engines (EUs: G002, G035a, G038, G042, G047, G053, G064, G066, G067, G068, G069, G077, G080, G081, G084 through G086, G089 through G092, G095, G097, G099, G102, G103, G105, G124, G130, G131, G136, G137, G142, and A032) shall comply with the emission standards set forth in 40 CFR 89.112 and 40 CFR 89.113 for new non-road CI engines for the same model year and maximum engine power. The emission standards are provided in Table V-B-2:

Table V-B-2: Emission Standards for Generators Subject to 40 CFR 60 Subpart IIII

Power (kW)	NMHC+NO _x (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)
37 to 75 kW	4.7	5.0	0.40
75 to < 130 kW	4.0	5.0	0.30
130 to < 225	4.0	3.5	0.20
225 to < 450	4.0	3.5	0.20
450 to 560	4.0	3.5	0.20
> 560 kW	6.4	3.5	0.20

2. Production Limits

- a. The Permittee shall limit the operation of each emergency generator and fire pump for testing and maintenance purposes to 100 hours per year. The Permittee may operate each emergency generator up to 50 hours per year for nonemergency situations, but those hours

count towards the 100 hours provided for testing and maintenance. The 50 hours per year for nonemergency situations cannot be used for peak shavings or demand response, except as provided in 40 CFR 60.4211(f)(3) and 40 CFR 63.6640(f)(4). *[40 CFR 60.4211 and 40 CFR 63.6640]*

- b. The Permittee shall limit the operation of each aircraft arrestor (EUs: G052 through G055, G058, G062, G063, G104, G105, G117, G143, and G144 through G148) to 225 hours per any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Application for Renewal of Part 70 OP (09/26/13); Applications for Minor Revision of Part 70 OP (05/29/15) and (05/18/16), and AQR 12.5.2.6(a)]*
- c. The Permittee shall limit the operation of the 210-bhp generator (EU: A032) to 2,080 hours in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- d. The Permittee shall limit the operation of the 295-bhp diesel generator (EU: A033) to 1,750 hours in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

3. Emission Controls

- a. Generators greater than 100 hp (EUs: G002, G004 through G007, G009 through G013, G021, G029 through G033, G035a, G038, G041, G042, G046 through G051, G064, G066 through G069, G073, G077, G080, G090 through G094, G097, G103, G121, G130 through G132, G136, G137, G139, G141, G142, A053, and A076) shall be equipped with turbochargers and aftercoolers. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Application for Renewal of Part 70 OP (09/26/13); Applications for Minor Revision of Part 70 OP (07/16/14), (07/29/15), (01/11/16) and (05/18/16); and AQR 12.5.2.6(a)]*
- b. The Permittee shall operate EUs G008, G014, G026, G028, G040, G081, G099, A032, and A033 with turbochargers. *[Application for Minor Revision of Part 70 OP (01/11/16)]*
- c. The Permittee shall operate EUs A032, A033, and A053 with timing retardation and lean burn combustion. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- d. The Permittee shall only combust diesel fuel in each engine with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume or jet fuel only. *[40 CFR 60.4207 and 40 CFR 63.65]*
- e. The Permittee shall maintain each generator (EUs: G001, G003 through G014, G017, G021, G022a, G024 through G026, G028 through G034, G036, G040, G041, G046, G048, G049, G050 through G052, G058, G098, G120, G122, G125 through G127, G135, G141, and A033) as follows, unless the manufacturer's specifications are more stringent: *[40 CFR 63, Subpart ZZZZ]*
 - i. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
 - iv. the Permittee may utilize an oil analysis program as described in Subpart 63.6625(i) in order to extend the specified oil change requirement and can petition the Control Officer pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

- f. During periods of startup, the Permittee shall minimize the generator engine's (EUs: G001, G003 through G014, G017, G021, G022a, G024 through G026, G028 through G034, G036, G040 G041, G046, G048, G049, G050 through G052, G098, G102, G103, G120 through G122, G125, G126 through G129, G132 through G135, G140, G141, and A033) time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. *[40 CFR 63.6603(a)]*
- g. The gasoline-fired aircraft arrestors shall combust gasoline only (EUs: G052 through G055, G058, G062, G063, G104, G105, G117, and G144 through G148). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08), Application for Minor Revision of Part 70 OP (05/18/16), and AQR 12.5.2.6(a)]*
- h. The Permittee shall operate and maintain all generators in accordance with the manufacturer's recommendations. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.6(a)]*

C. Monitoring

- 1. The Permittee shall conduct a quarterly visual emissions check for visible emissions from emissions units while they are in operation. If the units are not operating frequently enough for quarterly observations, then observations shall be conducted while the units are operating. *[AQR 12.5.2.6(d)]*
- 2. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
- 3. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
 - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
- 4. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. *[AQR 12.5.2.6(d)]*
- 5. The Permittee shall operate each emergency diesel generator (except the diesel fired aircraft arrestors) with a nonresettable hour meter and monitor the duration of operation when operated for testing, maintenance, and separately for emergencies. *[AQR 12.5.2.6(d)]*
- 6. The Permittee shall operate each continuous duty diesel generator (EUs: A032 and A033) with a nonresettable hour meter and monitor the duration of operation. *[AQR 12.5.2.6(d)]*
- 7. The Permittee shall demonstrate compliance with the hourly emissions limitations for the internal combustion emission units by maintaining a log of the maintenance and testing activities inclusive of the date, the type of fuel consumed, and the start and stop time of each emergency generator, fire pump, and aircraft arrestor. *[AQR 12.5.2.6(d)]*

8. The Permittee shall monitor the sulfur content, and cetane index or aromatic content of the fuel burned in the diesel engines by retaining a copy of vendor fuel specifications. [AQR 12.5.2.6(d)]

D. Testing

1. The Permittee shall comply with the general performance testing requirements in Section II of this permit. [AQR 12.5.2.6(d)]

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum [AQR 12.5.2.6(d)]:
 - a. date, duration of operation, and type of fuel consumed by each of the internal combustion engines and aircraft arrestors for testing, maintenance, and non-emergency use;
 - b. date, duration of operation, and type of fuel consumed by each of the internal combustion engines and aircraft arrestors for emergency use, including documentation justifying use during the emergency; and
2. monthly, and, on a consecutive twelve month basis, hours of operation and type of fuel consumed by the full duty internal combustion engine located at the mineral processing plant (EUs: A032 and A033) The Permittee shall maintain records on-site that include, at a minimum: [AQR 12.5.2.6(d)]
 - a. excess emissions, notifications, malfunctions;
 - b. audit results and corrective actions as required by 40 CFR 60 Appendix F;
 - c. the dates and time of the visible emissions check, the name of the person conducting the check, the results of the check, and the type of corrective action taken;
 - d. manufacturer's certification of sulfur content and cetane index or aromatic content of diesel fuel and jet fuel; and
 - e. results of any performance testing, if applicable.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. [AQR 12.5.2.6(d)]
4. The Permittee is shall comply with the record keeping requirements of 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ.

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition V-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.8]

VI. HUSH HOUSE

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables VI-A-1. [AQR 12.5.2.3 and NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

Table VI-A-1: List of Emission Units

EU	Building	Description
N001	61633	Hush House,
N002	61637	Hush House

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not allow the actual emissions from the hush house operations to exceed the PTE listed below in Table VI-B-1, in any consecutive 12-months. [NSR ATC/OP 114; Modification 46, Revision 1 (11/17/08); Application for Minor Revision of Part 70 OP (07/16/14); and AQR 12.5.2.3]

Table VI-B-1: PTE (tons per year)

Aircraft Engines	Power Setting	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC
F100-PW-220	Idle	0.07	0.06	1.27	9.69	0.28	2.08
	Military	0.59	0.53	17.16	0.50	0.59	1.35
	AB-1	0.37	0.33	3.51	2.70	0.42	0.89
F100-PW-229	Idle	0.01	0.01	0.34	0.91	0.09	0.03
	Military	0.17	0.15	25.02	0.17	0.44	0.17
	AB-1	0.70	0.63	4.27	3.22	0.08	0.66
F119-PW-100	Idle	0.09	0.08	0.10	1.66	0.03	0.22
	Military	0.26	0.23	4.61	0.19	0.23	0.01
	AB-1	0.17	0.15	1.11	2.42	0.15	0.03

2. Production Limitations

- a. The Permittee shall limit the maximum annual time in the mode of operation for each engine type testing in the hush houses as listed in Table VI-B-2. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

Table VI-B-2: Maximum Annual Mode Hours for Each Type of Engine Test

Type of Engine	Time in Mode (Hours per year)		
	Idle	Military	Afterburner
F100-PW-220	240	120	20
F100-PW-229	150	75	8
F119-PW-100	50	25	6

- b. The Permittee shall limit the maximum fuel flow rate as listed in Table VI-B-3 for each aircraft engine type tested in the hush houses. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

Table VI-B-3: Maximum Fuel Flow Rate for Each Type of Engine Test

Aircraft Engines	Power Setting	Fuel Flow Rate (lbs/hr)
F100-PW-220	Idle	2,084
	Military	9,800
	AB-1	44,000
F100-PW-229	Idle	1,200
	Military	11,500
	AB-1	254,000
F119-PW-100	Idle	1,400
	Military	19,000
	AB-1	452,000

3. Emission Controls

- a. The Permittee shall implement best management practices that result in compliance, at a minimum, with AQR 26, 40, and 43. *[AQR 12.5.2.6(a)]*
- b. The Permittee shall combust only jet fuel or diesel fuel with a sulfur content equal to or less than 0.5 percent sulfur by weight. *[NSR ATC/OP 114 Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.6(a)]*

C. Monitoring

- The Permittee shall verify continuous compliance with the emission limitations specified in this permit by usage of accepted emission factors, operational parameters, performance test data or alternate method(s) approved by the Air Quality. *[AQR 12.5.2.6(d)]*
- The Permittee shall demonstrate compliance with the hour limits, listed in Table VI-B-2, for jet engine testing in the hush houses, by maintaining a log of the start and stop time, type of engine and the mode of operation for each engine test. *[AQR 12.5.2.6(d)]*
- The Permittee shall monitor the flow rate of the fuel used during engine testing by use of a flow meter or other method approved by the Control Officer. *[AQR 12.5.2.6(d)]*
- The Permittee shall report any exceedance in maximum fuel flow rate outlined in Table VI-B-3 to the Control Officer within five (5) working days. *[AQR 12.5.2.6(d)]*

D. Testing

- The Permittee shall comply with the general performance testing requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

E. Record Keeping

- The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum: *[AQR 12.5.2.6(d)]*
 - the date, start and stop time, type of engine, and time in mode for each engine tested.

2. The Permittee shall maintain records on-site that include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. excess emissions and any corrective actions taken as a result of the excess emissions;
 - b. vendor certification(s) per delivery of the sulfur content of the diesel and jet fuel designated for aircraft engine testing; and
 - c. Results of any performance testing.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items required by Condition VI-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

VII. LANDFILL

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables VII-A-1. *[AQR 12.5.2.3 and NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

Table VII-A-1: Fugitive Emission Activities

EU	Description
I001	Type III Landfill Unloading
I002	Paved Haul Road Travel
I003	Unpaved Haul Road
I004	Disturbed Area

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1.1]*
- b. The Permittee shall not allow the actual emissions in the landfill operations to exceed the PTE listed below in Table VII-B-1, in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]*

Table VII-B-1: PM₁₀ PTE for All Activities at Landfill

EU	Activity	Process (tons/day)	Process (tons/yr)	PM ₁₀ EF	Control Efficiency	PTE (tons/yr)
I001	Excavating	100	3,000	0.08 (lb/ton)	81.5% ¹	0.02
	Unloading	100	3,000	0.04 (lb/ton)	81.5% ¹	0.01
	Transferring	100	3,000	0.04 (lb/ton)	81.5% ¹	0.01
I002	Paved Haul Road	0.9 mile/round trip		7.57 (lb/VMT)	98%	0.20
I003	Unpaved Haul Road	0.3 mile/round trip		7.57 (lb/VMT)	90%	0.34
I004	Disturbed Area	18.98 Acres		1.66 (lb/acre-day)	81.5%	1.06

¹ Assumes 1.5 percent moisture content.

2. Production Limits

- a. The Permittee shall limit the amount of material disposed of at the site to 100 tons per day (182 cubic yards per day) and 3,000 tons in any consecutive 12-months (5,454 cubic yards per year). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- b. The Permittee shall limit the total vehicle miles traveled (VMT) from vehicle traffic to 90 miles per day and 2,700 miles, in any consecutive 12-months, on the paved portion of the haul road to the landfill, and 30 miles per day and 900 miles, in any consecutive 12-months, on the unpaved portion of the haul road to the landfill. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- c. The construction debris collection area at NAFB shall meet requirements of its Class III landfill permit. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- d. The Permittee shall not open the construction debris collection area to the general public. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- e. The Permittee shall limit the landfill to the disposal of construction debris, defined as inert building materials and wastes, non-contaminated soils, landscaping waste (i.e. tree and grass clippings), asphalt and concrete. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

3. Emission Controls

- a. The Permittee shall water all construction debris released from trucks prior to release such that the moisture contents of all materials less than one-quarter inch in diameter meet or exceed 1.5 percent moisture content. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- b. The Permittee shall maintain a water truck at the site during unloading, transferring of the landfill material, and excavation activities. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- c. The Permittee shall perform a visible emissions check when in use, and shall investigate any occurrence of visible fugitive dust. Corrective action shall be immediately taken to correct causes of fugitive dust in excess of allowable opacity limits. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- d. At the end of each day that material has been added to the landfill, the Permittee shall compact the material and cover it with soil. Water shall be used to form a crust on the covered material. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

- e. The Permittee shall apply water or soil stabilization palliatives to unpaved haul roads to control fugitive dust emissions. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- f. The Permittee shall limit vehicle speed of haul trucks to 15 miles per hour. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- g. Control measures shall be considered effectively implemented when stabilization observations for fugitive dust emissions from roads comply with the opacity standard of 20 percent as determined by conducting observations in accordance with EPA Method 9; when silt loading is not greater than 0.33 ounces per square foot; or when silt content is not greater than six (6) percent silt content. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- h. During high wind events (20 knots or higher), the Permittee shall water areas where a visible plume is produced. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- i. The Permittee shall release no odors from the operation of the landfill. The Control Officer shall deem the odor occurrence a violation if he is able to detect the odor twice within a period of one (1) hour, if the odor is of such a nature as to cause a nuisance, and these detections being separated by at least 15 minutes *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)] (Not Federally Enforceable)*

C. Monitoring

- 1. The Permittee shall demonstrate compliance with the minimum moisture contents contained within this permit by conducting and recording sampling and analysis of materials less than one-quarter inch in diameter in accordance with ASTM Standard C 566-97: Standard Test Method for Total Moisture Content of Aggregate by Drying. Once each calendar quarter, a moisture sample shall be taken from the material at the landfill and disturbed vacant areas associated with the landfill. *[AQR 12.5.2.6(d)]*
- 2. The Permittee shall conduct quarterly visual emissions checks for visible emissions from emissions units while they are in operation. If the units are not operating frequently enough for quarterly observations, then observations shall be conducted while the units are operating. *[AQR 12.5.2.6(d)]*
- 3. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
- 4. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
 - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
- 5. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. *[AQR 12.5.2.6(d)]*

6. The Control Officer may require testing to demonstrate compliance with emission limitations outlined in this permit. *[AQR 12.5.2.6(d)]*

D. Testing

1. The Permittee shall comply with the general performance testing requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

E. Record Keeping

1. The Permittee shall maintain records on a semi-annual basis of the date and the amount of each load of construction debris deposited in the landfill. *[AQR 12.5.2.6(d)]*
2. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. daily, and, on a consecutive twelve month basis, records of the number of cubic yards (or tons) of material disposed, and a description of the type of material; and
 - b. daily, and, on a consecutive twelve month basis, records regarding the number of gallons of water used at the landfill as dust control.
3. The Permittee shall maintain records on-site that include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. the dates and time of the visible emissions check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required); and
 - b. a log book of malfunctions, corrective actions taken, and date, time, and results of moisture testing and performance testing (EPA Method 9).
4. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition VII-E-2, in accordance with the reports and reporting requirements in Section II of this, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

VIII. DISTURBED VACANT AREAS/UNPAVED PARKING AREAS

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables VIII-A-1. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]*

Table VIII-A-1: Fugitive Emission Activities

EU	Description
K001	Disturbed Areas, 70 acres

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1.1]*
- b. The Permittee shall not allow the actual emissions from storage areas/vacant land operations to exceed the PTE listed below in Table VIII-B-1, in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]*

Table VIII-B-1: PM₁₀ PTE for Disturbed Surfaces at NAFB¹ (tons/year)

EU	Area	Disturbed Surface (Acres)	PM ₁₀
K001	Disturbed Areas	70	21.22

¹Air Quality default emission factor of 1.66 lb/acre-day for storage pile/disturbed surface was used.

2. Production Limits

- a. The Permittee, at no time, shall the sum of the amount of storage areas/disturbed surfaces at the entire NAFB (excluding the landfill, mineral processing, and areas under a dust permit) exceed 70 acres on any given day. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

3. Emission Controls

- a. The Permittee shall control fugitive dust from unpaved parking lots, material handling and storage yards, and vehicle and equipment storage yards, whenever technically feasible, by:
 - i. watering;
 - ii. paving;
 - iii. applying dust palliatives applicable to traffic areas;
 - iv. for employee, visitor and other on-road vehicle parking areas, applying dust palliatives to vehicle travel lanes within the parking lot and uniformly applying and maintaining clean, well-graded surface gravel of a minimum of 3/8 inch material to a depth of two (2) inches on the vehicle parking areas; or
 - v. applying and maintaining an alternate control measure pre-approved by the Control Officer. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- b. For unpaved parking lots, material handling and storage yards, and vehicle and equipment storage yards, the Permittee shall stabilize soils by:
 - i. watering to maintain soils in a visibly moist condition;
 - ii. paving by application and maintenance of asphalt, concrete, or other similar material on a roadway surface;

- iii. applying and maintaining per the manufacturer's recommendations dust palliatives as needed to maintain a stable surface; or
 - iv. maintaining gravel to at least two (2) inch minimum depth. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- c. If open areas and vacant lots are 5,000 square feet or larger and are disturbed by any means, including use by motor vehicle and/or off-road motor vehicle, or material dumping, then the Permittee of such open areas and vacant lots shall implement one or more of the control measures whenever technically feasible, by:
- i. preventing equipment, motor vehicles and/or off-road vehicle trespassing, parking, and/or access by installing effective control measures; and either
 - ii. establishing and maintaining a stable surface area at all times by watering to form a crust, establishing and maintaining adequate vegetation, uniformly applying and maintaining surface gravel or applying and maintaining dust palliatives to all areas; or
 - iii. applying and maintaining an alternative control measure per-approved by the Control Officer. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- d. For open areas and vacant lands, the Permittee shall stabilize soils by:
- i. watering to maintain soils in a visibly moist condition;
 - ii. crusting of the soils as determined by the Soil Crust Determination Test (Drop Ball Test);
 - iii. maintaining adequate vegetation cover on open areas and vacant lots;
 - iv. applying clean well-graded gravel of at least 3/8 inch in diameter to cover the entire area; or
 - v. applying and maintaining per the manufacturer's recommendations dust palliatives as needed to maintain a stable surface. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

C. Monitoring

1. The Permittee shall conduct a monthly visual emissions check for visible emissions from emissions units while they are in operation. If the units are not operating frequently enough for monthly observations, then observations shall be conducted while the units are operating. *[AQR 12.5.2.6(d)]*
2. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
3. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or

- b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
4. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. *[AQR 12.5.2.6(d)]*
5. The Control Officer reserves the right at any time to require additional control measures to ensure that the 20 percent opacity as determined by conducting observations in accordance with EPA Method 9. *[AQR 12.5.2.6(d)]*
6. The Permittee shall observe operations at least monthly, and more often as meteorological conditions warrant, and shall investigate any occurrence of visible fugitive dust within normal working hours (Monday through Friday, excluding holidays, between the hours of 7:00 to 17:00). Corrective action shall be immediately taken to correct causes of fugitive dust in excess of allowable opacity limits. *[AQR 12.5.2.6(a)]*
7. Where unpaved access roadways may exist, the Permittee shall monitor all vehicles traveling on unpaved roadways, and take such action as necessary to stabilize the surface as traffic and meteorological conditions warrant. *[AQR 12.5.2.6(a)]*
8. The Control Officer reserves the right at any time to quantify acreage of disturbed areas, storage lots and unpaved parking lots to demonstrate compliance with emission limitations outlined in this permit. *[AQR 12.5.2.6(d)]*

D. Testing

1. The Permittee shall comply with the general performance testing requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. the date and the amount of acres of unpaved parking lots, material handling and storage yards, and vehicle and equipment storage yards, disturbed open areas and disturbed vacant land on a monthly basis;
2. The Permittee shall maintain records on-site that include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. the dates and time of the visible emissions check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required);
 - b. a log book of excess opacity, malfunctions, and any corrective actions taken;
 - c. records of all fugitive dust abatement activities; and
 - d. results of any performance testing. *[40 CFR 60.7 – 40 CFR 60.11]*
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition VIII-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.6(d)]

IX. MINERAL PROCESSING

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables IX-A-1 through IX-A-4. [AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); and Applications for Minor Revision of Part 70 OP (07/16/14) (7/29/15) and (12/07/15)]

Table IX-A-1: Asphalt Plant Emission Units

EU	Description	Make	Model No.	Serial No.
A040	Hopper 1	Terex	PAB-420TR	
A041	Hopper 2	Terex	PAB-420TR	
A042	Hopper 3	Terex	PAB-420TR	
A043	Hopper 4	Terex	PAB-420TR	
A044	Gathering Conveyor	Terex	PC-2447	
A045	Screen	Terex	N/A	
A046	Charging Conveyor	Terex	PC-2447	
A047	Drum Mixer	Terex	E-225P	
A048	Conveyor - Load Out	Terex	PC-2447	
A049	Hopper - Load Out	Terex	SE-195	
A061	Conveyor	Terex		
A062	Conveyor	Terex		
A050	Burner	Terex		
A063	Storage Pile			

Table IX-A-2: Concrete Plant Emission Units

EU	Description	Make	Model No.	Serial No.
A011	Cement Silo	Zimmerman		
A054	Cement Silo	Rehesa	HCC1EN-H4050	212-RTE-IT-6502
A055	Cement Silo	Rehesa	HCC1EN-H4050	212-RTE-IT-6503
A056	Conveyor	Erie Strayer Company	MC-11C	
A057	Mixer	Erie Strayer Company	MC-11C	
A058	Aggregate Bin (aggregate)	Erie Strayer Company	MC-11C	
A059	Aggregate Bin (sand)	Erie Strayer Company	MC-11C	
A060	Batch Transfer Conveyor	Erie Strayer Company	MC-11C	
A017	Storage Piles - Gravel/Dirt, 0.10 acres			
A018	Storage Piles - Sand, 0.05 acres			
A064	Conveyor	Erie Strayer Company	MC-11C	
A065	Conveyor	Erie Strayer Company	MC-11C	

EU	Description	Make	Model No.	Serial No.
A066	Aggregate Bin (aggregate)	Erie Strayer Company	MC-11C	
A067	Hopper	Erie Strayer Company	MC-11C	
A068	Batch Transfer Conveyor	Erie Strayer Company	MC-11C	

Table IX-A-3: Aggregate Plant Emission Units

EU	Description	Make	Model No.	Serial No.
A051	Conveyor	KPI-JCI	5030-25S	
A034	Conveyor	Eagle	36D3879	3318
A035	Conveyor	Kolman	101	86208-24-60
A036	Conveyor	Kolman	101	826208-24-60
A037	Conveyor	Goodfellow		
A038	Conveyor	Goodfellow		
A019	Crusher	Eagle	62D370	11375
A020	Wash Plant Screen	JCI	JCI516326	00H03L26
A024	Conveyor Transfer Point	Eagle	PRSC	2701
A025	Conveyor Transfer Point	Eagle	PRSC	2702
A026	Conveyor Transfer Point	Eagle	PRSC	2694
A027	Storage Pile	Gravel-Dirt, 2.0 Acres		
A069	Transfer Auger	KPI-JCI	5030-258	409350
A071	Conveyor	Screen Machine		TE60-30-JD1731
A073	Storage Bins (sand)			
A074	Storage Bins (aggregate)			
A075	Screen	Eagle	M110B	4563

Table IX-A-4: Haul Roads

EU	Description
A072	Unpaved Haul Road, 5,475 Vehicle Miles (VMT) per consecutive 12-months
A028	Paved Haul Road, 5,475 Vehicle Miles Travel (VMT) per consecutive 12-months

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge or cause the discharge into the atmosphere from any Hot Mix Asphalt facility, including all the emission units listed in Table IX-A-1, emissions exceeding 20 percent opacity. *[40 CFR 60.92]*
- b. The Permittee shall not discharge or cause the discharge into the atmosphere from the asphalt drum (EU: A047) emissions containing particulate matter in excess of 0.04 gr/dscf (90 mg/dscm). *[ATC/OP 114, Modification 37, Revision 1 (03/13/2008) and 40 CFR 60.92]*
- c. The Permittee shall not allow visible emissions from binvents associated with the Concrete Batch Plant, listed in Table X-A-2, greater than 7 percent opacity (EUs: A011, A054, A055, A058, A059, and CP013). *[ATC/OP 114, Modification 37, Revision 1 (03/13/2008), Condition X.B.2.j and Application for Minor Revision of Part 70 OP (07/16/14)]*
- d. The Permittee shall not allow visible emissions from the Concrete Batch Plant, emission units listed in Table IX-A-2, to exceed 20 percent opacity. *[AQR 26.1.1]*

- e. The Permittee shall not allow visible emissions from the Aggregate Processing facility, including the emission units listed in Tables IX-A-1, IX-A-3, and IX-A-4 to exceed the following standards:
- i. from any screening equipment, conveyors, storage piles, stackers, transfer point on belt conveyors, fugitive emissions shall not exhibit greater than 10 percent opacity; [40 CFR 60.672]
 - ii. from any crusher, at which a capture system is not used, fugitive emissions shall not exhibit greater than 15 percent opacity; [40 CFR 60.672] and
 - iii. from any other fugitive emission source, fugitive emissions shall not exhibit greater than 20 percent opacity. [AQR 26.1.1]
- f. The Permittee shall not allow the actual emissions from the mineral processing emission units to exceed the PTE listed in Table IX-B-1 through IX-B-4, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08), and Applications for Minor Revision of Part 70 OP (07/16/14) (07/29/15) and (12/07/15)]

Table IX-B-1: PM₁₀ PTE Asphalt Plant Processing Emission Units

EU	Throughput (tons/hour)	Throughput (tons/year)	PM ₁₀ EF (lbs/ton)	Control Efficiency (%)	PM ₁₀ (lb/hr)	PM ₁₀ (ton/yr)
A040	225	18,000	0.000046	90.0	0.01	0.01
A041	225	18,000	0.000046	90.0	0.01	0.01
A042	225	18,000	0.000046	90.0	0.01	0.01
A043	225	18,000	0.000046	90.0	0.01	0.01
A044	225	18,000	0.000046	90.0	0.01	0.01
A045	225	18,000	0.00074	90.0	0.17	0.01
A046	225	18,000	0.000046	90.0	0.01	0.01
A047	225	18,000	0.023	90.0	5.18	0.21
A048	225	18,000	0.000046	90.0	0.12	0.01
A049	225	18,000	0.000046	90.0	0.12	0.01
A061	225	18,000	0.000046	90.0	0.01	0.01
A062	225	18,000	0.000046	90.0	0.01	0.01
A050	9.21 gal/hr	16,800 gal/yr	2		0.02	0.02
A063	0.25 acres		1.66 lb/acre-day		0.02	0.08

¹Controlled emission factor reflecting use of water sprays to reduce particulate in materials less than one-quarter inch in diameter.

Table IX-B-2: PTE Asphalt Plant (tons per year)

EU	Description	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
A040	Hopper 1	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A041	Hopper 2	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A042	Hopper 3	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A043	Hopper 4	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A044	Gathering Conveyor	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A045	Screen	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A046	Charging Conveyor	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A061	Conveyor	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A062	Conveyor	0.01	0.01	0.00	0.00	0.00	0.00	0.00
A047	Drum Mixer	0.21	0.21	0.50	1.17	0.10	0.29	0.08
A048	Conveyor - Load Out	0.01	0.01	0.01	0.01	0.01	0.04	0.01
A049	Hopper - Load Out	0.01	0.01	0.81	0.05	0.03	0.02	0.04

EU	Description	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
A050	Burner	0.02	0.02	0.17	0.04	0.01	0.01	0.01
A063	Storage Pile	0.08	0.01	0.00	0.00	0.00	0.00	0.00

Table IX-B-3: PTE Concrete Plant (tons per year)

EU	Throughput (tons/hour)	Throughput (tons/year)	PM ₁₀ EF (lbs/ton)	Control Efficiency (%)	PM ₁₀ (lbs/hr)	PM ₁₀ (tons/yr)
A011	200	15,000	0.47	99.0 ²	0.94	0.04
A054	810	15,000	0.00034	99.0 ²	0.03	0.01
A055	810	15,000	0.00034	99.0	0.01	0.01
A056	810	15,000	0.000046	90.0 ¹	0.01	0.01
A057	810	15,000	0.156	90.0	12.64	0.12
A058	810	15,000	0.000046	90.0	0.01	0.01
A059	810	15,000	0.000046	90.0	0.01	0.01
A060	810	15,000	0.000046	90.0	0.01	0.01
A017	0.10 acres		1.66 lb/acre-day		0.01	0.03
A018	0.05 acres		1.66 lb/acre-day		0.01	0.02
A064	810	15,000	0.000046	90.0	0.01	0.01
A065	810	15,000	0.000046	90.0	0.01	0.01
A066	810	15,000	0.000046	90.0	0.01	0.01
A067	810	15,000	0.000046	90.0	0.01	0.01
A068	810	15,000	0.000046	90.0	0.01	0.01

¹90.0 percent control efficiency based on 2.5% inherent moisture content of material.

²99 percent control efficiency for silos based on binvent control.

Table IX-B-4: PTE Aggregate Plant (tons per year)

EU	Throughput (tons/hour)	Throughput (tons/year)	PM ₁₀ EF (lbs/ton)	Control Efficiency ¹ (%)	PM ₁₀ (lbs/hr)	PM ₁₀ (tons/yr)
A051	200	100,000	0.0011	90.0	0.02	0.01
A034	200	100,000	0.0011	90.0	0.02	0.01
A035	200	100,000	0.0011	90.0	0.02	0.01
A036	200	100,000	0.0011	90.0	0.02	0.01
A037	200	100,000	0.0011	90.0	0.02	0.01
A038	200	100,000	0.0011	90.0	0.02	0.01
A019	200	100,000	0.0024	90.0	0.05	0.01
A020	200	100,000	0.0087	90.0	0.17	0.04
A024	200	100,000	0.0011	90.0	0.02	0.01
A025	200	100,000	0.0011	90.0	0.02	0.01
A026	200	100,000	0.0011	90.0	0.01	0.01
A027	2.00 acres		1.66 lb/acre-day		0.14	0.61
A069	200	100,000	0.0011	90.0	0.02	0.01
A028	5,475 VMT/yr		7.57 lb/VMT	98.0	2.12	0.41
A071	200	100,000	0.0011	90.0	0.02	0.01
A072	5,475 VMT/yr		7.57 lb/VMT	90.8	10.60	2.07
A073	200	100,000	0.000046	90.0	0.20	0.05
A074	200	100,000	0.000046	90.0	0.66	0.17
A075	200	100,000	0.0087	90.0	1.74	0.44

¹90.0 percent control efficiency based on 2.5% inherent moisture content of material. 90% control for unpaved haul roads and 98% control for paved haul roads.

2. Production Limits

- a. The Permittee shall limit production at the asphalt plant (EUs: A040 through A049, and A061 through A063) to 225 tons of material per hour and 18,000 tons of material in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/16/14)]*
- b. The Permittee shall limit the amount of diesel fuel used for the 1.2 MMBtu/hr asphalt plant burner (EU: A050) to 16,800 gallons in any twelve consecutive month period and shall only combust low sulfur (less than 0.05 percent) diesel fuel. *[NSR ATC/OP, Modification 46, Revision 1 (11/17/08)]*
- c. The Permittee shall limit production at the concrete batch plant (EUs: A011, A017, A018, A054 through A060, and A064 through A068) to 810 tons of material per hour and 15,000 tons of material in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/16/14)]*
- d. The Permittee shall limit the production at aggregate facility (EUs: A019, A020, A024 through A027, A034 through A039, A051, A069, A070, A071, and A073 through A075) to produce 200 tons of material per hour and 100,000 tons of material in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Applications for Minor Revision of Part 70 OP (07/16/14) and (07/29/15)]*
- e. The Permittee shall limit traffic to a maximum of 5,475 VMT in any consecutive 12-months on the paved haul road (EU: A028). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- f. The Permittee limit traffic to a maximum of 5,475 VMT in any consecutive 12-months (EU: A072) on the unpaved haul road. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

3. Emission Controls

Mineral Processing Equipment

- a. The Permittee shall incorporate, and maintain in good operating condition at all times, an effective water suppression system to control visible emissions within allowable opacity limits for the following emission units: A019, A020, A024 through A027, A034, A037 through A039, A051, A069 through A071, and A075. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/29/15)]*
- b. The Permittee shall take continual measures to control fugitive dust (e.g. wet, chemical or organic suppression, enclosures, etc.) at all mining and aggregate processing operations, material transfer points, stockpiles, truck loading stations and haul roads throughout the source to comply with the applicable opacity standards. *[AQR 41.1]*
- c. The Permittee shall sweep and/or rinse paved roads accessing or located on the site as necessary to remove all observable deposits and so as not to exhibit an average opacity in excess of 20 percent for a period or periods totaling more than 6 minutes in any 60 minute period. *[AQR 41.1]*
- d. The Permittee shall control fugitive emissions on unpaved roads accessing or located on the site by treating with chemical or organic dust suppressant and/or watered as necessary, or paved, or graveled, or have an alternate, Control Officer approved, control measure

applied, so as not to exhibit an average opacity in excess of 20 percent for a period or periods totaling more than 6 minutes in any 60 minute period. [AQR 41.1]

Asphalt Plant

- e. The Permittee shall incorporate, and maintain in good operating condition at all times, an effective water suppression system to control visible emissions within allowable opacity limits for the following emission units: A040 through A050 and A061 through A063. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/16/14)]
- f. The Permittee shall use a baghouse on the Drum Mixer (EU: A047) to control particulate emissions at all times the processing equipment is operating. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]
- g. The Permittee shall maintain and operate the baghouse on the Drum Mixer (EU: A047) to attain an effective seal and particulate control efficiency of 90.0 percent. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]
- h. The Permittee shall maintain an effective seal around the baghouse by correcting all leaks adversely affecting its performance. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]
- i. The Permittee shall maintain the pressure drop across the baghouse within a normal operating range as defined by manufacturer specifications and as demonstrated through monitoring records (EU: A047). [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]
- j. The Permittee shall burn only low sulfur diesel fuel (less than 0.05 percent) in the asphalt drum (EU: A047). [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

Concrete Plant [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

- k. The Permittee shall incorporate, and maintain in good operating condition at all times, an effective water suppression system to control visible emissions within allowable opacity limits for the following emission units: A017, A018, A054 through A060, and A064 through A068.
- l. The Permittee shall use bin vents on the cement silos to control particulate emissions at all times the processing equipment is operating (EUs: A011, A054 and A055).
- m. The Permittee shall maintain and operate the bin vents on the two cement silos to attain an effective seal and particulate control efficiency of 99.0 percent (EUs: A011, A054 and A055).
- n. The Permittee shall ensure that an effective seal is maintained on the bin vents, and the pressure drop across each binvent shall be maintained within the limits specified by the manufacturer. [AQR 12.5.2.6(d)]

Fugitive Dust [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

- o. The Permittee shall not cause or allow the discharge of fugitive dust in excess of 100 yards from the point of origin or beyond the lot line of the property on which the emissions originate, whichever is less.
- p. The Permittee shall not track out onto a paved road mud or dirt that extends 50 feet or more in cumulative length from the point of origin or allow any trackout to accumulate to a depth greater than 0.25 inches. Notwithstanding the preceding, all accumulations of mud or dirt on curbs, gutters, sidewalks or paved roads including trackout less than 50 feet in length and 0.25 inches in depth, shall be cleaned of all observable deposits and maintained to eliminate emissions of fugitive dust.

- q. The Permittee shall control fugitive dust emissions from any disturbed open area or disturbed vacant lot that are owned or operated by the Permittee by paving, applying gravel, applying a dust palliative or applying water to form a crust.
- r. The Permittee shall implement long-term stabilization of disturbed surfaces when the stationary source, or a portion thereof, is to be closed or idled for a period of 30 days or more, within 10 days following the cessation of active operations. Long-term stabilization includes, but is not limited to one or more of the following: applying water to form a crust, applying palliatives, applying gravel, paving, and denying unauthorized access, or other effective control measure to prevent fugitive dust from becoming airborne.
- s. The Permittee shall effectively cover all loaded trucks leaving the site and carrying loose materials to reduce emissions of dust. This condition applies to trucks regardless of whether they are owned and operated by the owner/operator.

General [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

- t. The Control Officer at any time may require additional water sprays at pertinent locations if an inspection indicates the six minute opacity limit is being exceeded.
- u. The Permittee shall not cause, suffer or allow the discharge from any source whatsoever such quantities of air contaminants or other material which cause a nuisance, including excessive odors. [AQR 40 and AQR 43]

C. Monitoring

Visible Emissions [AQR 12.5.2.6(d)]

- 1. The Permittee shall conduct monthly visual emissions check when the units are operating for visible emissions from emissions units while they are in operation. If the units are not operating frequently enough for monthly observations, then observations shall be conducted while the units are operating.
- 2. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
- 3. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
 - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
- 4. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard.

Mineral Processing Equipment [AQR 12.5.2.6(d)]

5. The Permittee shall visually inspect the water spray system at all emission units controlled through water suppression, and monitor its effectiveness. Inspections shall include, but not be limited to, flow rates, leaks and nozzle conditions, as applicable.
6. The Permittee shall monitor the throughput of all mineral products in tonnage.

Baghouses/Bin vents [AQR 12.5.2.6(d)]

7. The Permittee shall visually inspect the bin vents when in operation at least monthly for air leaks. Defective components shall be repaired or replaced within 5 working days of the discovery of the malfunction. Should the malfunction cause the bin vent to be ineffective in controlling particulate emissions, the processing of material shall cease until such repairs to the binvent are completed (EUs: A054 and A055).
8. The Permittee shall develop and follow a preventative maintenance schedule that is consistent with the binvent manufacturer's specifications for routine and long-term maintenance.
9. When in use, the Permittee shall conduct daily monitoring of the pressure drop across baghouse cell with the installation and operation of a pressure differential (Magnehelic) gauge per manufacturer's specifications (EU: A047).
10. The Permittee shall visually inspect the baghouse interior at least monthly for air leaks. Defective baghouse compartments shall be sealed off and repairs completed within 5 working days of the discovery of the malfunction. Should the malfunction cause the baghouse to be ineffective in controlling particulate emissions, the processing of material shall cease until such repairs to the baghouse are completed.
11. The Permittee shall have a standard operating procedures (SOP) manual for baghouse. The procedures specified in the manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance (EU: A047).
12. When in use, the Permittee shall conduct daily visual observations of baghouse and/or stack discharges to verify that visible emissions are not present in excess of allowable opacity limits. If they are, the Permittee shall cease operations producing the emissions until the problem is corrected.

Haul Roads/Disturbed Surfaces [AQR 12.5.2.6(d)]

13. Compliance with the opacity standards for paved and unpaved roads contained within the permit shall be demonstrated, when required by the Control Officer, in accordance with one of the following, as applicable:
 - a. EPA Method 9 (Standards for Opacity); or
 - b. The test method set forth in AQR 94.12.4: Instantaneous Method.

D. Testing

1. The Permittee shall conduct initial EPA Method 5 Particulate Matter Concentration performance test on emissions from the Hot Mix Asphalt (EU: A047) drum that has operated during the calendar year. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). A report of the results shall be submitted to the Control Officer. [40 CFR 60.93 and AQR 12.5.2.6(d)]

2. The Permittee shall conduct initial EPA Method 9 Opacity test on all mineral processing equipment that has operated during the calendar year. A report of the results shall be submitted to the Control Officer. *[40 CFR 60.93 and AQR 12.5.2.6(d)]*
3. The Permittee shall conduct subsequent Method 5 and Method 9 performance testing every five years on or before the anniversary date of the initial performance test. *[AQR 12.5.2.6(d)]*
4. The Permittee shall comply with the general performance testing requirements in Section II of this permit. *[AQR 12.5.2.8]*

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. monthly, and, on a consecutive twelve month basis, the amount of material excavated and/or processed through the rock crusher and screen;
 - b. monthly, and, on a consecutive twelve month basis, the amount of concrete produced at the concrete batch plant;
 - c. monthly, and, on a consecutive twelve month basis, the amount of asphalt produced at the asphalt batch plant; and
 - d. total vehicles miles traveled on haul road(s), on a consecutive twelve month basis, and the length of the haul road(s).
2. The Permittee shall maintain records on-site that include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. the dates and time of the visible emissions check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required);
 - b. baghouse pressure differential;
 - c. log of control device inspections, maintenance and repair;
 - d. log of dust control measures applied to the paved haul road, unpaved haul road, parking lots, and vacant areas;
 - e. the results of any performance testing; and,
 - f. excess emissions, notifications, and malfunctions, including actions taken to remedy the excess emissions and malfunctions.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. If at any time, the Permittee replaces all existing equipment in a production line with new equipment, the Permittee shall submit all information about the existing equipment and its replacement equipment to the Administrator. *[40 CFR 60.676]*
2. The Permittee shall submit a summary of items stipulated by Condition IX-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are

required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.8]

X. PAINT BOOTHS AND MEDIA BLASTING

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Table X-A-1. [AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); and Applications for Minor Revision of Part 70 OP (07/29/15) and (05/18/16)]

Table X-A-1: List of Emission Units

EU	Building	Description	Make	Model No.	Serial No.
D001	252-1	Paint Booth	JBI	F-22	30807-A
D018	252-2	Paint Booth	Pauli Systems Inc.		
D002	253	60' x 20' Paint Booth	Binks		
D003	256-1	95'6" x 91'6" x 20' Paint Booth	JBI	DB-7322-5	20849
D004	256-2	Paint Booth	Pauli Systems Inc.	Custom Design	
D028	474	Paint Booth			
D005	807	15'7" x 7'7" x 8' Paint Booth	Binks		83-2448
D006	868	Paint Booth	Binks	SDT44P-SB	
D007	10144	20' X 30' Paint Booth			
D009	10148	Paint Booth	Bleeker Bros	TSDT-40	
D022	10305	Paint Booth	Dwyer Mark II/SATA		
D012	252	Media Blasting	Clemco	BNP220P 900R&DF	52248
D010	255	Media Blasting	Pauli		
D011	256	Media Blasting	Abrasive Blast Systems, Inc.	Type 1	300902-02-48
D025	256	Media Blasting	Cyclone	3524	8120
D029	423	Media Blasting	Cyclone	4826	7705
D019	442	Media Blasting	MaxiBlast	Deluxe-1	96X48SL
D013	474	Media Blasting	Snap-on	YA437	
D027	610	Media Blasting	Media Blast & Abrasive, Inc.	Crystal Blast Pro 3624	5813112
D031	807	Media Blasting	ALC Abrasive Blasting	40400	
D030	843	Media Blasting	ALC Abrasive Blasting		
D020	858	Media Blasting	Trinco	40X40SL/PC	66752-8

EU	Building	Description	Make	Model No.	Serial No.
D024	10119	Media Blasting	Snapon	YA-437	TBD
D017	10144	20' X 30' Media Blasting	Paul Griffen	PRAM 101020	0092
D023	10305	Media Blasting	ECO Blast		

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not discharge from any source whatsoever quantities of air contaminants or other material which cause a nuisance. [AQR 40.1]
- c. The Permittee shall not allow the actual emissions from the paint booth and media blasting activities to exceed the PTE listed in Table X-B-1, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Application for Renewal of Part 70 OP (09/26/13); Applications for Minor Revision of Part 70 OP (07/16/14), (07/29/15), and (05/18/16); and AQR 12.5.2.3]

Table X-B-1: Paint Booths and Media Blasting PTE (tons per year)

EU	PM ₁₀	PM _{1.5}	VOC	HAP
D001	0.03	0.03	0.51	0.27
D018	0.03	0.03	0.51	0.27
D002	0.02	0.02	2.19	1.12
D003	0.13	0.13	1.81	0.92
D004	0.13	0.13	1.81	0.92
D028	0.07	0.07	1.44	0.81
D005	0.01	0.01	0.86	0.44
D006	0.01	0.01	2.24	1.15
D007	0.04	0.04	0.59	0.31
D009	0.01	0.01	1.27	0.66
D022	0.04	0.04	0.52	0.29
D012 ¹	0.01	0.01	0	0
D010 ¹	0.01	0.01	0	0
D011 ¹	0.01	0.01	0	0
D025	0.01	0.01	0	0
D029	0.01	0.01	0	0
D019	0.01	0.01	0	0
D013 ¹	0.01	0.01	0	0
D027	0.01	0.01	0	0
D031	0.01	0.01	0	0
D030	0.01	0.01	0	0
D020	0.01	0.01	0	0
D024	0.01	0.01	0	0
D017 ¹	0.01	0.01	0	0
D023	0.01	0.01	0	0

¹PM₁₀ emission factor for media blasting provided by the Permittee.

2. Production Limits

- a. The maximum gallons of paint used by each paint booth at NAFB shall be limited as follows in Table X-B-2, in any consecutive 12-months: *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Renewal of Part 70 OP (09/26/13)]*

Table X-B-2: Maximum Allowable Gallons of Surface Coating Materials (gallons/year)

EU	Building	Topcoat	Primer	Cleaning
D001	252-1	1,500	450	200
D018	252-2	1,500	450	200
D002	253-1	900	80	30
D003	256-1	7,000	1,000	215
D004	256-2	7,000	1,000	215
D028	474	200	125	125
D005	807-1	350	25	25
D006	868-1	520	190	40
D007	10144-1	180	50	20
D009	10148-1	350	50	30
D022	10305-1	180	0	40

- b. The VOC and HAP content of surface coating materials shall not exceed the limits outlined in Table X-B-3 in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Renewal of Part 70 OP (09/26/13)]*

Table X-B-3: Allowable VOC and HAP Content of Surface Coating Materials

EU	Topcoat (lbs/gal)		Primer (lbs/gal)		Cleaning (lbs/gal)	
	VOC	HAP	VOC	HAP	VOC	HAP
D001	4.10	2.05	5.88	2.94	7.49	5.24
D018	4.10	2.05	5.88	2.94	7.49	5.24
D002	4.10	2.05	5.88	2.94	7.49	5.24
D003	4.10	2.05	5.88	2.94	7.49	5.24
D004	4.10	2.05	5.88	2.94	7.49	5.24
D028	5.70	2.85	6.45	3.23	7.49	5.24
D005	4.10	2.05	4.00	2.00	7.49	5.24
D006	5.70	2.85	6.45	3.23	7.49	5.24
D007	4.10	2.05	5.88	2.94	7.49	5.24
D009	5.70	2.85	6.45	3.23	7.49	5.24
D022	4.10	2.05	5.88	2.94	7.49	5.24

- c. The Permittee shall not exceed the limits of media usage in each media blasting booth as outlined in Table X-B-4 in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Applications for Minor Revision of Part 70 OP (01/28/14), (07/29/15), and (05/18/16)]*

Table X-B-4: Maximum Allowable Media Blasting Usage

EU	Media (lbs/hr)	Total Usage (tons/yr)
D012	50	10,000
D010	50	38,000
D011	50	10,000
D025	50	38,000
D029	50	38,000
D019	50	10,000

EU	Media (lbs/hr)	Total Usage (tons/yr)
D013	50	10,000
D027	50	10,000
D031	50	10,000
D030	50	38,000
D020	150	10,000
D024	50	10,000
D017	50	38,000
D023	50	10,000

3. Emission Controls

- a. The Permittee shall not operate spray booths unless all exhaust air passes through appropriate filter media having a particulate capture efficiency of at least 99 percent of the overspray (EUs: D001 through D007, D018, D022, and D028). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/29/15)]*
- b. The Permittee shall not operate spray booth EU: D009 unless all exhaust air passes through appropriate filter media having a particulate capture efficiency of at least 95 percent. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- c. The Permittee must cover all openings in dry filter media in all of the spray booths (EUs: D001 through D007, D009, D018, D022, and D028). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- d. All painting must be performed in the spray paint booth using an HVLP gun having at least 65 percent transfer efficiency. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- e. The spray booths equipped with a VOC control device (EUs: D001, D003, D004, and D018) shall maintain at least a 90 percent control efficiency. The VOC control device shall be in operation at all times the surface coating is occurring. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- f. Open containers shall not be used for storage or disposal of solvent-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[AQR 12.5.2.6]*
- g. Pursuant to AQR Sections 40 and 43, no person shall cause, suffer or allow the discharge from any source whatsoever such quantities of air contaminants or other material which cause a nuisance, such as over spray or excessive odors from the spray painting operation or associated operations. *[AQR 40.1] (Not Federally Enforceable)*
- h. The spray booths equipped with dry filter media shall not be operated unless all exhaust air passes through a control equivalent to filter media two inches thick. The filters must cover all openings leading to the fan. All filters or other control equipment shall follow manufacturer's recommendations for use and operation. Dry filters must be changed at sufficient intervals to prevent a decrease in their effectiveness, and to prevent them from clogging. *[AQR 12.5.2.6] (Not Federally Enforceable)*
- i. A manometer (or equivalent) shall be used to monitor the pressure drop across the spray booth filters. The filters shall be replaced when the pressure drop exceeds 0.25 inches of water (6.35 millimeters of water). *[AQR 12.5.2.6]*

- j. Surface coating application equipment shall be cleaned in an enclosed container to minimize VOC volatilization into the ambient air. *[AQR 12.5.2.6] (Not Federally Enforceable)*
- k. All solvent containers shall remain securely closed, except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container shall be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[AQR 12.5.2.6] (Not Federally Enforceable)*
- l. The spray booth and all ancillary equipment shall be inspected for leaks, malfunctions, proper operation of gauges, and pressure drops each day the booth is operated. A log must be kept of such inspections as well as any corrective actions taken to repair the equipment regarding leaks, malfunctions, operations of gauges, pressure drops, or other parameter that may result in excess emissions. *[AQR 12.5.2.6]*
- m. Media blasting operations shall have particulate emissions controlled by a method compliant with AQR Section 41. *[AQR 12.5.2.6]*
- n. Permittee shall maintain and operate cyclones/cartridge filters used to control particulate emissions from media blasting per manufacturer's recommendations to maintain at a least 99.9 percent efficiency. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- o. The Permittee shall develop written instructions (SOPs) that shall contain procedures for tracking material usage from media blasting. *[AQR 12.5.2.6]*

C. Monitoring

- 1. The Permittee shall employ a manometer (or equivalent) to monitor the drop across the spray booth exhaust filters and prevent a decrease in their effectiveness from clogging. *[AQR 12.5.2.6(d)]*
- 2. The Permittee shall inspect the spray booth and all ancillary equipment for filter bypass, malfunctions, and proper operation of gauges, pressure drops, etc., for each day the booth is operated. *[AQR 12.5.2.6(d)]*

D. Testing

- 1. No performance testing requirements have been identified for any emission units in this section at this time.

E. Record Keeping

- 1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. monthly, and, on a consecutive twelve month basis, the consumption (in gallons) of each VOC-containing compound (paints, basecoats, primers, reducers, thinners, solvents) and shall be made available to the Control Officer upon request; and
 - b. daily, monthly, and, on a consecutive twelve month basis, the production of materials by each process as listed in this OP.

2. The Permittee shall maintain records on-site that include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. MSDS or records demonstrating the VOC and HAP content for each compound; and
 - b. logbook (as specified in Condition X-B-3-I) of spray paint booth inspections, maintenance, and repair.
3. The Permittee shall comply with the record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. In accordance with Section II of this permit, the Permittee shall submit: *[AQR 12.5.2.8]*
 - a. A table containing a list of all compounds recorded pursuant to Condition X-E-1, the total consecutive 12-month usage of the compound, the VOC content of the compounds and the HAP content of the compound.
 - b. A list of all inspections, performed pursuant to Condition X-B-3-I, that found faults and the actions taken to correct those faults.
3. The Permittee shall submit a summary of items stipulated by Condition X-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

XI. COOLING TOWERS

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables XI-A-1. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (07/16/14) and (12/07/2015); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]*

Table XI-A-1: List of Emission Units

EU	Building	Make	Model No.	Serial No.
C001	11	Evapco	USS1956	W037346
C024	119	Evapco	AT-212-69	15762603
C002	200	Evapco	USS1988	W037667
C003	200	Evapco	USS1988	4108704
C021	340	BAC	XES3E-1020-06L	U136598901
C005	554	Evapco	USS19114	13522085
C018	625	Evapco	AT 19-66	9373392
C009a	625	Evapco	USSUAT1966	11462927
C011	704	BAC	FXT-87	97-220511
C012a	767	BAC	FXT-38/X	U094762801
C013a	791	Reymosa	HRFG 714275	H46M3M1142A12431255
C027	878	AAON	LL-060-8-8-DB0E-000	201301-BAAE00029
C017	1301	Marley	NC8307SG-08	834273-A1
C016	1301	Marley	NC8304E-ISS	231320-C1

EU	Building	Make	Model No.	Serial No.
C014	1301	Marley	NC8304E-ISS	231320-A1
C015	1301	Marley	NC8304E-ISS	231320-B1
C019	1705	Evapco	AT 29-324	10399579
C028	1706	AAON	LL-090-3-0-MCOV-000	201301-BAAH00031
C020	61697	Evapco	ICT 474	W037681

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not allow the actual emissions from the cooling tower operations to exceed the PTE listed in Table XI-B-1, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Application for Minor Revision of Part 70 OP (07/16/14); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]

Table XI-B-1: PTE for Cooling Towers (tons per year)

EU	Capacity (gpm)	Percent Drift	TDS (ppm)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)
C001	325	0.001	2,400	0.01	0.01
C024	480	0.001	3,200	0.02	0.02
C002	625	0.001	2,400	0.02	0.02
C003	625	0.001	2,400	0.02	0.02
C021	1155	0.005	2,400	0.14	0.14
C005	700	0.005	2,400	0.09	0.09
C018	386	0.001	2,400	0.01	0.01
C009a	396	0.001	2,400	0.01	0.01
C011	340	0.005	2,400	0.04	0.04
C012a	340	0.005	2,400	0.04	0.04
C013a	937	0.005	2,400	0.12	0.12
C027	200	0.001	3,200	0.01	0.01
C017	1654	0.005	3,200	0.27	0.27
C016	1200	0.005	3,200	0.20	0.20
C014	1200	0.005	3,200	0.20	0.20
C015	1200	0.005	3,200	0.20	0.20
C019	2205	0.001	2,400	0.05	0.05
C028	280	0.001	3,200	0.01	0.01
C020	175	0.001	2,400	0.01	0.01

2. Production Limits

- a. The circulation rate (gallons per minute) and total dissolved solids (ppm) shall not exceed those listed for each unit in Table XI-B-1. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (07/16/14) and (12/07/15); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]

3. Emission Controls

- a. The drift rate (percent drift) and total dissolved solids shall not exceed those listed in Table XI-B-1. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (07/16/14) and (12/07/15); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]*
- b. The Permittee shall operate and maintain all cooling towers in accordance with the manufacturer's recommendations. No chromium-containing compounds shall be used for water treatment. *[40 CFR 63.402]*

C. Monitoring

1. The Permittee shall conduct quarterly TDS sampling of the cooling tower water using a TDS or conductivity meter to demonstrate compliance with the PTE of each cooling tower. *[AQR 12.5.2.6(d)]*
2. The Control Officer may require testing to demonstrate compliance with emission limitations outlined in this permit. *[AQR 12.5.2.6(d)]*

D. Testing

1. No performance testing requirements have been identified for any emission units in this section at this time.

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. Semi-annual and consecutive 12-months hours of operation for all cooling towers.
2. The Permittee shall maintain records on-site that include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. Semi-annual TDS content of cooling tower circulation water; and
 - b. emission limit exceedences, upsets, emergencies, malfunctions, and breakdowns; the times, durations and probable causes of such incidences; and the corrective and/or preventative actions taken to restore and maintain compliance.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition XI-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

XII. INCINERATOR

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables XII-A-1. [AQR 12.5.2.3 and NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

Table XII-A-1: List of Emission Units

EU	Building	Make	Model	Serial Number
H001	1301	National Pathological Incinerator	P-50	

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not allow the actual emissions from the operation of the incinerator to exceed the PTE listed below in Tables XII-B-1 and XII-B-2, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]
- b. Visible emissions from the incinerator shall not exhibit in excess of five (5) percent opacity as determined by conducting observations in accordance with EPA Method 9, except for a period or periods aggregating more than one (1) minute in any 60-minute period during which time a visible emission not in excess of 20 percent opacity shall be permitted. [AQR 26.2.2]

Table XII-B-1: PTE Hospital Incinerator

EU	Emission Rate	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC
H001	lbs/hour	0.04	0.04	0.09	0.01	0.05	0.86
	tons/year	0.01	0.01	0.01	0.01	0.01	0.01

Table XII-B-2: PTE of HAPs: Hospital Incinerator

CAS #	Pollutant (HAPs)	Emissions (tons/year)
778205	Chlorine	2.73E-04
7664393	Hydrogen Fluoride	3.87E-04
7647010	Hydrogen Chloride	8.71E-02
7440473	Chromium Metal	2.02E-06
7440439	Cadmium	1.42E-05
7440417	Beryllium Compounds	1.63E-08
7440382	Arsenic	6.29E-07
7440360	Antimony	3.33E-05
7440020	Nickel Metal	1.53E-06
7439976	Mercury Compounds	2.78E-04
7439965	Manganese Compounds	1.47E-06
7439921	Lead	1.89E-04

CAS #	Pollutant (HAPs)	Emissions (tons/year)
1746016	Tetrachloro-Dibenzo-p-Dioxin	1.42E-10
1336363	Polychlorinated Biphenyls	1.21E-07
132649	Dibenzofuran	1.86E-07
Totals		0.09

2. Production Limits

- a. The Permittee shall incinerate only pathological waste, low-level radioactive waste and/or chemotherapeutic waste.
- b. The Permittee shall limit the amount of waste incinerated to 50 pounds per hour, and 10,400 pounds in any consecutive 12-months (5.2 tons per year). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- c. The Permittee shall burn only natural gas in the hospital incinerator (EU: H001). *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

3. Emission Controls

- a. The Permittee shall not operate the incinerator at a temperature in the primary chamber below 1,400°F. If at any time the temperature drops below 1,400°F, incineration shall be discontinued until the operating temperature exceeds 1,400°F. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)] (Local Only)*
- b. No odors shall be released by the operation of the incinerator. The Control Officer shall deem the odor occurrence a violation if he is able to detect the odor twice within a period of one (1) hour, if the odor is of such a nature as to cause a nuisance, and these detections are separated by at least 15 minutes. *[AQR 12.5.2.6(d)]*

C. Monitoring

1. The Permittee shall maintain temperature in the primary chamber of the incinerator equal to or greater than 1400°F. If the manufacturer specifies a temperature higher than 1400°F, that temperature shall be the minimum temperature while incineration is occurring. At no time shall the Permittee allow to drop incinerator temperature the minimum temperature during incineration. *[AQR 12.5.2.6(d)]*
2. The Permittee shall equip the incinerator with an audible alarm that warns the operator when the temperature drops below 1400°F. *[AQR 12.5.2.6(d)]*
3. The Permittee shall equip the incinerator with a temperature-measuring device installed in the primary chamber at a location that will provide accurate and representative temperature readings, and a temperature gauge shall be placed at a location that is clearly visible to the operator. This temperature device shall be operated at all times when the unit is being charged. To record temperatures, a continuous recorder that records hourly temperature readings shall be installed, calibrated and maintained. *[AQR 12.5.2.6(d)] (Local Only)*
4. The Permittee shall conspicuously post operating instructions for the incinerator at or near the charging door. *[AQR 12.5.2.6(d)]*
5. The Permittee shall perform annual maintenance on the unit in accordance with the manufacturer's recommendations. *[AQR 12.5.2.6(d)]*

6. The Permittee shall conduct a visual emissions check for visible emissions from the incinerator when in operation. If the units are not operating frequently enough for monthly observations, then observations shall be conducted while the units are operating. [AQR 12.5.2.6(d)]
7. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
8. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
 - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
9. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. [AQR 12.5.2.6(d)]
10. Records and data required by this permit to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. [AQR 12.5.2.6(d)]

D. Testing

1. The Permittee shall demonstrate compliance with the opacity standards in Section XII-B-1-b of this permit in accordance with EPA Method 9 (Standards for Opacity) conducted and recorded annually. [AQR 12.5.2.6(d)]
2. The Control Officer may require additional performance testing for particulate matter. Subsequent performance testing for opacity shall be conducted on or before the anniversary date of the last performance test. [AQR 4.5]
3. The Control Officer may require additional performance testing to demonstrate compliance with emission limitations outlined in this permit (Table XII-D-1). [AQR 12.5.2.6(d)]

Table XII-D-1: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
Incinerator Exhaust Outlet Stack	Opacity	60-minute EPA Method 9
	PM ₁₀	EPA Method 5

4. The Permittee shall comply with the general performance testing requirements in Section II of this permit. [AQR 12.5.2.6(d)]

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum [AQR 12.5.2.6(d)]:
 - a. the daily, and, on a consecutive twelve month basis, the hours of operation for the incinerator; and
 - b. the semi-annual consumption of natural gas for the incinerator.
2. The Permittee shall maintain records on-site that include, at a minimum [AQR 12.5.2.6(d)]:
 - a. demonstration that only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste are combusted in the VA Hospital incinerator.
 - b. the date and daily pounds of matter incinerated;
 - c. the temperature readings taken each time matter is incinerated;
 - d. the dates and time of the visible emissions check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required); and
 - e. the date, time, and results of performance testing (EPA Method 5 and EPA Method 9).
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. [AQR 12.5.2.6(d)]

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition XII-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.8]

XIII. WOOD WORKING

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Table XIII-A-1. [AQR 12.5.2.3 and NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/16/14)]

Table XIII-A-1: List of Emission Units

EU	Building	Number of Sanders	Number of Other Equipment	Control Device	Collection Efficiency (percent)
E004	610	6	16	Cyclone\Fabric Filter	99.5 percent
E001	807	2	9	Cyclone\Fabric Filter	99.5 percent

E002	811	0	4	Cyclone\Fabric Filter	99.5 percent
E003	10118	2	5	Cyclone\Fabric Filter	99.5 percent

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not allow the actual emissions from the woodworking operation to exceed the PTE listed below in Table XIII-B-1, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Application for Minor Revision of Part 70 OP (07/16/14); and AQR 12.5.2.3]

Table XIII-B-1: PM₁₀ PTE for Woodworking Shops

EU	Number of Sanders	Number of Other Equipment	Control Device	Collection Efficiency (percent)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
E004	6	16	Cyclone\Fabric Filter	99 percent	1.36	1.36
E001	2	9	Cyclone\Fabric Filter	99 percent	0.61	0.61
E002	0	4	Cyclone\Fabric Filter	99 percent	0.18	0.18
E003	2	5	Cyclone\Fabric Filter	99 percent	0.44	0.44

2. Emission Controls

- a. The Permittee shall maintain and operate all control devices used to control particulate emissions from all woodworking activities in all of the woodworking shops (EUs: E001 through E004) per manufacturers' recommendations to maintain at least 99 percent control efficiency. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and Application for Minor Revision of Part 70 OP (07/16/14)]
- b. A preventative maintenance schedule that is consistent with the cyclone and/or fabric filter manufacturer's instructions for routine and long-term maintenance shall be developed and followed. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]
- c. The Permittee shall have a standard operating procedures (SOP) manual for cyclones and fabric filters. The procedures specified in the manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the cyclone or fabric filter manufacturer's instructions for routine and long-term maintenance. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

C. Monitoring

- 1. The Permittee shall conduct a monthly visual emissions check for visible emissions from the vents and exhaust stacks for the woodworking shops while they are in operation. If the

units are not operating frequently enough for monthly observations, then observations shall be conducted while the units are operating. [AQR 12.5.2.6(d)]

2. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the check was made, the location, and the results of the visible emissions check.
3. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall:
 - a. take immediate action to correct causes of fugitive emissions that appear to exceed allowable opacity limits; or
 - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60, Appendix A: Reference Method 9.
4. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. [AQR 12.5.2.6(d)]
5. All opacity observations that require observation with EPA Method 9 shall be performed by observers that hold a valid Visible Emissions (VE) certificate. [AQR 12.5.2.6(d)]
6. Monthly visual inspection shall be made of the particulate control devices for air leaks. Defective cyclone and fabric filter compartments shall be sealed off and work orders for repairs shall be submitted within 72 hours of discovery of the malfunction, and all repairs shall be made in a timely manner. Should the malfunction cause the cyclone and/or fabric filter to be ineffective in controlling particulate emissions, the processing of material shall cease until such repairs to the cyclone and/or fabric filter are completed. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.6(d)]
7. The Control Officer may require testing to demonstrate compliance with emission limitations outlined in this permit. [AQR 12.5.2.6(d)]

D. Testing

1. No performance testing requirements have been identified for any emission units in this section at this time.

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum [AQR 12.5.2.6(d)]:
 - a. hours of operations of cyclone/fabric filters used in the woodworking shop in any consecutive 12-months (EU: E004).
2. The Permittee shall maintain records on-site that include, at a minimum [AQR 12.5.2.6(d)]:

- a. emission limit exceedences, upsets, emergencies, malfunctions, and breakdowns; the times, durations and probable causes of such incidences; and the corrective and/or preventative actions taken to restore and maintain compliance; and
 - b. log of control device inspections, maintenance and repair.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. [AQR 12.5.2.6(d)]

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition XIII-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.6(d)]

XIV. DEGREASERS

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables XIV-A-1. [AQR 12.5.2.3; NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Application for Renewal of Part 70 OP (09/26/13); Applications for Minor Revision of Part 70 OP (07/16/14), (07/29/15), and (05/18/16)]

Table XIV-A-1: List of Emission Units

EU	Building	Make	Model	Serial Number	Capacity (gal)	Type of Cleaner
M004	180	Clarus	PCS-25		25	Parts (Solvent)
M001	270	Clarus	PCS-25		27.5	
M003	270	Clarus	PCS-25		27.5	
M043	270	Equipment Manufacturing Company	T160E88	G3491003	100	
M052	270	Graymills	A-42618-A	285584-06	75	
M002	442	Clarus	PCS-25		27.5	
M032	442	Best Engineering	F5000-LXPZX-SS	20467	200	
M037	831	ChemFree	Smart Washer		25	
M038	832	ChemFree	Smart Washer		25	
M030	858	Bauer Inc.	1039003-P1	40792	150	
M010	858	Clarus	PCS-25		27.5	
M011	858	Clarus	PCS-15		27.5	
M012	858	Aaladin	2260ESS	81321	200	
M013	858				5	

EU	Building	Make	Model	Serial Number	Capacity (gal)	Type of Cleaner
M014	858				5	
M047	858				5	
M054	1100	Mira Chem				
M055	1100	Mira Chem				
M056	1100	Crest	F1436HT	1207A3236		
M008	1101	Clarus	PCS-25		27.5	
M023	10132	Clarus	PCS-25	1894	28	
M022	10148	Clarus	PCS-25	1542	27.5	
M050	10202	Clarus	PCS-25	219	27.5	
M057	10202	Graymills	HK150			
M058	10278		SF50			
M059	10278	Snap-On	PBC16	DB03319		
M017	10304	Clarus	PCS-25		27.5	
M018	10304	Clarus	PCS-25		27.5	
M060	10304	Chemfree Corporation/ Smartwasher	SW328		25	
M061	10304	Chemfree Corporation/ Smartwasher	SW328		25	
M026	442	Clarus	PCS-25		27.5	
M027	843	Clarus	PCS-25		27.5	
M005	61685	Clarus	PCS-25		25	

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not discharge from any source whatsoever quantities of air contaminants or other material which cause a nuisance. [AQR 40.1]
- c. The Permittee shall not allow the actual emissions from each degreasing operation to exceed the PTE listed below in Table XIV-B-1, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); 114 Title V OP Significant Revision (10/28/13); Applications for Minor Revision of Part 70 OP (08/30/12), (07/16/14), (07/29/15), and (05/18/16); Application for Renewal of Part 70 OP (09/26/13); and AQR 12.5.2.3]

Table XIV-B-1: PTE for Degreasing Activities

EU	Hours/Year	Area (ft ²)	EF (lb/hour/ft ²)	VOC (tons/year)	HAP (tons/year)
M004	208	8.1	0.08	0.07	0
M001	208	8.1	0.08	0.07	0
M003	208	8.1	0.08	0.07	0
M043	208	16	0.08	0.13	0
M052	208	8.1	0.08	0.07	0
M002	208	8.1	0.08	0.07	0
M032	208	16	0.08	0.13	0
M037	208	8.1	0.08	0.07	0
M038	208	8.1	0.08	0.07	0
M030	208	8.1	0.08	0.07	0
M010	208	8.1	0.08	0.07	0
M011	208	6.9	0.08	0.06	0
M012	208	8.1	0.08	0.07	0
M013	208	1.7	0.08	0.01	0
M014	208	1.7	0.08	0.01	0
M047	208	1.7	0.08	0.01	0
M054	208	8.1	0.08	0.07	0
M055	208	8.1	0.08	0.07	0
M056	208	8.1	0.08	0.07	0
M008	208	8.1	0.08	0.07	0
M023	208	8.1	0.08	0.07	0
M022	208	8.1	0.08	0.07	0
M050	208	8.1	0.08	0.07	0
M057	208	8.1	0.08	0.07	0
M058	208	8.1	0.08	0.07	0
M059	208	8.1	0.08	0.07	0
M017	208	8.1	0.08	0.07	0
M018	208	8.1	0.08	0.07	0
M060	208	8.1	0.08	0.07	0
M061	208	8.1	0.08	0.07	0
M026	208	8.1	0.08	0.07	0
M027	208	8.1	0.08	0.07	0
M005	208	8.1	0.08	0.07	0

¹Limited to 20 gallons in any consecutive twelve month period.

2. Production Limits

- a. The Permittee shall limit each part cleaner (EUs: M001 through M004, M008, M010 through M014, M017, M018, M022, M026, M027, M030, M032, M037, M038, M043, M047, M050, M052, and M054 through M061) to the hours of operations as outlined in Table XIV-B-1 in any consecutive 12-months. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08); Application for Renewal of Part 70 OP (09/26/13); 114 Title V OP Significant Revision (10/28/13); and Applications for Minor Revision of Part 70 OP (07/16/14) and (05/18/16)]*

3. Emission Controls

- a. The Permittee shall implement good operating practices to reduce VOC emissions by ensuring that all lids to degreasing units remain closed except when the unit is in use. *[NSR ATC/OP 114, Modification 46, Revision 1]*

C. Monitoring

1. The Permittee shall post signs at all degreasing areas that state that all lids to degreasing units must remain closed except when the unit is in use. It is the responsibility of the Permittee to ensure that all personnel follow this procedure. Should any inspection by Air Quality indicate that lids are not being properly closed when units are not in use, enforcement action may occur. *[AQR 12.5.2.6(d)]*

D. Testing

1. No performance testing requirements have been identified for any emission units in this section at this time.

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. date and hours, and/or minutes, that each of the part cleaners (EUs: M001 through M005, M008, M010 through M014, M017, M018, M022, M026, M027, M030, M032, M037, M038, M043, M047, M050 through M052, and M054 through M061) are in use in any consecutive 12-months.
2. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition XIV-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

XV. FUEL CELL MAINTENANCE

A. Emission Units

- a. The stationary source covered by this Part 70 OP includes the emission units and associated appurtenances summarized in Tables XV-A-1. *[AQR 12.5.2.3 and NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

Table XV-A-1: List of Emission Units

EU	Building	Description
L001	190 and 61685	Fuel Cell Maintenance

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not allow the actual emissions from fuel cell maintenance operation to exceed the PTE listed below in Table XV-B-1, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]

Table XV-B-1: Fuel Cell Maintenance PTE (tons per year)

EU	Tank Volume (gallons)	Maximum VOC	Maximum HAP
L001	738	0.36	0.02

2. Production Limits

- a. The Permittee shall limit the number of fuel cell purges to 3,200 in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]

3. Emission Controls

- a. The Permittee shall implement good operating practices to reduce VOC emissions by proper cleanup of fuel spills and proper cleanup of rags and sponges. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]
- b. The Permittee shall have a standard operating procedures (SOP) manual for fuel cell maintenance activities. The procedures specified in the manual shall outline good operating practice with regard to the reduction of VOC emissions from this operation. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]

C. Monitoring

- 1. Unless Air Quality pre-approves another emission methodology, the source shall calculate emissions from this activity by the following equation: [AQR 12.5.2.6(d)]

$0.0023 \times \text{Volume of Fuel Cell (gallons)} \times 0.134 \times \text{Number of Purges} = \text{Lbs. VOC}$ $\text{Lbs. VOC} \times 0.043055 = \text{Lbs. HAPs}$

- 2. The Control Officer may require testing to demonstrate compliance with emission limitations outlined in this permit. [AQR 12.5.2.6(d)]
- 3. Written standards of procedure (SOP) shall be maintained and contain procedures for the minimization of VOC emissions from fuel cell purging activities. [AQR 12.5.2.6(d)]

D. Testing

- 1. No performance testing requirements have been identified for any emission units in this section at this time.

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum [AQR 12.5.2.6(d)]:
 - a. The number of fuel cell purges in any consecutive 12-months.
2. The Permittee shall maintain records on-site that include, at a minimum [AQR 12.5.2.6(d)]:
 - a. information regarding any variables of parameters outlined in Condition XV-B-3-b for emission calculations.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. [AQR 12.5.2.6(d)]

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition XV-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. [AQR 12.5.2.8]

XVI. MISCELLANEOUS CHEMICALS

A. Emitting Activities

Table XVI-A-1: Summary of Emission Activities

EU	Description
O01	Source-wide Miscellaneous Chemical Usage

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not allow the actual emissions from miscellaneous chemical usage to exceed the PTE listed below in Table XVI-B-1, in any consecutive 12-months. [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08) and AQR 12.5.2.3]

Table XVI-B-1: PTE for Miscellaneous Chemical Usage

EU	VOC tons per year	HAP tons per year
	O01	19.14

2. Production Limits

- a. The Permittee shall calculate the quarterly limitation for miscellaneous chemical consumption with regard to the emissions of VOCs using the following formula: Consumption * Density * VOC Content / 100 = 28,720 pounds of VOC per calendar quarter, where: [NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]

- i. Consumption is the amount (in gallons) of each product used during that calendar quarter;
 - ii. Density is the lb/gallon of each product used during that calendar quarter; and
 - iii. VOC Content is the weight percent of VOC in each product used during that calendar quarter. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- b. The Permittee shall calculate the quarterly consumption limitation with regard to the emissions of HAPs using the following formula: Consumption * Density * HAP Content / 100 = 4,240 pounds of HAPs per calendar quarter, where:
- i. Consumption is the amount (in gallons) of each product used during that calendar quarter;
 - ii. Density is the lb/gallon of each product used during that calendar quarter; and
 - iii. HAP Content is the weight percent of HAP in each product used during that calendar quarter. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- c. The Permittee shall base the annual production limitations on four (4) consecutive, rolling calendar quarters. The annual emissions shall not exceed the ton-per-consecutive 12-month limitations outlined in Table XVI-B-1. *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*

3. Emission Controls

- a. The Permittee shall implement the following guidelines to reduce VOC emissions from miscellaneous chemical usage: *[NSR ATC/OP 114, Modification 46, Revision 1 (11/17/08)]*
- i. minimize chemical usage, where possible;
 - ii. substitute low vapor pressure cleaners, where possible; and
 - iii. substitute low VOC alternatives, where possible.

C. Monitoring

1. No monitoring requirement has been identified for any emission activity in this section at this time.

D. Testing

1. No performance testing requirements have been identified for any emission units in this section at this time.

E. Record Keeping

1. The Permittee shall maintain records on-site that require semi-annual reporting and include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. amount of each VOC- and HAP-containing chemical consumed in any consecutive 12-months;
2. The Permittee shall maintain records on-site that include, at a minimum *[AQR 12.5.2.6(d)]*:
 - a. density of each VOC- and HAP-containing chemical consumed;

- b. VOC and HAP content of each VOC- and HAP-containing chemical consumed; and
 - c. information related to practices outlined in Condition XVI-B-2-a.
3. The Permittee shall comply with the general record keeping requirements in Section II of this permit. *[AQR 12.5.2.6(d)]*

F. Reporting

1. The Permittee shall submit a summary of items stipulated by Condition XVI-E-1 in accordance with the reports and reporting requirements in Section II of this permit, except only monthly, consecutive 12-month totals, and annual total summaries of the items are required unless a month exceeds the listed production or operational limits. If a month exceeds a listed production or operational limit, copies of daily records are required to be included in the report, along with a deviation report. *[AQR 12.5.2.8]*

XVII. MITIGATION

1. Mitigation is not required by this permitting action.

XVIII.ON-SITE AMBIENT MONITORING

1. On-site ambient monitoring is not required by this permitting action.

ATTACHMENTS

Attachment 1:

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading by vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried on the cargo tank.

Attachment 2:

List of Insignificant External Combustion Emission Units

EU	Building	Description	Install Date
EB002	94	American Water Heater Water Heater, M/N: G51-50T40-3N, S/N: 9544353009, 0.04 MMBtu/hr, Natural Gas	1995
EB035	808	Landa Mfg Water Heater, M/N: EHW4-3000, S/N: P1189-2515, 0.25 MMBtu/hr, Natural Gas	1989
EB036	808	Landa Mfg Water Heater, M/N: EHWV-3000rb477, S/N: P1189-3343, 0.32 MMBtu/hr, Natural Gas	1989
EB042	1037	A.O. Smith Water Heater, M/N: BT80931, S/N: ML88-0145198-931, 0.075 MMBtu/hr, Natural Gas	1988
EB048	10236	Rheem Water Heater, M/N: G9200, S/N: URNG0998G01125, 0.2 MMBtu/hr, Natural Gas	1998
EB049	10237	Bradford White Water Heater, M/N: 100T883N, S/N: MM8787574, 0.088 MMBtu/hr, Natural Gas	1995
EB056	282	Rheem Water Heater, M/N: IPZ64, S/N: VGLN0202A07127, 0.036 MMBtu/hr, Natural Gas	2002
EB070	61697	State Water Heater, M/N: SBF100260NT, S/N: H02159238, 0.26 MMBtu/hr, Natural Gas	2002
EB077	201	Rite Boiler, M/N: 55WGO, S/N: 8218612, 0.4 MMBtu/hr, Natural Gas	1982
EB095	328	Rite Boiler, M/N: N76X, S/N: 8999M10, 0.76 MMBtu/hr, Natural Gas	1989

EU	Building	Description	Install Date
EB101	538	Teledyne Laars Boiler, M/N: HH0320MN20CBAKX, S/N: M97A01035, 0.32 MMBtu/hr, Natural Gas	1997
EB108	617	Teledyne Laars Boiler, M/N: HH0320MN20CBAKX, S/N: M97A01040, 0.32 MMBtu/hr, Natural Gas	1997
EB126	2221	RBI Boiler, M/N: LB0400N0E2A0CA, S/N: 90436551, 0.399 MMBtu/hr, Natural Gas	1990
EB132	10234	Teledyne Laars Boiler, M/N: PW0400CN12C, S/N: 8891537, 0.4 MMBtu/hr, Natural Gas	1988
EB133	10234	Fourmost Boiler, M/N: DSID525-80-1, S/N: 902500302, 0.505 MMBtu/hr, Natural Gas	1990

List of Insignificant Fuel Storage Tanks

Building Number	Unit Type	Make	Model	Serial Number	Capacity (Gallons)	Fuel Type
2	AST	Containment Solutions	LDP250P		250	Diesel
6	AST	Containment Solutions	LP1000	LP1000	1,000	Diesel
199	AST	Containment Solutions	LP250P		250	Diesel
200	AST	Hoover Containment Systems	224257		5,000	Diesel
201	AST	Hoover Containment Systems	1305		9,871	Diesel
202	AST	Chillicothe	N685106	03-15320	4,000	Diesel
216	AST	Convault			2,000	Diesel
217	Belly Tank				800	Diesel
217	Belly Tank				300	Diesel
217	Belly Tank				415	Diesel
222	AST	Containment Solutions	LDP250P		250	Diesel
235	UST	SCAT System		SB500030U0595	5,000	Jet Fuel
256	AST	Containment Solutions	LDP250P		250	Diesel
267	UST				10,000	Jet Fuel
276	AST				2,500	Diesel
277	AST	Containment Solutions	LDP250P		250	Diesel
278	AST	Containment Solutions	LDP250P		250	Diesel
283	AST	Containment Solutions	LDP250P		250	Diesel
328	AST	Containment Solutions	LDP250P		250	Diesel
431	AST	Containment Solutions	LP250P	37530	250	Diesel
431	AST				250	Diesel
490	AST	Steel Tank Institute		FS016618	5,000	Diesel
620	AST	Containment Solutions	LDP1000P		1,000	Diesel

Building Number	Unit Type	Make	Model	Serial Number	Capacity (Gallons)	Fuel Type
805	AST	Containment Solutions	LDP250P		250	Diesel
801	AST/ Belly Tank				50	Diesel
807	AST	Containment Solutions	LDP250P		250	Diesel
812	AST	Containment Solutions	LDP250P		250	Diesel
814	AST	Containment Solutions	LDP250P		250	Diesel
822	AST	Containment Solutions	LDP250P		250	Diesel
830	AST	Containment Solutions	LDP250P	732748	250	Diesel
856	AST	Containment Solutions	LDP250P		250	Diesel
878	Belly Tank				110	Diesel
890	UST				25,000	Diesel
890	AST	Containment Solutions	LP500P		1,000	Diesel
890	AST				10,000	Diesel
893	AST	Joor Manufacturing			20,000	Diesel
895	AST	Joor Manufacturing			20,000	Diesel
905	AST	Containment Solutions			500	Diesel
905	AST	Containment Solutions	LP2000		250	Diesel
905	UST				2,100	Diesel
907	AST				1,000	Diesel
1005	Belly Tank				75	Diesel
1032	AST				100	Diesel
1050	AST	Containment Solutions	LP3000	927143	3,000	Diesel
1050	AST				280	Reclaimed Jet Fuel
1050	AST				500	Reclaimed Jet Fuel
1050	AST				500	Reclaimed Jet Fuel
1051	IFR	Chicago Bridge and Iron	1995		403,200	Jet Fuel
1052	IFR	Chicago Bridge and Iron	1951		420,000	Jet Fuel
1054	IFR	Chicago Bridge and Iron	1995		789,000	Jet Fuel
1055	IFR				600,600	Jet Fuel
1301	UST				15,000	Diesel
1301	UST				15,000	Diesel
1545	Belly Tank				194	Diesel
1590	AST				500	Diesel
1602	AST	Containment	LDP250P		250	Diesel

Building Number	Unit Type	Make	Model	Serial Number	Capacity (Gallons)	Fuel Type
		Solutions				
1602	AST	Containment Solutions	LDP250P		250	Diesel
1606/ 1607	AST				500	Diesel
1705	Belly Tank				308	Diesel
1721	Belly Tank				75	Diesel
1724	Belly Tank				75	Diesel
1740	Belly Tank				308	Diesel
1998	AST				250	Diesel
2060	AST				500	Diesel
2064	AST	Containment Solutions	LP1000		1,000	Diesel
2069	AST	Containment Solutions	LP1000		1,000	Diesel
2195	AST				1,000	Jet Fuel
2270	Belly Tank				75	Diesel
2340	AST				500	Diesel
2345	AST	Containment Solutions	LDPV4AA101MVS542	389300	1,000	Diesel
2345	AST	Steel Tank Institute	Flameshield	FS016623	2,000	Diesel
2353	AST				250	Diesel
2354	AST				250	Diesel
2354	Belly Tank				350	Diesel
10113	AST	Steel Tank Institute		FS 016625	200	Diesel
10116	AST	Underwriters Lab, Inc.	RIVS 1230 1		6,000	Diesel
10215	AST				350	Diesel
10301	Belly Tank w/ G086				110	Diesel
10307	AST w/ G041				10,000	Diesel
10307A	AST				10,000	Diesel
10460	AST				500	Diesel
61663	AST	Containment Solutions	LDP1000P		1,000	Diesel
61663	AST	Containment Solutions	LDP1000P		1,000	Diesel
61664	AST				500	Diesel
61672	AST				250	Diesel
61672	AST				250	Diesel
61697	AST				8000	Diesel
62123	UST				4,000	Jet Fuel
61647C	UST				5,000	Jet Fuel
61647D	UST				5,000	Jet Fuel
10307/A	AST				1,000	Diesel
10307/B	AST				10,000	Diesel

Building Number	Unit Type	Make	Model	Serial Number	Capacity (Gallons)	Fuel Type
2064A	AST				1,000	Diesel
2064B	AST				1,000	Diesel
2070/2364	AST				250	Diesel
60937/11	AST				25,000	Jet Fuel
60937/12	AST				25,000	Jet Fuel
60937/13	AST				25,000	Jet Fuel
60937/14	AST				25,000	Jet Fuel
60937/2	AST				500	Jet Fuel
61633/1	AST				5,000	Jet Fuel
61633/2	AST				2,500	Jet Fuel
61637/1	AST				5,000	Jet Fuel
61637/2	AST	Youngs Tank	D-230	1Y9B4AA04K2002478	2,500	Jet Fuel
61647A	UST				5,000	Jet Fuel
61647B	UST				5,000	Jet Fuel
61697-1	AST				250	Diesel
61697-2	AST				250	Diesel
Fuel Hydrant	UST				4,000	Jet Fuel
Fuel Hydrant (62121)	IFT	(Former J011)			420,000	Jet Fuel
Fuel Hydrant (62122)	IFT	(Former J012)			420,000	Jet Fuel
KM	IFT	(Former J014)			420,000	Jet Fuel
KM	IFT	(Former J015)			420,000	Jet Fuel
Aggregate Plant	Diesel AST				500	Diesel
Aggregate Plant	Diesel AST w/Disp.				10,000	Diesel
Rescue K-span	Diesel AST				119	Diesel

Insignificant Degreaser¹

Bldg	Make	Model	Serial Number	Capacity (gal)
858	Bio-Circle L	600C	600C 513 071	100

¹ Unit insignificant as the only solvent used, Bio-Circle L, contains no VOC or HAP content per the Material Safety Sheet.