ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

TBD

Aaron S. Brown
Deputy Director of Public Works
AMIM-LIP
2175 Rock Merritt Avenue
Fort Liberty, North Carolina 28310-5000

SUBJECT: Air Quality Permit No. 04379T47
Facility ID: 2600102
HQ XVIII ABN Corps & Fort Liberty
Fort Liberty, North Carolina
Cumberland County
Fee Class: Title V
PSD Class: Major

Dear Mr. Brown:

In accordance with your requests for renewal and significant modifications of your Title V permit, we are forwarding herewith Air Quality Permit No. 04379T47 authorizing the construction and operation, of the emission sources and associated air pollution control devices specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS

143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Cumberland County has triggered increment tracking under PSD for PM_{10} and SO_2. These modifications will change emissions by:

Pollutant	Change (lb/hr)
PM_{10}	+0.07
SO_2	-1.20

This Air Quality Permit shall be effective from TBD until TBD+5 years, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or russell.braswell@ncdenr.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Brad Akers, EPA Region 4 (Permit and Review)
Laserfiche (2600102)
Connie Horne (cover letter only)

NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

Summary of Changes to Permit

The following changes were made to Air Permit No. 04379T47:*

Page No.	Section	Description of Changes
Throughout	Throughout	• Updated dates and permit numbers. • Fixed formatting. Changes that apply solely to formatting are not intended to affect the Permittee's compliance requirements. • Removed references to 02D .1109 and Case-by-Case MACT because that rule no longer applies. • Updated authorized official.
4	1	• Removed references to "used No. 2 oil" • Noted that ES-17PSG is now emergency-use only. • Moved small boilers and engines (not subject to PSD avoidance) that qualify as insignificant per 02Q .0503(8) to the list of insignificant activities. These sources have been consolidated in the list of insignificant activities. See list below for ID Nos moved and consolidated this way. • Removed sources as requested by Permittee. See list below for ID Nos removed. • Noted that the turbine ES-33B is for emergency use under the NSPS and MACT. • Added cyclone CD-01P-C associated with ES-01P based on email from Permittee. • Renamed "CD-01P" to "CD-01P-FF" to differentiate from the new cyclone. • Noted that ES-01E and ES-02E are subject to MACT Subpart PPPPP. • Moved the following to list of insignificant activities because they qualify per 02Q .0503(8): o welding operations ES-27W and ES-28W o tank cleaning operation ES-01TP • Noted building locations for ES-36B, ES-37B, ES-38B, and ES-39B. • Corrected heat input of ES-922B to 8.165 million Btu per hour. • Corrected capacity of ES-33G to 1,275 kW. • Noted that the SCR associated with ES-87G, ES-191GI, and ES-192GI are control devices. This change is only for clarity. • Added emission sources as requested by Permittee. See the following table for a list of sources added based on applications .20A, .21A, and .22A. • Added the following boilers to the list of permitted emission sources. These boilers previously were categorized under IES-00B, but do not qualify as insignificant activities: o ES-647B o ES-648B o ES-943B o ES-944B o ES-945B
n/a	2.1 A through E (new)	• Created these sections. • Grouped similar boilers and generators into these sections based on NSPS applicability. • Noted that all boilers are subject to 02D .0503. This will not change the Permittee's compliance requirements.

Page No.	Section	Description of Changes
10	2.1 A.2	• Rewrote the condition for NSPS Subpart Dc to match DAQ standard format. • Clarified emission standards for NSPS Subpart Dc for distillate-fired boilers with capacity greater than 30 million Btu per hour. • Clarified that fuel recordkeeping is required for NSPS Subpart Dc. • Added opacity monitoring requirements for when boilers are firing fuel oil.
14	2.1 B.3	• Clarified emission standards for NSPS Subpart Dc for distillate-fired boilers with capacity less than 30 million Btu per hour. • Clarified that fuel recordkeeping is required for NSPS Subpart Dc.
20	2.1 D.3	• Removed references to non-emergency use activities because all of these engines are emergency-use only.
26	2.1 F	• Removed reference to TAP "exemptions" and "pollutant modeling" because the turbine is subject to a MACT. Note that the HRSG is not subject to a MACT and therefore subject to 02Q .0711.
27	2.1 F.4	• Because ES-34B is gas-fired only, the only requirement under NSPS Subpart Dc is to maintain records of fuel use. • Changed the requirements of NSPS Subpart GG to reflect that the turbine is now emergency-use only. • Added specific condition for MACT Subpart YYYY.
n/a	2.1 F (onwards)	• Rearranged subsequent sections to reflect above renumbering.
31	2.1 H.	• Moved specific condition for MACT Subpart GG to this section because it only applies to sources in this section. • Updated specific condition for MACT Subpart GG to reflect recent regulatory updates. Specialty coatings are no longer categorically exempt.
37	2.1 I	• Added specific condition for MACT Subpart PPPPP.
42	2.2 A	• Created this section for PSD Avoidance conditions. • Moved all PSD Avoidance conditions to this Section. • Clarified that all specific conditions in this section are for PSD avoidance, not PSD. There are no PSD-affected sources at this facility.
44	2.2 A.3	• Combined conditions for SO_2 and NOx PSD avoidance for ES-24B, ES-25B, and ES-26B into one specific condition. • Removed formula for calculating SO_2 emissions from these sources because the fuel limits are sufficient to demonstrate compliance.
49	2.2 A.9	• Removed monitoring/recordkeeping/reporting requirements for PSD Avoidance for the emergency generator ES-17PSG because it is no longer a peak-shaving generator and can therefore not exceed the PSD Avoidance limit.
52	2.2 A.13	• Removed formula for calculating combined operating hours because it is not needed.
55	2.2 B	• Created this section for all boilers subject to MACT Subpart DDDDD.
58	2.2 C	• Created this section for facility-wide specific conditions
58	2.2 C.1	• Added rule citation for this requirement as 02D .0600. • Moved generator reporting requirement to this section. • Added a requirement to keep records of the use of the temporary boilers and temporary generators and compliance with NSPS and MACT.

Page No.	Section	Description of Changes
58	2.2 C.2	• Rewrote specific condition for 02Q .0711 to match current DAQ format. • Removed the following TAP from the TPER table because the Permittee has previously submitted a modeling demonstration for these pollutants: o Xylene o Toluene o MIBK o MEK
n/a	2.2 N (former)	• Removed this section because all the sources covered by this section have been moved to the list of insignificant activities.
60	3. (new)	• Added this Section. • Moved the list of insignificant activities to this section. • Noted that the landfills IES-01L, IES-02L, and IES-03L are closed. • Noted the capacity of landfill IES-01L, and noted this source is subject to 40 CFR Part 62, Subpart OOO. • Corrected source descriptions based on Permittee's information. • Noted that IES-03E and IES-04E are subject to MACT subpart PPPPP. • Added the following sources: o IES-27W o IES-28W o IES-01TP o IES-02FP o IES-20T o IES-21T o IES-22T • Grouped the small similar boilers and water heaters into the following groups: o IES-00B-NG-WH: gas-fired water heaters o IES-00B-O-WH: oil-fired water heaters o IES-00B-P-WH: propane-fired water heaters o IES-00B-NGO-WH: gas/oil-fired water heaters o IES-00B-NGO: gas/oil-fired boilers (MACT) o IES-00B-NG: gas-fired boilers (MACT) o IES-00B-O: oil-fired boilers (MACT) o IES-EMGEN-NEW: emergency-use generators (MACT, NSPS) o IES-EMGEN-EX: non-NSPS emergency-use generators (MACT) • Noted the total number and total capacity of the above groups. • Removed the following sources at Permittee's request: o IES-11T756E o IES-11T756EF o IES-02UST
64	4. (new)	• Created this section. • Moved General Conditions to this section. • Updated General Conditions to version 6.0.

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

Boilers moved to the list of insignificant activities:	Generators moved to list of insignificant activities:	Fire pumps moved to list of insignificant activities:
ES-650B	ES-01PSG	ES-01FPA2838
ES-779B	ES-05PSG	ES-02FPH3838
ES-814B	ES-06PSG	ES-03FPHH4983
ES-819B	ES-07PSG	ES-04FPH6628
ES-820B	ES-45G	ES-05FPP4543A
ES-833B	ES-46G	ES-06FPP4543B
ES-834B	ES-73G	ES-07FPP4543C
ES-835B	ES-74G	ES-08FPP4543D
ES-842B	ES-75G	ES-09FPR3065
ES-851B	ES-36GI	ES-13FPO19F3
ES-890B	ES-49GI	ES-14FPF4706A
ES-892B	ES-74GI	ES-15FPF4706B
ES-894B	ES-87GI	ES-16FPATF
ES-895B	ES-88GI	ES-17FPO19F2
ES-906B	ES-89GI	ES-18FPSAAF
ES-907B	ES-91GI	ES-19FPSAAF
ES-908B	ES-101GI	ES-20FPSAAF
ES-909B	ES-102GI	ES-21FPSAAF
ES-910B	ES-105GI	ES-22FPO19
ES-911B	ES-106GI	ES-23FPO19
ES-912B	ES-112GI	ES-24FPT6202
ES-913B	ES-133GI	ES-25FPW3396
ES-914B	ES-144GI	
ES-915B	ES-147GI	
ES-916B	ES-148GI	
ES-917B	ES-149GI	
ES-918B	ES-150GI	
ES-919B	ES-160GI	
ES-920B	ES-161GI	
ES-921B	ES-162GI	
	ES-163GI	
	ES-164GI	
	ES-165GI	
	ES-183GI	
	ES-184GI	
	ES-185GI	
	ES-188GI	
	ES-189GI	
	ES-193GI	
	ES-194GI	
	ES-195GI	
	ES-196GI	
	ES-197GI	
	ES-199GI	
	ES-200GI	
	ES-201GI	
	ES-202GI	
	ES-203GI	

New sources requested by application .20A	New sources requested by application .21A	New sources requested by application .22A
ES-105G	n/a	ES-110G
ES-106G		ES-111G
ES-107G		ES-112G
ES-108G		ES-113G
ES-109G		ES-114G
		ES-115G
		ES-116G

Boilers removed by Permittee's request (application no.):	Generators removed by Permittee's request (application no.):
ES-601B (.20A)	ES-02PSG (.20A)
ES-602B (.20A)	ES-03PSG (.20A)
ES-923B (.21A)	ES-10PSG (.20A)
	ES-84G (.22A)
	ES-85G (.22A)
	ES-86G (.22A)
	ES-108G (.22A)

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
04379T47	04379T46	TBD	TBD+5 years

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than *TBD+5 years – 6 months*.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	**HQ XVIII ABN Corps & Fort Liberty**
Facility ID:	**2600102**
Primary SIC Code:	**9711**
NAICS Code:	**92811**
Facility Site Location:	**AMIM-LIP** **2175 Rock Merritt Avenue**
City, County, State, Zip:	**Fort Liberty, Cumberland County, North Carolina, 28310**
Mailing Address:	**AMIM-LIP** **2175 Rock Merritt Avenue**
City, State, Zip:	**Fort Liberty, North Carolina, 28310-5000**
Application Numbers:	**2600102.21A (2600102.20A and 2600102.22A consolidated)**
Complete Application Dates:	**December 22, 2020 (.20A); September 28, 2021 (.21A); December 6, 2022 (.22A)**
Division of Air Quality, Regional Office Address:	**Fayetteville Regional Office** **225 Green Street, Suite 714** **Fayetteville, North Carolina 28301**

Permit issued this the TBD.

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

SECTION 1- PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Boilers			
ES-01CMA ES-02CMA ES-03CMA **NSPS Dc** **MACT DDDDD**	Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners and flue gas recirculation (41 million Btu per hour heat input each when firing fuel oil and 42 million Btu per hour heat input each when firing natural gas) located in Building CMA/D-3529	NA	NA
ES-11B ES-12B **MACT DDDDD**	Two natural gas/No. 2 fuel oil-fired boilers (25 million Btu per hour heat input capacity each), located in Building N-6002 (COSCOM)	NA	NA
ES-24B ES-25B ES-26B **NSPS Dc** **MACT DDDDD**	Three natural gas/No. 2 fuel oil-fired boilers (23.4, 23.4, and 10 million Btu per hour heat input capacity, respectively) located in the new Womack Hospital Boiler Plant, Building 4-2811	NA	NA
ES-27B ES-28B **MACT DDDDD**	Two natural gas-fired boilers (20 million Btu per hour heat input capacity each), located in Building E-2823	NA	NA
ES-30B ES-31B ES-32B **MACT DDDDD**	Three natural gas/No. 2 fuel oil-fired boilers (8.3 million Btu per hour heat input capacity each), located in the Special Operations Training Facility (SOTF) area	NA	NA
ES-35B **NSPS Dc** **MACT DDDDD**	One natural gas/No. 2 fuel oil-fired "temporary backup" boiler (up to 72.3 million Btu per hour heat input)	NA	NA
ES-36B ES-37B **NSPS Dc** **MACT DDDDD**	Two natural gas/No. 2 fuel oil-fired boilers (10.5 million Btu per hour heat input each), A2565	NA	NA
ES-38B ES-39B **MACT DDDDD**	Two natural gas-fired boilers (9.64 million Btu per hour heat input each), A3247	NA	NA
ES-40B ES-41B ES-42B ES-43B **MACT DDDDD**	Four natural gas/No. 2 fuel oil-fired boilers (8.4 million Btu per hour heat input each) located in buildings A4251 and A2547	NA	NA
ES-44B ES-45B ES-46B **NSPS Dc** **MACT DDDDD**	Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners (45.42 million Btu per hour heat input capacity), located in the 82nd Heat Plant	NA	NA
ES-TEMPBOIL **NSPS Dc** **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired, temporary boiler (up to 100 million Btu per hour heat input)	NA	NA
ES-FORSCOM1 **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)	NA	NA
ES-FORSCOM2 **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-FORSCOM3 **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)	NA	NA
ES-647B **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired boiler (3.5 million Btu per hour heat input)	NA	NA
ES-648B **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired boiler (3.5 million Btu per hour heat input)	NA	NA
ES-922B **MACT DDDDD**	Natural gas/No. 2 fuel oil-fired boiler (8.165 million Btu per hour heat input)	NA	NA
ES-943B **MACT DDDDD**	No. 2 fuel oil-fired boiler (2.77 million Btu per hour heat input)	NA	NA
ES-944B **MACT DDDDD**	No. 2 fuel oil-fired boiler (2.89 million Btu per hour heat input)	NA	NA
ES-945B **MACT DDDDD**	No. 2 fuel oil-fired boiler (3.17 million Btu per hour heat input)	NA	NA
Generators			
ES-04PSG **MACT ZZZZ**	Diesel-fired emergency generator (500 kW maximum output)	NA	NA
ES-16PSG **MACT ZZZZ**	Diesel-fired emergency generator (900 kW maximum output)	NA	NA
ES-17PSG **MACT ZZZZ**	Diesel-fired emergency generator (2,700 kW maximum output)	NA	NA
ES-24G **MACT ZZZZ**	Diesel-fired emergency generator (1,275 kW maximum output)	NA	NA
ES-25G **MACT ZZZZ**	Diesel-fired emergency generator (1,275 kW maximum output)	NA	NA
ES-26G **MACT ZZZZ**	Diesel-fired emergency generator (1,275 kW maximum output)	NA	NA
ES-33G **MACT ZZZZ**	Diesel-fired emergency generator (1,275 kW maximum output)	NA	NA
ES-37G **MACT ZZZZ**	Diesel-fired emergency generator (1,250 kW maximum output)	NA	NA
ES-38G **MACT ZZZZ**	Diesel-fired emergency generator (600 kW maximum output)	NA	NA
ES-41G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,000 kW maximum output)	NA	NA
ES-42G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,000 kW maximum output)	NA	NA
ES-43G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (750 kW maximum output)	NA	NA
ES-44G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (500 kW maximum output)	NA	NA
ES-TEMPGEN1500A **MACT ZZZZ** **NSPS IIII**	Diesel/No. 2 fuel oil-fired, lean burn, temporary emergency generator (up to 1,500 kW maximum output)	NA	NA
ES-TEMPGEN1500B **MACT ZZZZ** **NSPS IIII**	Diesel/No. 2 fuel oil-fired, lean burn, temporary emergency generator (up to 1,500 kW maximum output)	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-TEMPGEN900A **MACT ZZZZ** **NSPS IIII**	Diesel/No. 2 fuel oil-fired, lean burn, temporary emergency generator (up to 900 kW maximum output)	NA	NA
ES-TEMPGEN900B **MACT ZZZZ** **NSPS IIII**	Diesel/No. 2 fuel oil-fired, lean burn, temporary emergency generator (up to 900 kW maximum output)	NA	NA
ES-80G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (3,100 kW maximum output, 4,154 Hp)	NA	NA
ES-81G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (3,100 kW maximum output, 4,154 Hp)	NA	NA
ES-82G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (3,100 kW maximum output, 4,154 Hp)	NA	NA
ES-83G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,500 kW maximum output, 3,350 Hp)	NA	NA
ES-87G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (900 kW maximum output)	CD-87G	Selective catalytic reduction
ES-88G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (750 kW maximum output)	NA	NA
ES-89G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-90G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-91G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-92G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-93G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-94G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-95G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,230 kW maximum output)	NA	NA
ES-96G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,230 kW maximum output)	NA	NA
ES-97G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,230 kW maximum output)	NA	NA
ES-98G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,000 kW maximum output)	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-99G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,250 kW maximum output)	NA	NA
ES-100G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (750 kW maximum output)	NA	NA
ES-101G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,230 kW maximum output)	NA	NA
ES-102G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (800 kW maximum output)	NA	NA
ES-103G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (800 kW maximum output)	NA	NA
ES-104G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (800 kW maximum output)	NA	NA
ES-104GI **MACT ZZZZ**	Diesel-fired emergency generator (500 kW maximum output)	NA	NA
ES-105GI **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (500 kW maximum output)	NA	NA
ES-110GI **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (600 kW maximum output)	NA	NA
ES-145GI **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (600 kW maximum output)	NA	NA
ES-146GI **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (500 kW maximum output)	NA	NA
ES-191GI **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (655 kW maximum output)	CD-191GI	Selective catalytic reduction
ES-192GI **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (655 kW maximum output)	CD-192GI	Selective catalytic reduction
ES-106G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,000 kW maximum output)	NA	NA
ES-107G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-109G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (500 kW maximum output)	NA	NA
ES-110G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,500 kW maximum output)	NA	NA
ES-111G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,500 kW maximum output)	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-112G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-113G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-114G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-115G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (2,000 kW maximum output)	NA	NA
ES-116G **MACT ZZZZ** **NSPS IIII**	Diesel-fired emergency generator (1,750 kW maximum output)	NA	NA
Cogeneration System			
ES-33B **NSPS GG** **MACT YYYY**	One emergency-use natural gas/No. 2 fuel oil-fired cogeneration gas turbine (60.32 million Btu per hour maximum heat input, 5.0 megawatt electrical output)	NA	NA
ES-34B **NSPS Dc**	Natural gas-fired Heat Recovery Steam Generator (61.2 million Btu per hour maximum heat input)	NA	NA
Painting Operations			
ES-01C ES-02C	Two paint spray booths, located in Building Y-4804 [Main]	CD-01C and CD-02C	Panel filters
ES-08C	One paint spray booth, located at the new Special Operations Training Facility [SOTF]	CD-08C	Panel filter
ES-09C	One dry filter-type paint spray booth (ES-09C) using non-reactive water Reducible Chemical Agent Resistant Coatings only, along with natural gas-fired make-up air heater (3.3 million Btu per hour total heat input capacity, IES-09H) located in the Materiel Maintenance Building (Y-4804)	CD-09C	Panel filter
ES-10C **MACT GG**	One dry filter paint spray booth (ES-10C) with direct natural gas-fired make-up air heater (3.3 million Btu per hour heat input, ID No. IES-10H) located in building No. P-3354)	CD-10C	One thermal oxidizer (1.2 million Btu per hour heat input)
ES-12C **MACT GG**	Paint spray booth with HVLP application located at Simmons Army Air Field	CD-12C	Panel filter
Test Stands			
ES-01E **MACT PPPPP**	Diesel vehicle engine test stand located at the Materiel Maintenance Division, Bldg Y-5015	NA	NA
ES-02E **MACT PPPPP**	Diesel vehicle engine test stand located at the Materiel Maintenance Division, Bldg Y-5015	NA	NA
Miscellaneous			
ES-01PC	Plasma arc cutter	CD-01PC	Cartridge filter dust collector
ES-01P	One paper pulverizer	CD-01P-C	One cyclone
		CD-01P-FF	One fabric filter (612 square feet of surface area)

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control devices and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. The following natural gas/No. 2 fuel oil-fired boilers, subject to NSPS Subpart Dc, with heat input capacity greater than 30 million Btu per hour:

Table 2.1 A.

Emission Source ID No.	Emission Source Description
ES-01CMA ES-02CMA ES-03CMA	Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners and flue gas recirculation located in Building CMA/D-3529
ES-44B ES-45B ES-46B	Three No. 2 fuel oil/natural gas-fired boilers with low NOx burners located in the 82nd Heat Plant
ES-35B	One natural gas/No. 2 fuel oil-fired "temporary backup" boiler
ES-TEMPBOIL	Natural gas/No. 2 fuel oil-fired, temporary boiler

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	**See Section 2.1 A.1**	15A NCAC 02D .0503
Particulate matter	No PM limit for boilers combusting oil with a sulfur content less than 0.5 percent sulfur	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc
Sulfur dioxide	0.5 percent sulfur content by weight for No. 2 fuel oil	
Visible emissions	20 percent opacity, not to exceed six-minute average of 27 percent	
Nitrogen dioxide Sulfur dioxide	PSD avoidance limits. **See Section 2.2 A.**	15A NCAC 02D .0317 PSD Avoidance
Hazardous air pollutants	MACT standards for gas 1 boilers. **See Section 2.2 B.**	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from these sources **(listed in Table 2.1 A, above)** into the atmosphere shall not exceed: [15A NCAC 02D .0503(a)]
   i. ES-01CMA, ES-02CMA, ES-03CMA, ES-35B, ES-44B, ES-45B, ES-46B: 0.19 pounds per million Btu heat input.
   ii. ES-TEMPBOIL: 0.18 pounds per million Btu.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas or No. 2 fuel oil in these sources **(listed in Table 2.1 A, above)**.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. For these boilers **(listed in Table 2.1 A, above)**, the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," including Subpart A "General Provisions."

Emission Limitations [15A NCAC 02Q .0508(b)]

b. The following emission limitations apply:
   i. As an alternative to the sulfur dioxide (SO_2) limit in 40 CFR 60.42c(d), the Permittee shall not combust oil in the boiler that contains greater than 0.5 weight percent sulfur. [40 CFR 60.42c(d)]
   ii. On and after the date on which the initial performance test is required under Section 2.1 A.2.c.ii below, visible emissions from the boiler when firing No. 2 fuel oil shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)]
   iii. The opacity standard in Section 2.1 A.2.b.ii applies at all times when firing No. 2 fuel oil, except during periods of startup, shutdown, or malfunction. No fuel sulfur limits or opacity limits apply under 15A NCAC 02D .0524 when firing natural gas. [40 CFR 60.43c(d)]
   iv. There is no emission limit for particulate matter (PM) for the affected boilers when combusting oil that contains sulfur less than the limit in Section 2.1 A.2.b.i, above. [40 CFR 60.43c(e)(4)]

Testing [15A NCAC 02Q .0508(f)]

c. The following testing requirements apply:
   i. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.2.b.i or ii, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
   ii. The Permittee shall conduct initial performance tests as follows:
      (A) To demonstrate compliance with the opacity limit in Section 2.1 A.2.b.ii above, the initial performance test shall be conducted using Method 9 of Appendix A-4 of 40 CFR Subpart 60 and in accordance with 40 CFR 60.45c(a) and 40 CFR 60.47c(a).
         (1) The initial performance test for opacity shall be conducted within 180 days after initial startup of the boiler when firing No. 2 fuel oil. [40 CFR 60.47c(a)]
         (2) The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. [40 CFR 60.47c(a)]
      (B) To demonstrate compliance with the sulfur limit in Section 2.1 A.2.b.i, above, the performance test shall consist of the certification from the fuel supplier, according to Section 2.1 A.2.d, below. [40 CFR 60.44c(h)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these testing requirements are not met or the results are above the limits in Section 2.1 A.2.b.i or ii above.

Fuel Sulfur Monitoring [15A NCAC 02Q .0508(f)]

d. The Permittee shall retain a copy of the fuel supplier certification for any oil fired in this boiler. The fuel supplier certification shall include the following information:
   i. The name of the oil supplier;
   ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and
   iii. The sulfur content or maximum sulfur content of the oil.

   [40 CFR 60.42c(h)(1), 60.46c(e), 60.48c(f)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these monitoring requirements are not met or the sulfur content of the oil exceeds the limit in Section 2.1 A.2.b.i above.

Opacity Monitoring [15A NCAC 2Q .0508(f)]

e. After completion of the initial performance testing in Section 2.1 A.2.c.ii, the Permittee shall comply with visible emissions monitoring according to the following:
   i. The Permittee shall conduct subsequent Method 9 performance tests using the applicable schedule in paragraphs (A) through (D) below, as determined by the most recent Method 9 performance test results.
      (A) If no visible emissions are observed, a subsequent Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
      (B) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;
      (C) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
      (D) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.
      (E) The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.
      [40 CFR 60.47c(a)(1)]
   ii. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 performance test, the owner or operator may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using Method 22 according to the procedures specified in paragraphs (A) and (B) below.
      (A) The Permittee shall conduct 10-minute observations (during normal operation) each operating day the affected facility fires No. 2 fuel oil using Method 22 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10-minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10-minute observation, immediately conduct a 30-minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in paragraph (h)(i) above within 45 calendar days.
      (B) If no visible emissions are observed for 10 operating days during which No. 2 fuel oil is fired, observations can be reduced to once every 7 operating days during which No. 2 fuel oil is fired. If any visible emissions are observed, daily observations shall be resumed.
      [40 CFR 60.47c(a)(2)]
   iii. If the source is not operating on the required date for the Method 9 performance test, the performance test shall be conducted the next time the source is operated for three or more daylight hours. [40 CFR 60.8(d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these opacity monitoring requirements are not met or the opacity exceeds the limit in Section 2.1 A.2.b.ii above.

Recordkeeping [15A NCAC 2Q .0508(f))]

f. The following recordkeeping requirements apply:
   i. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)]
   ii. The Permittee shall maintain records of No. 2 fuel oil supplier certifications as shown in Section 2.1 A.2.d. [40 CFR 60.48c(e)(11), (f)(1)]
   iii. The Permittee shall keep the following opacity monitoring records:
      (A) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the following:
         (1) Dates and time intervals of all opacity observation periods;
         (2) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
         (3) Copies of all visible emission observer opacity field data sheets;
      (B). For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the following:
         (1) Dates and time intervals of all visible emissions observation periods;

(2) Name and affiliation for each visible emission observer participating in the performance test;
(3) Copies of all visible emission observer opacity field data sheets; and
(4) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

[40 CFR 60.48c(c)(1) and (2)]

iv. The Permittee shall maintain records of any occurrence and duration of any startup, shutdown, or malfunction in the operation the boiler. [40 CFR 60.7(b)]

v. All records required shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

Reporting/Notifications [15A NCAC 2Q .0508(f)]

g. The Permittee shall submit:

i. a semiannual summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. [40 CFR 60.48c(j)] All instances of noncompliance from the requirements of this permit and excess emissions must be clearly identified. The summary report shall include the following information:

(A) Fuel supplier certification(s), as described in Section 2.1 A.2.d; and
(B) A certified statement signed by the owner or operator that the records of fuel supplier certification(s) submitted represents all of the No. 2 fuel oil fired during the semiannual period.[60.48c(e)(11)]

ii. a notification of the actual date of initial startup of the boiler to the Regional Supervisor, DAQ, postmarked within 15 days after such date. [40 CFR 60.7, 40 CFR 60.48c(a)]

iii. at least 30 days advance notice of a performance test conducted pursuant to Section 2.1 A.2.c.ii or 2.1 A.2.e to the Regional Supervisor, DAQ to afford the DAQ the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the Regional Supervisor as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Regional Supervisor by mutual agreement. [40 CFR 60.8(d), 60.7(a)(6)]

iv for the opacity performance tests pursuant to Section 2.1 A.2.c.ii or 2.1 A.2.e ,the following [40 CFR 60.48c(b)]:

(A) a report containing the results of the initial performance test conducted pursuant to Section 2.1 A.2.c.ii postmarked no later than 180 days after initial startup of the boiler while firing No.2 fuel oil. [40 CFR 60.8(a)].
(B) a report containing the results of subsequent performance test conducted pursuant to Section 2.1 A.2.e postmarked no later than 30 days after completion of performance tests. [15A NCAC 02Q .0508(i)(16)]

B. The following natural gas/No. 2 fuel oil-fired boilers, subject to NSPS Subpart Dc, with heat input capacity less than 30 million Btu per hour:

Table 2.1 B.

Emission Source ID No.	Emission Source Description
ES-24B ES-25B ES-26B	Three natural gas/No. 2 fuel oil-fired boilers located in the new Womack Hospital Boiler Plant, Building 4-2811
ES-36 ES-37	Two natural gas/No. 2 fuel oil-fired boilers

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	**See Section 2.1 B.1**	15A NCAC 02D .0503
Visible emissions	20% opacity	15A NCAC 02D .0521
Sulfur dioxide	0.5 percent sulfur content by weight for No. 2 fuel oil	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc
Nitrogen dioxide Sulfur dioxide	PSD avoidance limits. **See Section 2.2 A.**	15A NCAC 02D .0317 PSD Avoidance
Hazardous air pollutants	MACT standards for gas 1 boilers. **See Section 2.2 B.**	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from these sources **(listed in Table 2.1 B, above)** into the atmosphere shall not exceed: [15A NCAC 02D .0503(a)]
   i. ES-24B, ES-25B, ES-26B: 0.20 pounds per million Btu heat input.
   ii. ES-36, ES-37: 0.19 pounds per million Btu.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas or No. 2 fuel oil in these sources **(listed in Table 2.1 B, above)**.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of these boilers (**listed in Table 2.1 B, above**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in these boilers (**listed in Table 2.1 B, above**).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. For these boilers **(ID Nos. listed in Table 2.1 B, above)**, the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" including Subpart A, "General Provisions."

Emission Limitations [15A NCAC 2Q .0508(b)]

b. As an alternative to the sulfur dioxide (SO_2) limit in 40 CFR 60.42c(d), the Permittee shall not combust oil in these sources that contains greater than 0.5 weight percent sulfur. [40 CFR 60.42c(d)]

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The following monitoring and recordkeeping requirements apply:
   i. Compliance with the fuel oil sulfur limits in Section 2.1 B.3.b may be determined based on a certification from the fuel supplier, as described below.[40 CFR 60.42c(h)(1)]
   ii. The Permittee shall keep records, including the following information:
      (A) Calendar dates covered in the reporting period.
      (B) Fuel supplier certifications including the following information.
         (1) The name of the oil supplier;
         (2) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and
         (3) The sulfur content or maximum sulfur content of the oil.
         [40 CFR 60.48c(f)(1)]
      [40 CFR 60.48c(e)(1) and (11)]
   iii. The Permittee shall maintain records of the amount of each fuel combusted during each calendar month. [40 CFR 60.48c(g)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these monitoring and recordkeeping requirements are not met or the sulfur content of the oil exceeds the limit in Section 2.1 B.3.b above.

Reporting [15A NCAC 2Q .0508(f)]

d. The following reporting requirements apply:
   i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
   ii. The summary report shall contain the following information in Section 2.1 B.3.c above. [40 CFR 60.48c(e)(1) and (11)]
   iii. A certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the distillate fuel combusted during the reporting period. [40 CFR 60.48c(e)(11)]

C. The following natural gas/No. 2 fuel oil-fired boilers, not subject to NSPS Subpart Dc:

Table 2.1 C.

Emission Source ID No.	Emission Source Description
ES-11B ES-12B	Two natural gas/No. 2 fuel oil-fired boilers (25 million Btu per hour heat input capacity each), located in Building N-6002 (COSCOM)
ES-27B ES-28B	Two natural gas-fired boilers (20 million Btu per hour heat input capacity each), located in Building E-2823
ES-30B ES-31B ES-32B	Three natural gas/No. 2 fuel oil-fired boilers (8.3 million Btu per hour heat input capacity each), located in the Special Operations Training Facility (SOTF) area
ES-38B ES-39B	Two natural gas-fired boilers (9.64 million Btu per hour heat input each)
ES-40B ES-41B ES-42B ES-43B	Four natural gas/No. 2 fuel oil-fired boilers (8.4 million Btu per hour heat input each) located in buildings A4251 and A2547
ES-FORSCOM1	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)
ES-FORSCOM2	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)
ES-FORSCOM3	Natural gas/No. 2 fuel oil-fired boiler (3.0 million Btu per hour heat input)
ES-647B	Natural gas/No. 2 fuel oil-fired boiler (3.5 million Btu per hour heat input)
ES-648B	Natural gas/No. 2 fuel oil-fired boiler (3.5 million Btu per hour heat input)
ES-922B	Natural gas/No. 2 fuel oil-fired boiler (8.165 million Btu per hour heat input)
ES-943B	No. 2 fuel oil-fired boiler (2.77 million Btu per hour heat input)
ES-944B	No. 2 fuel oil-fired boiler (2.89 million Btu per hour heat input)
ES-945B	No. 2 fuel oil-fired boiler (3.17 million Btu per hour heat input)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	PM limit per boiler	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible emissions	20% opacity	15A NCAC 02D .0521
Nitrogen dioxide Sulfur dioxide	PSD avoidance limits. **See Section 2.2 A.**	15A NCAC 02D .0317 PSD Avoidance
Hazardous air pollutants	MACT standards for gas 1 boilers. **See Section 2.2 B.**	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from these sources **(listed in Table 2.1 C, above)** into the atmosphere shall not exceed: [15A NCAC 02D .0503(a)]

Boiler	Limit (pounds per million Btu)
ES-11B	0.23
ES-12B	0.23
ES-27B	0.20
ES-28B	0.20
ES-30B	0.23
ES-31B	0.23
ES-32B	0.23
ES-38B	0.19
ES-39B	0.19
ES-40B	0.19
ES-41B	0.19
ES-42B	0.19
ES-43B	0.19
ES-FORSCOM1	0.19
ES-FORSCOM2	0.19
ES-FORSCOM3	0.19
ES-647B	0.18
ES-648B	0.18
ES-922B	0.18
ES-943B	0.18
ES-944B	0.18
ES-945B	0.18

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas or No. 2 fuel oil in these sources **(listed in Table 2.1 C, above)**.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these boilers (**listed in Table 2.1 C, above**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas or No. 2 fuel oil in these boilers (**listed in Table 2.1 C, above**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of these boilers (**listed in Table 2.1 C, above**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in these boilers (**listed in Table 2.1 C, above**).

D. The following diesel-fired emergency generators subject to NSPS Subpart IIII:

Table 2.1 D.

Emission Source ID No.	Emission Source Description
ES-42G	Diesel-fired emergency generator (1,000 kW maximum output)
ES-43G	Diesel-fired emergency generator (750 kW maximum output)
ES-44G	Diesel-fired emergency generator (500 kW maximum output)
ES-TEMPGEN1500A	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 1,500 kW maximum output)
ES-TEMPGEN1500B	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 1,500 kW maximum output)
ES-TEMPGEN900A	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 900 kW maximum output)
ES-TEMPGEN900B	Diesel/No. 2 fuel oil –fired, lean burn, temporary emergency generator (up to 900 kW maximum output)
ES-80G	Diesel-fired emergency generator (3,100 kW maximum output, 4,154 Hp)
ES-81G	Diesel-fired emergency generator (3,100 kW maximum output, 4,154 Hp)
ES-82G	Diesel-fired emergency generator (3,100 kW maximum output, 4,154 Hp)
ES-83G	Diesel-fired emergency generator (2,500 kW maximum output, 3,350 Hp)
ES-87G	Diesel-fired emergency generator (900 kW maximum output)
ES-88G	Diesel-fired emergency generator (750 kW maximum output)
ES-89G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-90G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-91G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-92G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-93G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-94G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-95G	Diesel-fired emergency generator (1,230 kW maximum output)
ES-96G	Diesel-fired emergency generator (1,230 kW maximum output)
ES-97G	Diesel-fired emergency generator (1,230 kW maximum output)
ES-98G	Diesel-fired emergency generator (1,000 kW maximum output)
ES-99G	Diesel-fired emergency generator (1,250 kW maximum output)
ES-100G	Diesel-fired emergency generator (750 kW maximum output)
ES-101G	Diesel-fired emergency generator (1,230 kW maximum output)
ES-102G	Diesel-fired emergency generator (800 kW maximum output)
ES-103G	Diesel-fired emergency generator (800 kW maximum output)
ES-104G	Diesel-fired emergency generator (800 kW maximum output)
ES-105G	Diesel-fired emergency generator (500 kW maximum output)
ES-110GI	Diesel-fired emergency generator (600 kW maximum output)
ES-145GI	Diesel-fired emergency generator (600 kW maximum output)
ES-146GI	Diesel-fired emergency generator (500 kW maximum output)
ES-191GI	Diesel-fired emergency generator (655 kW maximum output)
ES-192GI	Diesel-fired emergency generator (655 kW maximum output)
ES-106G	Diesel-fired emergency generator (1,000 kW maximum output)
ES-107G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-109G	Diesel-fired emergency generator (500 kW maximum output)

Emission Source ID No.	Emission Source Description
ES-110G	Diesel-fired emergency generator (1,500 kW maximum output)
ES-111G	Diesel-fired emergency generator (1,500 kW maximum output)
ES-112G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-113G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-114G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-115G	Diesel-fired emergency generator (2,000 kW maximum output)
ES-116G	Diesel-fired emergency generator (1,750 kW maximum output)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible Emissions	20% opacity	15A NCAC 02D .0521
Nitrogen Dioxide Carbon Monoxide Particulate Matter	NSPS standards for emergency engines	15A NCAC 02D .0524 (40 CFR Part 60, Subpart IIII)
Hazardous Air Pollutants	New or reconstructed emergency RICE with a capacity greater than 500 horsepower do not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ.	15A NCAC 02D .1111 (40 CFR Part 63, Subpart ZZZZ)
Nitrogen Dioxide Sulfur Dioxide	PSD avoidance limits. **See Section 2.2 A.**	15A NCAC 02D .0317 PSD Avoidance

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these engines (**listed in Table 2.1 D, above**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these engines (**listed in Table 2.1 D, above**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of these engines (**listed in Table 2.1 D, above**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of diesel fuel in these engines (**listed in Table 2.1 D, above**).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

Applicability [40 CFR 60.4200(a)(2)(i)]

a. For these engines (**listed in Table 2.1 D, above**), the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart III "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" including Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 60.4219 shall apply.

General Provisions

c. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII. [40 CFR 60.4218]

Emission Standards [15A NCAC 02Q .0508(b)]

d. The Permittee shall comply with the emission standards 40 CFR 60.4202 for all pollutants, for the same model year and maximum engine power for this engine. [40 CFR 60.4205(b)]

Fuel Requirements [15A NCAC 02Q .0508(b)]

e. The Permittee shall use diesel fuel in the engine that meets the requirements of 40 CFR 1090.305 including:
   i. a maximum sulfur content of 15 ppm; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

   [40 CFR 60.4207(b)]

Testing [15A NCAC 02Q .0508(f)]

f. If emissions testing is required, the testing shall be performed in accordance with 40 CFR 60.4212 and 60.4213. If the results of this test are above the limits given in Section 2.1 D.3.d and e above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(b)]

g. The engine has the following monitoring requirements:
   i. The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
   ii. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these monitoring requirements are not met.

Compliance Requirements [15A NCAC 02Q .0508(b)]

h. The Permittee shall:
   i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
   ii. change only those emission-related settings that are permitted by the manufacturer; and
   iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable.

   [40 CFR 60.4206 and 60.4211(a)]

i. The Permittee shall comply with the emission standards in Section 2.1 D.3.d by purchasing an engine certified to the emission standards in Section 2.1 D.3.d for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]

j. In order for the engine to be considered an emergency stationary internal combustion engine (ICE) as defined in Section 2.1 D.3.b, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
   i. There is no time limit on the use of emergency stationary ICE in emergency situations.
   ii. The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph j.ii.(A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency

situations as allowed by paragraph j.(iii) below counts as part of the 100 hours per calendar year allowed by this paragraph j.(ii).

(A) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph j.(ii) above. Except as provided in paragraph j.iii.(A) below, the 50 hours per calendar year for non- emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(4) The power is provided only to the facility itself or to support the local transmission and distribution system.

(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)]

k. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the compliance requirements in Section 2.1 D.3.h through j are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

l. The following records shall be maintained:

i. The results of inspection and maintenance made pursuant to Section 2.1 D.3.h shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

(A) the date and time of each recorded action;
(B) the results of each inspection;
(C) the results of any maintenance performed on the engine;
(D) any variance from manufacturer's recommendations, if any, and corrections made;
(E) the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time [40 CFR 60.4214(b)]; and
(F) if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)];

ii. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 D.3.d; and

iii. records showing the fuel combusted meets the requirements in Section 2.1 D.3.e.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

Reporting [15A NCAC 02Q .0508(f)]

m. The Permittee shall meet the following reporting requirements:

i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and

July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

ii. If the Permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in Section 2.1 D.3.j.iii(A), the Permittee shall submit an annual report according to the requirements at 40 CFR 60.4214(d). This report must be submitted to the Regional Supervisor and directly to the EPA pursuant to 40 CFR 60.4214(d)(3). [40 CFR 60.4214(d)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if this reporting requirement is not met.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(2)(iii)]

a. For these sources (**listed in Table 2.1 D, above**) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to limited requirements [15A NCAC 02Q. 0508(b)]

b. Pursuant to 40 CFR 63.6590(b)(1)(i), new or reconstructed emergency RICE (defined in 40 CFR 63.6590(a)(2)(i) and 40 CFR 63.6590(a)(3)(i)) with a capacity greater than 500 horsepower do not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ and Subpart A except for the initial notification requirements of 40 CFR 63.6645(f).

Notification Requirements [15A NCAC 02Q. 0508(f)]

c. Pursuant to 40 CFR 63.6645(c) and (f), the Permittee shall submit an initial notification for each source in accordance with 40 CFR 63.6590(b), no later than 120 calendar days after construction of each source and include the information in 40 CFR 63.9(b)(2)(i) through (iv) and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion.

E. The following diesel-fired emergency generators not subject to NSPS Subpart IIII:

Table 2.1 E.

Emission Source ID No.	Emission Source Description
ES-04PSG	Diesel-fired emergency generator (500 kW maximum output)
ES-16PSG	Diesel-fired emergency generator (900 kW maximum output)
ES-17PSG	Diesel-fired emergency generator (2,700 kW maximum output)
ES-24G	Diesel-fired emergency generator (1,275 kW maximum output)
ES-25G	Diesel-fired emergency generator (1,275 kW maximum output)
ES-26G	Diesel-fired emergency generator (1,275 kW maximum output)
ES-33G	Diesel-fired emergency generator (1,750 kW maximum output)
ES-37G	Diesel-fired emergency generator (1,250 kW maximum output)
ES-38G	Diesel-fired emergency generator (600 kW maximum output)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible emissions	20% opacity	15A NCAC 02D .0521
Hazardous air pollutants	Existing emergency RICE with a capacity greater than 500 horsepower do not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ	15A NCAC 02D .1111 (40 CFR Part 63, Subpart ZZZZ)
Nitrogen dioxide Sulfur dioxide	PSD avoidance limits. **See Section 2.2 A.**	15A NCAC 02D .0317 PSD Avoidance

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these engines (**listed in Table 2.1 E, above**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these engines (**listed in Table 2.1 E, above**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each of these engines (**listed in Table 2.1 E, above**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of diesel fuel in these engines (**listed in Table 2.1 E, above**).

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(2)(iii)]

a. For these sources (**listed in Table 2.1 E, above**) (*existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions*) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purposes of Section 2.1 E.3, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply. [40 CFR 63.6675]

Emergency Engine Compliance Requirements [15A NCAC 02Q .0508(f)]

c. For the purposes of Section 2.1 E.3, the Permittee shall only operate these sources(s) as emergency stationary reciprocating internal combustion engine(s) (RICE), which is defined as follows: Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in Sections Section 2.1 E.3.c.i and ii, below. All emergency stationary RICE must comply with the requirements specified in Section 2.1 E.3.d, below, in order to be considered emergency stationary RICE. If an engine does not comply with the requirements specified in Section 2.1 E.3.d, below, then it is not considered to be an emergency stationary RICE.
   i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
   ii. The stationary RICE is operated under limited circumstances for situations not included in Section 2.1 E.3.c.i, above, as specified in Section 2.1 E.3.d, below.

   [40 CFR 63.6675]

d. In order for the engine to be considered an emergency stationary RICE as defined in Section 2.1 E.3.c, above, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described Section 2.1 E.3.d.i through iii, below, is prohibited.
   i. There is no time limit on the use of emergency stationary RICE in emergency situations.
   ii. The Permittee may operate the emergency stationary RICE for any combination of the purposes specified in Section 2.1 E.3.d.ii.(A), below, for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Section 2.1 E.3.d.iii, below, counts as part of the 100 hours per calendar year allowed by this paragraph.
      (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
   iii. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Section 2.1 E.3.d.ii, above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

   [40 CFR 63.6640(f)]

Stationary RICE subject to limited requirements

e. Sources that meet the requirements of Section 2.1 E.3.c and d, above, do not have any other applicable requirements under 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements. [40 CFR 63.6590(b)(3)]

Recordkeeping [15A NCAC 02Q .0508(f)]

f. To ensure compliance with Section 2.1 E.3.c and d above, the Permittee shall maintain the following records. The Permittee shall record:
   i. the hours for each engine spent in emergency operation, including what classified the operation as emergency;
   ii. the hours for each engine spent for non-emergency operation; and
   iii. the dates of operation of each engine.

   The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

F. Emergency-use turbine and associated heat recovery steam generator consisting of:

One natural gas/No. 2 fuel oil-fired cogeneration gas turbine meeting the definition of "emergency stationary combustion turbine" under 40 CFR 63.6175 and "emergency gas turbine" under 40 CFR 60.331(e) (ID No. ES-33B)

And

Natural gas-fired Heat Recovery Steam Generator (ID No. ES-34B)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	**ID No. ES-34B** 0.19 pounds PM per million Btu per hour heat input	15A NCAC 02D .0503
Sulfur dioxide	**ID No. ES-34B** 2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
None	**ID No. ES-34B** Recordkeeping	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc
Nitrogen dioxide Sulfur dioxide	**ID No. ES-33B** Fuel ≤ 0.8% sulfur by weight Operate as an emergency turbine per 40 CFR 60.331(e)	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
Hazardous air pollutants	**ID No. ES-33B** Operate as an emergency turbine per 40 CFR 63.6175.	15A NCAC 02D .1111 40 CFR Part 63, Subpart YYYY
Nitrogen dioxide	Less than 75 tons per consecutive 12-month period See **Section 2.2 A.14**	15A NCAC 02Q .0317 PSD Avoidance
Toxic air pollutants	**State-enforceable Only** **ID No. ES-34B** Facility-wide TPERs **See Section 2.2 C.2**	15A NCAC 02Q .0711

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from the steam generation unit (**ID No. ES-34B**) into the atmosphere, shall not exceed 0.19 pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate matter emissions from the firing of natural gas the steam generation unit (**ID No. ES-34B**).

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the natural gas-fired steam generation unit (**ID No. ES-34B**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in this source **(ID No. ES-34B)**.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. ES-33B and ES-34B)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in these sources **(ID Nos. ES-33B and ES-34B).**

(ID No. ES-34B only)

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. For this boiler **(ID Nos. ES-34B**), the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," including Subpart A "General Provisions."

Recordkeeping [15A NCAC 02Q .0508(f)]

b. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)] These records shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

Reporting/Notifications [15A NCAC 02Q .0508(f)]

c. The Permittee shall submit a notification of the actual date of initial startup of the boiler to the Regional Supervisor, DAQ, postmarked within 15 days after such date. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if this notification requirement is not met. [40 CFR 60.7, 60.48c(a)]

(ID No. ES-33B only)

5. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart GG "Standards of Performance for Stationary Gas Turbines," including Subpart A "General Provisions."

b. The turbine (**ID No. ES-33B**) is an "emergency gas turbine" as defined in 40 CFR 60.331(e).

Standards for Nitrogen Oxides [40 CFR 60.332]

c. Emergency gas turbines are exempt from the nitrogen oxide standards in 40 CFR 60.332(a). [40 CFR 60.332(g)]

Standards for Sulfur Dioxide [40 CFR 60.333]

d. The Permittee shall not burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight. [40 CFR 60.333(b)]

Testing [15A NCAC 02Q .0508(f), 40 CFR 60.335]

e. If emission testing is required, the testing shall be performed in accordance with 40 CFR 60.335 or an EPA approved alternative test method. If the results of this test are above the limit given in Section 2.1 G.5.d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f), 40 CFR 60.334]

f. The Permittee may elect to not monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u). The Permittee shall use one of the options in 40 CFR 60.334(h)(3) to make this demonstration. [40 CFR 60.334(h)(3)]

g. For fuel oil, the turbine receives No. 2 fuel oil from bulk storage tanks located on the military base. These tanks receive their supply from tank trucks. To ensure compliance, the maximum sulfur content of any No. 2 fuel oil received at the site and burned in the turbine shall not exceed 0.8 percent by weight. The Permittee shall use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to 40 CFR Part 75. [40 CFR 60.334(i)(1)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, Subpart GG if the sulfur content of the oil is not monitored and recorded or if the sulfur content of the oil exceeds the limit in Section 2.1 G.5.d, above.

Reporting [15A NCAC 02Q .0508(f), 40 CFR 60.334]

h. The Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purposes of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined according to 40 CFR 60.334(j)(2).

i. The Permittee shall submit a summary report of the monitoring activities listed in Section 2.1 G.5.f and g, above, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. For the stationary combustion turbine **(ID No. ES-33B),** the Permittee shall comply with all requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart YYYY "National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines."

b. Because the stationary combustion turbine **(ID No. ES-33B)** meets the definition of "existing stationary combustion turbine" under 40 CFR 63.6175, this turbine does not have to meet the requirements of Subpart YYYY or Subpart A, except for the initial notification requirement under 40 CFR 63.6145(d). [40 CFR 63.6090(b)(1)(i)]

G. Three dry filter-type paint spray booths (ES-01C, ES-02C, and ES-08C), one dry filter-type paint spray booth (ES-09C) using non-reactive water reducible Chemical Agent Resistant Coatings only along with natural gas-fired bake ovens

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in ton/hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Toxic air pollutants	**State-enforceable Only** **See Section 2.2 C.2**	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10 \times P^{0.67}$
Where:
E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall maintain records which specify the types of materials and finishes processed and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the records are not maintained or the types of materials and finishes are not monitored.

d. Particulate matter emissions from the paint spray booths (**ID Nos. ES-01C, ES-02C, ES-08C, and ES-09C**) shall be controlled by panel filters. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) inspection of the panel filter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the panel filters are not inspected and maintained.

e. The results of recordkeeping, inspection, and maintenance required by Sections 2.1 G.1.c and d, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the panel filters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the panel filters within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Sections 2.1 G.1.c through e, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from each spray booth (**ES-01C, ES-02C, ES-08C, and ES-09C**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month when the spray booth is in operation, the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 G.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring required by Section 2.1 G.2.c, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities required by Section 2.1 G.1.c and d, above, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

H. MACT-subject spray booths:

One dry filter-type paint spray booth (ID No. ES-10C, MACT Subpart GG), using epoxy primer and Chemical Agent Resistant Coating (CARC), with one natural gas-fired make up air heater (ID No. IES-10H), controlled by one natural gas-fired thermal oxidizer (ID No. CD-10C), Building P-3354

One dry filter-type paint spray booth (ID No. ES-12C, MACT Subpart GG) with HVLP application located at Simmons Army Air Field

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in ton/hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	MACT standards for Aerospace Manufacturing and Rework	15A NCAC 02D .1111 40 CFR Part 63, Subpart GG

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID No. ES-10C and ES-12C)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$
Where:
E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall maintain records that specify the types of materials and finishes processed and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the records are not maintained or the types materials and finishes are not monitored.

d. Particulate matter emissions from these sources **(ID No. ES-10C and ES-12C)** shall be controlled by panel filters. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) inspection of the panel filter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the panel filters are not inspected and maintained.

e. The results of inspection and maintenance required by Sections 2.1 H.1.c and d, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the panel filters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the panel filter within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Sections 2.1 H.1.c through e, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the thermal oxidizer (**ID No. CD-10C**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the thermal oxidizer (**ID No. CD-10C**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from spray booths (**ID No. ES-10C and ES-12C**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month when the spray booths (**ID No. ES-10C and ES-12C**) are in operation, the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 H.3.a above.
   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring activities required by Section 2.1 H.3.c, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities required by Sections 2.1 H.3.d and e, above, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities" and Subpart A "General Provisions."

b. i. The requirements of 40 CFR Part 63, Subpart GG do not apply to primers, topcoats, specialty coatings, chemical milling maskants, strippers, and cleaning solvents that meet the definition of non-HAP material. [40 CFR 63.741(f)]
   ii. *Non-HAP material* means, for the purposes of this subpart, a primer, topcoat, specialty coating, chemical milling maskant, cleaning solvent, or stripper that contains no more than 0.1 percent by mass of any individual organic HAP that is an Occupational Safety and Health Administration-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP. [40 CFR 63.742]

c. The requirements for primers, topcoats, specialty coatings, and chemical milling maskants in 40 CFR 63.745 and 63.747 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 50 gallons, and the combined annual total of all such primers, topcoats, specialty coatings, and chemical milling maskants used at a facility does not exceed 200 gallons. Primers, topcoats, and specialty coatings exempted under Section 2.1 H.1.b, above, and under 40 CFR 63.745(f)(3) and (g)(4) are not included in the annual limits. Chemical milling maskants exempted under 40 CFR 63.747(c)(3) are also not included in these limits. [40 CFR 63.741(g)]

d. When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 40 CFR Part 63, Subpart GG.

Testing [15A NCAC 02Q .0508(f)]

e. If emission testing is required, the testing shall be performed in accordance with 40 CFR 63.749 and 63.750. If the results of this test are above the limits given in Sections 2.1 H.4.g, below, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Emission Standards [15A NCAC 02Q .0508(f)]

f. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.743(e)]

g. The Permittee shall comply with the operating, monitoring, and recordkeeping requirements of 40 CFR 63, Subpart GG, as summarized in the below tables:
   i. Standards: Cleaning Operations [40 CFR 63.744]
      (A) Housekeeping Measures: Unless the cleaning solvent used in the cleaning operation is identified in Table 1 of 40 CFR 63.744 or meets the definition of "non-HAP material" (above), each cleaning operation subject to this rule shall comply with the following requirements: [40 CFR 63.744(a)(1)-(3)]
         (1) place used solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so

as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

(2) store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

(3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

(B) Hand-wipe cleaning: Except for cleaning of spray gun equipment (as defined below), and the exempt cleaning operations defined in 40 CFR 63.744(e), the Permittee shall use cleaning solvents that meet one of the following requirements: [40 CFR 63.744(b)(1)-(3)]

(1) Meet one of the composition requirements in Table 1 to 40 CFR 63.744;

(2) Have a composite vapor pressure of 45 mm Hg (24.1 in. H_2 O) or less at 20 °C (68 °F); or

(3) Demonstrate that the volume of hand-wipe solvents used in cleaning operations has been reduced by at least 60% from a baseline adjusted for production (see 40 CFR 63.744(b)(3)).

(C) Spray Gun Cleaning: For each spray gun cleaning operation (except for spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in Section 2.l H.3.b.i, above), the Permittee shall use one or more of the techniques, or their equivalent, specified in 40 CFR 63.744(c)(1)-(4)

(D) Flush cleaning: For each flush cleaning operation (except those that use semi-aqueous cleaning solvents or solvents in Table 1 to 40 CFR 63.744), the Permittee shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control.

ii. Standards: Primer, topcoat, and specialty coating application operations [40 CFR 63.745]

(A) Uncontrolled coatings - organic HAP and VOC content levels:

(1) Organic HAP emissions and VOC emissions from primers shall each be limited to no more than 350 grams per liter of primer (less water), as applied. [40 CFR 63.745(c)(1),(2)]

(2) Organic HAP emissions and VOC emissions from self-priming topcoats shall each be limited to no more than 420 grams per liter of self-priming topcoat (less water) as applied. [40 CFR 63.745(c)(3), (4)]

(3) Organic HAP emissions and VOC emissions from specialty coatings shall be limited to no more than the content limit specified in Table 1 40 CFR 63.745(c) for each applicable specialty coating type. [40 CFR 63.745(c)(5), (6)]

(4) Comply with the limits in Paragraphs (1), (2), and (3) above, by either using primers, topcoats, and specialty coatings with VOC and HAP contents less than the limit, or use the averaging method in 40 CFR 63.743(d). [40 CFR 63.745(e)]

(B) Controlled coatings - control system requirements: Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in 40 CFR 63.750(h). [40 CFR 63.745(d)]

(C) Handling and transfer: The Permittee shall conduct the handling and transfer of primers, topcoats, and specialty coatings to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. [40 CFR 63.745(b)]

(D) Application equipment:

(1) Apply primers, topcoats, and specialty coatings using one of the spray application techniques in 40 CFR 63.745(f)(1)(i)-(v), except as allowed by 40 CFR 63.745(f)(3). [40 CFR 63.745(f)]

(2) All coating spray application devices shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. [40 CFR 63.745(f)(2)]

(E) Inorganic HAP Emissions: Except as allowed by 40 CFR 63.745(g)(4), each primer, topcoat, or specialty coating application operation in which any of the coatings that are spray-applied and contain inorganic HAP shall: [40 CFR 63.745(g)]

(1) Apply these coatings in a booth, hangar, or portable enclosure in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

(2) Control the air stream from the operation using the methods in 40 CFR 63.745(g)(2), as applicable.

(3) If the dry particulate filter system or spray booth are not operating according to manufacturer’s specifications or maintenance procedures, shut down the operation immediately and take corrective action.

iii. Standards: Depainting operations: These standards do not apply to aerospace manufacturing or rework facility that depaints six or less completed aerospace vehicles in a calendar year, and the activities listed in 40 CFR 63.746(a)(1)-(3). [40 CFR 63.746(a)]
   (A) HAP emissions – non-HAP chemical strippers and technologies: [40 CFR 63.746(b)]
      (1) The Permittee shall emit no organic HAP from chemical stripping formulations and agents or chemical paint softeners, except as provided by 40 CFR 63.746(b)(2) and (3). [40 CFR 63.746(b)]
      (2) For dry media blasting equipment (except mechanical and hand sanding operations), the Permittee shall comply with the operating requirements in 40 CFR 63.746(b)(4)(i)-(v). [40 CFR 63.746(b)]
   (B) Organic HAP emissions - organic HAP-containing chemical strippers: The permittee shall reduce organic HAP emissions from chemical stripper depainting by at least 81 percent (for systems installed before September 1, 1995) or at least 95 percent (for systems installed after September 1, 1995). [40 CFR 63.746(c)]

iv. Standards: Chemical milling maskant application operations: [40 CFR 63.747]
   (A) The Permittee shall conduct the handling and transfer of chemical milling maskants in a manner that minimizes spills. [40 CFR 63.747(b)]
   (B) Uncontrolled maskants – organic HAP and VOC content levels: For each chemical milling maskant that is uncontrolled, except operations in 40 CFR 63.747(c)(3): [40 CFR 63.747(c)]
      (1) Organic HAP emissions from chemical milling maskants shall be less than 622 grams per liter of Type I maskant applied (less water) and less than 160 grams per liter of Type II maskant applied (less water). [40 CFR 63.747(c)(1)]
      (2) VOC emissions from chemical milling maskants shall be less than 622 grams per liter of Type I maskant applied (less water) and less than 160 grams per liter of Type II maskant applied (less water). [40 CFR 63.747(c)(2)]
      (3) Comply with the limits in Paragraphs (1) and (2), above, by either using chemical milling maskants with VOC and HAP contents less than the limit, or use the averaging method in 40 CFR 63.743(d). [40 CFR 63.747(e)]
   (C) Controlled maskants – control system requirements: Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater. [40 CFR 63.747(d)]

v. Standards: Handling and storage of waste: Except for spent waste subject to 40 CFR Part 262 through 268, the Permittee shall handle and store waste as follows: [40 CFR 63.748(a)]
   (A) Conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.
   (B) Store all waste that contains organic HAP in closed containers.

Monitoring [15A NCAC 02Q .0508(f)]

h. i. For each enclosed spray gun cleaner (see Section 2.1 H.4.i.(C), above), the Permittee shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation. Repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed, and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued. [40 CFR 63.744(c)(1)(ii) and 63.751(a)]

ii. The Permittee shall establish as a site-specific operating parameter either the outlet total HAP/VOC concentration or control device efficiency that demonstrates compliance with 40 CFR 63.745(d), 63.746(c), and/or 63.747(d), as appropriate. The parameter shall be calculated according to 40 CFR 63.751(b)(4). The parameter shall be monitored according to 40 CFR 63.751(b)(6). [40 CFR 63.751(b)]

iii. All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications. Temperature sensors shall be replaced or recalibrated every 3 months. The thermocouple shall be equipped with a continuous recorder. [40 CFR 63.751(b)(8),(9)]

iv. The Permittee shall establish the minimum combustion temperature in the thermal oxidizer **(ID No. CD-10C)** as a site-specific operating parameter. [40 CFR 63.751(b)(11)]

v. The Permittee shall continuously monitor the pressure drop across the particulate filters while depainting operations are occurring. The Permittee shall read and record the pressure drop once per shift. [40 CFR 63.751(d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the required monitoring is not performed.

Recordkeeping [15A NCAC 02Q .0508(f)]

i. The Permittee shall maintain the following records:

i. Records for the cleaning operations in 40 CFR 63.752(b)(1)-(5).
ii. Records for the primer, topcoat, and specialty coating application operations in 40 CFR 63.752(c)(1)-(5), 63.752(d)(1), and 63.752(d)(3).
iii. Records for the depainting operations in 40 CFR 63.752(e)(1) and (3)-(7).
iv. Records for the chemical milling maskant application operations in 40 CFR 63.752(f)(1),(2), and (4).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the required records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

j. The Permittee shall submit the following reports. All instances of deviations from the requirements of this permit must be clearly identified.
i. Semiannual cleaning operation report required by 40 CFR 63.753(b).
ii. Semiannual primer, topcoat, and specialty coating application operations report required by 40 CFR 63.753(c)(1) and the annual report for the pressure drop for each dry filter required by 40 CFR 63.753(c)(2).
iii. Semiannual depainting operation report required by 40 CFR 63.753(d)(1) and the annual volume and pressure drop report required by 40 CFR 63.753(d)(2). In addition, whenever the Permittee uses a control device to control organic HAP emissions, submit the semiannual report required by 40 CFR 63.753(d)(3).
vi. Semiannual chemical milling maskant operation report required by 40 CFR 63.753(e).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the required reports are not submitted.

I. Two diesel vehicle engine test stands (ID Nos. ES-01E and ES-02E) located at the Materiel Maintenance Division

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
n/a	No requirements for existing units	15A NCAC 02D .1111 (40 CFR Part 63, Subpart PPPPP)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the engine test stands **(ID Nos. ES-01E and ES-02E)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of diesel fuel in the engine test stands **(ID Nos. ES-01E and ES-02E)**.

2. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. For the engine test stands **(ID Nos. ES-01E and ES-02E)**, the Permittee shall comply with all requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart PPPPP "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands."

b. Because the engine test stands **(ID Nos. ES-01E and ES-02E)** meet the definition of "existing affected source" under 40 CFR 63.9290(a)(1), these engine test stands do not have to meet the requirements of Subpart PPPPP or Subpart A. [40 CFR 63.9290(b)]

J. One paper pulverizer (ID No ES-01P) with associated cyclone (ID No. CD-01P-C) and fabric filter (ID No. CD-01P-FF)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable particulate emission rate (pounds per hour) P = process weight rate in ton/hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source **(ID No. ES-01P)** shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10 \times P^{0.67}$
Where:
E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the paper pulverizer **(ID No. ES-01P)** shall be controlled by the cyclone **(ID No. CD-01P-C)** and fabric filter **(ID No. CD-01P-FF)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the filter system's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and filter system are not inspected and maintained.

d. The results of inspection and maintenance required by Section 2.1 J.1.c, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the capture and filter system; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the capture and filter system within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Sections 2.1 J.1.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the paper pulverizer (**ID No. ES-01P**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.2.a above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of the paper pulverizer (**ID No. ES-01P**) for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 P.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring required by Section 2.1 J.2.c, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities required by Sections 2.1 J.2.c and d, above, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

K. Plasma Arc Cutter (ES-01PC) with a cartridge filter dust collector (CD-01PC) located in Building O-190-R61

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour Liquid and gaseous fuels and combustion air are not considered as part of the process weight	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source shall **(ID No. ES-01PC)** not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10 \times P^{0.67}$
Where:
E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the plasma arc cutter shall **(ID No. ES-01PC)** be controlled by a cartridge dust filter system **(ID No. CD-01PC)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the filter system's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and filter system are not inspected and maintained.

d. The results of inspection and maintenance required by Section 2.1 K.1.c, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the capture and filter system; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the capture and filter system within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Sections 2.1 K.1.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the plasma arc cutter (**ID No. ES-01PC**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K.2.a, above in this section, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of the plasma arc cutter shall **(ID No. ES-01PC)** for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 K.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring required by Section 2.1 K.2.c, above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities required by Sections 2.1 K.1.c and d, above, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Boilers, generators, and turbines subject to PSD Avoidance limits:

Three natural gas/No. 2 fuel oil-fired boilers (**ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA)**
Two natural gas/No. 2 fuel oil-fired boilers **(ID Nos. ES-11B and ES-12B)**
Three natural gas/No. 2 fuel oil-fired boilers (**ID Nos. ES-24B, ES-25B, and ES-26B)**
Three natural gas/No. 2 fuel oil-fired boilers (**ID Nos. ES-30B, ES-31B, and ES-32B)**
One temporary natural gas/No. 2 fuel oil-fired boiler **(ID No. ES-35B)**
Two natural gas/No. 2 fuel oil-fired boilers **(ID Nos. ES-36B and ES-37B)**
Two natural gas/No. 2 fuel oil-fired boilers **(ID Nos. ES-38B and ES-39B)**
Four natural gas/No. 2 fuel oil-fired boilers (**ID Nos. ES-40B, 41B, 42B, and 43B)**
One emergency-use diesel-fired generator **(ID No. ES-17PSG)**
One temporary natural gas/No. 2 fuel oil-fired boiler **(ID No. ES-TEMPBOIL)** and four temporary emergency-use diesel-fired generators **(ID Nos. ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)**
Three natural gas/No. 2 fuel oil-fired boilers (**ID Nos. ES-44B, ES-45B, and ES-46B)**
Four emergency-use diesel-fired generators **(ID Nos. ES-80G, ES-81G, ES-82G, and ES-83G)** and three natural gas/No. 2 fuel oil-fired boilers (**ID Nos. ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)**
Four emergency-use diesel-fired generators **(ID Nos. ES-91G, ES-92G, ES-93G, and ES-94G)**
One emergency-use natural gas/No. 2 fuel oil-fired combustion turbine **(ID No. ES-33B)** and associated natural gas-fired heat recovery steam generator **(ID No. ES-34B)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide Nitrogen oxides	Various PSD avoidance limits See Sections 2.2 A.1 through 14, below.	15A NCAC 02Q .0317 (PSD Avoidance)

(ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA)

1. 15A NCAC 02Q .0317 AVOIDANCE CONDITIONS
for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, these boilers (**ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA**) shall discharge into the atmosphere less than 44.42 tons of nitrogen dioxide total, per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall keep monthly records of the amount of fuel fired, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fuel usage is not monitored.

d. Calculations of NOx emissions from these boilers (**ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA)** shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO}) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E = Monthly NOx emissions from these boilers (**ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA)** (tons per month).

Q_{FO} = Total monthly fuel oil usage in these boilers (**ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA)** (gallons per month).

EF_{FO} = Approved vendor emission factor for NOx emissions from fuel oil firing. Equal to 16.6 pounds of NOx per 1,000 gallons of oil fired.

Q_{NG} = Total monthly natural gas usage in these boilers (**ID Nos. ES-01CMA, ES-02CMA, and ES-03CMA)** (million cubic feet per month).

EF_{NG} = AP-42 Table 1.4-1 emission factor for NOx emissions from natural gas firing in a boiler equipped with low-NOx burners. Equal to 50 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.1.a, above.

Reporting [15A NCAC 02Q .0508 (f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Section 2.2 A.1.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly NOx emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-11B and ES-12B)

2. 15A NCAC 02Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, these boilers (**ID Nos. ES-11B and ES-12B**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide total, per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. In no case shall the fuel sulfur content exceed 0.5 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content exceeds this limit.

d. In no case shall the total amount of No. 2 fuel oil burned in these boilers (**ID Nos. ES-11B and ES-12B**) exceed 1,112,696 gallons per consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fuel usage exceeds this limit.

e. The use of fuel in boilers (**ID Nos. ES-11B and ES-12B**) shall be limited such that sulfur dioxide emissions shall not exceed the limit in Section 2.2 A.2.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO} \times S) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E = Monthly SO_2 emissions from these boilers (**ID Nos. ES-11B and ES-12B)** (tons per month).

Q_{FO} = Total monthly fuel oil usage in these boilers (**ID Nos. ES-11B and ES-12B)** (gallons per month).

EF_{FO} = AP-42 Table 1.3-1 emission factor for SO_2 emissions from fuel oil firing. Equal to $142 \times S$ (pounds per 1,000 gallons fired).

S = The sulfur content of the oil fired. *e.g.*, if oil is 1% sulfur, then S = 1.

Q_{NG} = Total monthly natural gas usage in these boilers (**ID Nos. ES-11B and ES-12B)** (million cubic feet per month).

EF_{NG} = AP-42 Table 1.4-1 emission factor for SO_2 emissions from natural gas firing in a boiler. Equal to 0.6 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.2.a, above.

f. The Permittee shall keep monthly records of the amount of fuel used in these boilers (**ID Nos. ES-11B and ES-12B)** and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

g. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Sections 2.2 A.2.c through f, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months,
   iii. The highest sulfur content for the fuel oil, and
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-24B, ES-25B, and ES-26B)

3. 15A NCAC 02Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, these boilers **(ID Nos. ES-24B, ES-25B, and ES-26B)** shall discharge into the atmosphere less than:
   i. 40 tons of nitrogen dioxide per consecutive 12-month period.
   ii. 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.2 A.3.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The usage of natural gas in boilers (**ID Nos. ES-24B, ES-25B, and ES-26B**) shall be limited to 570 million cubic feet per consecutive 12-month period.

d. The use of fuel in boilers (**ID Nos. ES-24B, ES-25B, and ES-26B**) shall be limited to 986,000 gallons per year total.

e. The Permittee shall keep monthly records of the amount of fuel used, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fuel usage is not recorded or if the fuel usage exceeds the limits in Sections 2.2 A.3.c and d, above.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Section 2.2 A.3. c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly quantities and the rolling 12-month totals of natural gas and No. 2 fuel oil consumed for the previous 17 months, and
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

(**ID Nos. ES-30B, ES-31B, and ES-32B**)

4. 15A NCAC 02Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these boilers (**ID Nos. ES-30B, ES-31B, and ES-32B**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.4.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuel in boilers (**ID Nos. ES-30B, ES-31B, and ES-32B**) shall be limited such that sulfur dioxide emissions shall not exceed the limit in Section 2.2 A.4.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO} \times S) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\ \text{ton}}{2{,}000\ \text{lb}}\right)$$

Where:

E = Monthly SO_2 emissions from these boilers **(ID Nos. ES-30B, ES-31B, and ES-32B)** (tons per month).

Q_{FO} = Total monthly fuel oil usage in these boilers **(ID Nos. ES-30B, ES-31B, and ES-32B)** (gallons per month).

EF_{FO} = AP-42 Table 1.3-1 emission factor for SO_2 emissions from fuel oil firing. Equal to $142 \times S$ (pounds per 1,000 gallons fired).

S = The sulfur content of the oil fired. *e.g.*, if oil is 1% sulfur, then S = 1.

Q_{NG} = Total monthly natural gas usage in these boilers (**ID Nos. ES-30B, ES-31B, and ES-32B)** (million cubic feet per month).

EF_{NG} = AP-42 Table 1.4-1 emission factor for SO_2 emissions from natural gas firing in a boiler. Equal to 0.6 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.4.a, above.

d. The Permittee shall keep monthly records of the amount of fuel used in these boilers (**ID Nos. ES-30B, ES-31B, and ES-32B)** and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Sections 2.2 A.4.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months,
   iii. The highest sulfur content for the fuel oil, and
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID No. ES-35B)

5. 15A NCAC 02Q .0317 AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, this boiler **(ID No. ES-35B)** shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuel in this boiler (**ID No. ES-35B**) shall be limited such that sulfur dioxide emissions shall not exceed the limit in Section 2.2 A.5.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO} \times S) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E = Monthly SO_2 emissions from this boiler (**ID No. ES-35B**) (tons per month).
Q_{FO} = Total monthly fuel oil usage in this boiler (**ID No. ES-35B**) (gallons per month).
EF_{FO} = AP-42 Table 1.3-1 emission factor for SO_2 emissions from fuel oil firing. Equal to $142 \times S$ (pounds per 1,000 gallons fired).
S = The sulfur content of the oil fired. *e.g.*, if oil is 1% sulfur, then S = 1.
Q_{NG} = Total monthly natural gas usage in this boiler (**ID No. ES-35B**) (million cubic feet per month).
EF_{NG} = AP-42 Table 1.4-1 emission factor for SO_2 emissions from natural gas firing in a boiler. Equal to 0.6 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.5.a, above.

d. The Permittee shall keep monthly records of the amount of fuel used in this boiler (**ID No. ES-35B**) and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Sections 2.2 A.5.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months,
   iii. The highest sulfur content for the fuel oil, and
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-36B and ES-37B)

6. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these boilers (**ID Nos. ES-36B and ES-37B**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.6.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuel in boilers (**ID Nos. ES-36B and ES-37B**) shall be limited such that sulfur dioxide emissions shall not exceed the limit in Section 2.2 A.6.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO} \times S) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E = Monthly SO_2 emissions from these boilers (**ID Nos. ES-36B and ES-37B)** (tons per month).
Q_{FO} = Total monthly fuel oil usage in these boilers (**ID Nos. ES-36B and ES-37B)** (gallons per month).
EF_{FO} = AP-42 Table 1.3-1 emission factor for SO_2 emissions from fuel oil firing. Equal to $142 \times S$ (pounds per 1,000 gallons fired).
S = The sulfur content of the oil fired. *e.g.*, if oil is 1% sulfur, then S = 1.
Q_{NG} = Total monthly natural gas usage in these boilers (**ID Nos. ES-36B and ES-37B)** (million cubic feet per month).
EF_{NG} = AP-42 Table 1.4-1 emission factor for SO_2 emissions from natural gas firing in a boiler. Equal to 0.6 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.6.a, above.

d. The Permittee shall keep monthly records of the amount of fuel used in these boilers (**ID Nos. ES-36B and ES-37B)** and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Sections 2.2 A.6.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months,
   iii. The highest sulfur content for the fuel oil, and
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-38B and ES-39B)

7. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these boilers (**ID Nos. ES-38B and ES-39B**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.7.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuel in boilers (**ID Nos. ES-38B and ES-39B**) shall be limited such that sulfur dioxide emissions shall not exceed the limit in Section 2.2 A.7.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO} \times S) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E = Monthly SO_2 emissions from these boilers (**ID Nos. ES-38B and ES-39B)** (tons per month).
Q_{FO} = Total monthly fuel oil usage in these boilers (**ID Nos. ES-38B and ES-39B)** (gallons per month).
EF_{FO} = AP-42 Table 1.3-1 emission factor for SO_2 emissions from fuel oil firing. Equal to $142 \times S$ (pounds per 1,000 gallons fired).
S = The sulfur content of the oil fired. *e.g.*, if oil is 1% sulfur, then S = 1.

Q_{NG} = Total monthly natural gas usage in these boilers (**ID Nos. ES-38B and ES-39B)** (million cubic feet per month).
EF_{NG} = AP-42 Table 1.4-1 emission factor for SO_2 emissions from natural gas firing in a boiler. Equal to 0.6 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.7.a, above.

d. The Permittee shall keep monthly records of the amount of fuel used in these boilers (**ID Nos. ES-38B and ES-39B)** and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Sections 2.2 A.7.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months,
   iii. The highest sulfur content for the fuel oil, and
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-40B, 41B, 42B, and 43B)

8. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these boilers (**ID Nos. ES-40B, 41B, 42B, and 43B**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.8.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuel in boilers **(ID Nos. ES-40B, 41B, 42B, and 43B)** shall be limited such that sulfur dioxide emissions shall not exceed the limit in Section 2.2 A.8.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E = [(Q_{FO} \times EF_{FO} \times S) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\ \text{ton}}{2{,}000\ \text{lb}}\right)$$

Where:
E = Monthly SO_2 emissions from these boilers **(ID Nos. ES-40B, 41B, 42B, and 43B)** (tons per month).
Q_{FO} = Total monthly fuel oil usage in these boilers **(ID Nos. ES-40B, 41B, 42B, and 43B)** (gallons per month).
EF_{FO} = AP-42 Table 1.3-1 emission factor for SO_2 emissions from fuel oil firing. Equal to $142 \times S$ (pounds per 1,000 gallons fired).
S = The sulfur content of the oil fired. *e.g.*, if oil is 1% sulfur, then S = 1.
Q_{NG} = Total monthly natural gas usage in these boilers **(ID Nos. ES-40B, 41B, 42B, and 43B)** (million cubic feet per month).
EF_{NG} = AP-42 Table 1.4-1 emission factor for SO_2 emissions from natural gas firing in a boiler. Equal to 0.6 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.8.a, above.

d. The Permittee shall keep monthly records of the amount of fuel used in these boilers **(ID Nos. ES-40B, 41B, 42B, and 43B)** and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities in Sections 2.2 A.8.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months,
   iii. The highest sulfur content for the fuel oil, and
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID No. ES-17PSG)

9. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, the emergency generator **(ID No. ES-17PSG)** shall discharge into the atmosphere less than 40 tons of NOx per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.9.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required to demonstrate compliance with the NOx emission limit in Section 2.2 A.2.a, above.

(ID Nos. ES-TEMPBOIL, ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)

10. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, temporary boiler (**ID No. ES-TEMPBOIL**), and temporary emergency generators **(ID Nos. ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)** shall emit to the atmosphere less than 40 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.10.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuels in the boiler and emergency generators (**ID Nos. ES-TEMPBOIL, ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)** shall be limited such that NOx emissions from these sources, combined, do not exceed the limit in Section 2.2 A.10.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fuel use is not recorded.

d. Calculations of NOx emissions shall be made using the actual amounts of fuel consumed in each of these sources and the following formulas:

$$E_B = [(Q_{FO} \times EF_{FO}) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E_B = Monthly NOx emissions from the boiler (**ID No. TEMPBOIL)** (tons per month).

Q_{FO} = Total monthly fuel oil usage in this boiler (**ID No. TEMPBOIL)** (gallons per month).

EF_{FO} = AP-42 Table 1.3-1 emission factor for NOx emissions from distillate oil firing. Equal to 20 pounds of NOx per 1,000 gallons of oil fired. As an alternative, the Permittee may use a vendor-supplied emission factor if approved by DAQ.

Q_{NG} = Total monthly natural gas usage in the boiler (**ID No. TEMPBOIL)** (million cubic feet per month).

EF_{NG} = AP-42 Table 1.4-1 emission factor for NOx emissions from natural gas firing in a boiler. Equal to 100 pounds of NOx per million cubic feet fired. As an alternative, the Permittee may use a vendor-supplied emission factor if approved by DAQ.

$$E_G = (O \times C \times EF) \times \left(\frac{1\text{ ton}}{2{,}000\text{ lb}}\right)$$

Where:

E_G = Sum of monthly NOx emissions from the generators (**ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)** (tons per month).

O = For each generator, the operating hours for that generator (**ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)** (hours per month).

C = For each generator, the capacity of that generator (horsepower)

EF = For each generator, the appropriate emission factor:

For generators with capacity up to 600 horsepower: AP-42 Table 3.3-1 emission factor for NOx emissions from diesel fuel firing. Equal to 0.031 lb/hp-hr.

For generators larger than 600 horsepower: AP-42 Table 3.4-1 emission factor for NOx emissions from uncontrolled diesel fuel firing. Equal to 0.024 lb/hp-hr.

As an alternative, the Permittee may use a vendor-supplied emission factor if approved by DAQ.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.10.a, above.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report of the monitoring and recordkeeping activities in Section 2.2 A.10.c and d, above, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly NOx emissions from these sources **(ID Nos. ES-TEMPBOIL, ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B)** for the previous 17 months.
   ii. The rolling 12-month total NOx emissions from these sources for each month in the reporting period.
   iii. The monthly quantities of natural gas and No. 2 fuel oil consumed in these sources for the previous 17 months.
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-44B, ES-45B, and ES-46B)

11. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these boilers **(ID Nos. ES-44B, ES-45B, and ES-46B)** shall emit to the atmosphere less than 50 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.11.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuels in these boilers **(ID Nos. ES-44B, ES-45B, and ES-46B)** shall be limited such that NOx emissions from these sources, combined, do not exceed the limit in Section 2.2 A.11.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fuel use is not recorded.

d. Calculations of NOx emissions shall be made using the actual amounts of fuel consumed in each of these sources and the following formulas:

$$E_B = [(Q_{FO} \times EF_{FO}) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\ \text{ton}}{2{,}000\ \text{lb}}\right)$$

Where:

E_B = Monthly NOx emissions from these boilers **(ID Nos. ES-44B, ES-45B, and ES-46B)** (tons per month).

Q_{FO} = Total monthly fuel oil usage in these boilers **(ID Nos. ES-44B, ES-45B, and ES-46B)** (gallons per month).

EF_{FO} = AP-42 Table 1.3-1 emission factor for NOx emissions from distillate oil firing. Equal to 20 pounds of NOx per 1,000 gallons of oil fired.

Q_{NG} = Total monthly natural gas usage in these boilers **(ID Nos. ES-44B, ES-45B, and ES-46B)** (million cubic feet per month).

EF_{NG} = AP-42 Table 1.4-1 emission factor for NOx emissions from natural gas firing in a boiler equipped with low-NOx burners. Equal to 50 pounds of NOx per million cubic feet fired.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.11.a, above.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report of the monitoring and recordkeeping activities in Section 2.2 A.11.c and d, above, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly NOx emissions from these sources **(ID Nos. ES-44B, ES-45B, and ES-46B)** for the previous 17 months.
   ii. The rolling 12-month total NOx emissions from these sources for each month in the reporting period.
   iii. The monthly quantities of natural gas and No. 2 fuel oil consumed in these sources for the previous 17 months.
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-80G, ES-81G, ES-82G, ES-83G, ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)

12. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these emergency generators and boilers **(ID Nos. ES-80G, ES-81G, ES-82G, ES-83G, ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)** shall emit to the atmosphere less than 39.59 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.12.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuels in these sources **(ID Nos. ES-80G, ES-81G, ES-82G, ES-83G, ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)** shall be limited such that NOx emissions from these sources, combined, do not exceed the limit in Section 2.2 A.12.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format).

d. Calculations of NOx emissions shall be made using the actual amounts of fuel consumed in each of these sources and the following formulas:

$$E_B = [(Q_{FO} \times EF_{FO}) + (Q_{NG} \times EF_{NG})] \times \left(\frac{1\ \text{ton}}{2{,}000\ \text{lb}}\right)$$

Where:

E_B = Monthly NOx emissions from these boilers (**ID Nos. ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)** (tons per month).

Q_{FO} = Total monthly fuel oil usage in these boilers (**ID Nos. ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)** (gallons per month).

EF_{FO} = AP-42 Table 1.3-1 emission factor for NOx emissions from distillate oil firing. Equal to 20 pounds of NOx per 1,000 gallons of oil fired. As an alternative, the Permittee may use a vendor-supplied emission factor if approved by DAQ.

Q_{NG} = Total monthly natural gas usage in these boilers (**ID Nos. ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)** (million cubic feet per month).

EF_{NG} = AP-42 Table 1.4-1 emission factor for NOx emissions from natural gas firing in a boiler. Equal to 100 pounds of NOx per million cubic feet fired. As an alternative, the Permittee may use a vendor-supplied emission factor if approved by DAQ.

$$E_G = (O \times C \times EF) \times \left(\frac{1\ \text{ton}}{907{,}185\ \text{g}}\right)$$

Where:

E_G = Sum of monthly NOx emissions from the generators (**ID Nos. ES-80G, ES-81G, ES-82G, and ES-83G)** (tons per month).

O = For each generator, the operating hours for that generator (**ID Nos. ES-80G, ES-81G, ES-82G, and ES-83G)** (hours per month).

C = For each generator, the capacity of that generator (horsepower)

EF = Emission factor for NOx from these generators. Equal to 6.9 grams of NOx per horsepower-hour operated (i.e., the allowable emission limit for NSPS Subpart IIII).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.12.a, above.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report of the monitoring and recordkeeping activities in Sections 2.2 A.12.c and d, above, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly NOx emissions from these sources **(ID Nos. ES-80G, ES-81G, ES-82G, ES-83G, ES-FORSCOM1, ES-FORSCOM2, and ES-FORSCOM3)** for the previous 17 months.
   ii. The rolling 12-month total NOx emissions from these sources for each month in the reporting period.
   iii. The monthly quantities of natural gas and No. 2 fuel oil consumed in these sources for the previous 17 months.
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-91G, ES-92G, ES-93G, and ES-94G)

13. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, these emergency generators **(ID Nos. ES-91G, ES-92G, ES-93G, and ES-94G)** shall emit to the atmosphere less than 39.61 tons of nitrogen dioxide total per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.13.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. In order to demonstrate compliance with the limit in Section 2.2 A.13.a, above, the combined operation of these sources **(ID Nos. ES-91G, ES-92G, ES-93G, and ES-94G)** shall be less than 1,980 hours per 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the total operations exceed this limit.

d. For each month, the Permittee shall record the total hours of operation for these sources **(ID Nos. ES-91G, ES-92G, ES-93G, and ES-94G)** for that month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report of the monitoring and recordkeeping activities in Section 2.2 A.13.d, above, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly combined hours of operation of these sources **(ID Nos. ES-91G, ES-92G, ES-93G, and ES-94G)** for the previous 17 months.

ii. The rolling 12-month total combined hours of operation for these sources for each month in the reporting period.

iii. All instances of deviations from the requirements of this permit must be clearly identified.

(ID Nos. ES-33B and ES-34B)

14. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, the turbine/steam generation unit cogeneration system **(ID Nos. ES-33B and ES-34B)** shall discharge into the atmosphere less than 75 tons of nitrogen dioxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.14.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The use of fuels in the turbine/steam generation unit cogeneration system **(ID Nos. ES-33B and ES-34B)** shall be limited such that nitrogen dioxide emissions shall not exceed the limit in Section 2.2 A.14.a, above. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula for the firing of No. 2 fuel oil and natural gas in the turbine/steam generation unit cogeneration system:

$$E = \left[(Q_{HRSG} \times EF_{HRSG}) + (Q_{turb,NG} \times EF_{turb,NG}) + (Q_{turb,oil} \times EF_{turb,oil})\right] \Big/ \left(2{,}000 \ \frac{\text{lb}}{\text{ton}}\right)$$

Where:

E = The monthly NOx emissions from these sources **(ID Nos. ES-33B and ES-34B)** (tons per month)

Q_{HRSG} = Total hours of operation of the HRSG **(ID No. ES-34B)** (hours per month)

EF_{HRSG} = Vendor-supplied emission factor for the HRSG **(ID No. ES-34B)**, equal to 6.12 pounds of NOx per hour of operation.

$Q_{turb,NG}$ = Total hours of operation of the turbine **(ID No. ES-33B)** while burning natural gas (hours per month)

$EF_{turb,NG}$ = Site-specific emission factor for the turbine **(ID No. ES-33B)** while burning natural gas, equal to 3.97 pounds of NOx per hour of operation.

$Q_{turb,oil}$ = Total hours of operation of the turbine **(ID No. ES-33B)** while burning No. 2 oil (hours per month)

$EF_{turb,oil}$ = Site-specific emission factor for the turbine **(ID No. ES-33B)** while burning No. 2 oil, equal to 16.14 pounds of NOx per hour of operation.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculations are not performed or if the emissions exceed the limit in Section 2.2 A.14.a, above.

d. The Permittee shall keep monthly records of the amount of natural gas and No. 2 fuel oil used in these sources **(ID Nos. ES-33B and ES-34B)** and monthly NOx emissions in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities in Section 2.2 A.14.c and d, above, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month time period between July and December, July 30 of each calendar year for the preceding six-month time period January and June. The report shall contain the following:
   i. The monthly NOx emissions from these sources **(ID Nos. ES-33B and ES-34B)** for the previous 17 months.
   ii. The rolling 12-month total NOx emissions from these sources for each month in the reporting period.
   iii. The monthly quantities of natural gas and No. 2 fuel oil consumed in these sources for the previous 17 months.
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

B. Facility-wide boilers subject to MACT Subpart DDDDD:

1. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 63.7490(d), 63.7499(l)]

a. For these boilers (*i.e., sources designed to burn gas 1 fuels (with oil during curtailment) or light liquid, with no oxygen trim*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

Operating Restriction [15A NCAC 02Q .0508(b)]

c. Except for the oil-fired boilers **(ID Nos. ES-942B, ES-943B, ES-944B, and ES-945B)**, the Permittee shall only burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, and during periods of gas curtailment or gas supply interruptions of any duration.

40 CFR Part 63 Subpart A General Provisions

d. The Permittee shall comply with the requirements of 40 CFR Part 63, Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD. [40 CFR 63.7565]

Compliance Date [40 CFR 63.7495]

e. The Permittee shall comply with the applicable requirements:
   i. For new or reconstructed boilers, upon startup of the boilers.
   ii. For existing boilers, the Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. [40 CFR 63.7510(e), 63.56(b)] *These requirements have been met.*

Notifications [40 CFR 63.7545]

f. The following notification requirements apply:
   i. For existing boilers, the Permittee shall submit a Notification of Compliance Status. The notification shall be signed by a responsible official and submitted by July 19, 2019. [40 CFR 64.7545(e). 63.7530(e) and (f)] *This requirement has been met.*
   ii. For new boilers, as an alternative to the initial notification requirements in 40 CFR 63.9(b)(4) and (5), and as allowed by 40 CFR 63.9(i), the Permittee has requested an alternate submittal deadline for initial notifications and notices of compliance status. The alternate submittal date of initial notifications and notices of compliance status for these boilers is semiannually, i.e., postmarked on or before January 30 of each calendar year for the preceding six-month period from July to December and July 30 of each calendar year for the preceding six-month period from January to June. [40 CFR 63.7545(c)]
   iii. The Permittee shall submit a notification of intent to fire an alternative fuel (i.e., fuel oil) within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification shall include the information in 40 CFR 63.7545(f). [40 CFR 63.7545(f)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if this notification requirement is not met.

Work Practice Standards [15A NCAC 02Q .0508(b)]

g. The following work practice standards apply:
   i. For each boiler, the Permittee shall conduct a tune-up of the boiler according to the schedule below:
      (A) For boilers with capacities less than 5 million Btu per hour, the tune-up shall be conducted every five years.
      (B) For boilers with capacities between 5 and 10 million Btu per hour, the tune-up shall be conducted every two years.
      (C) For boilers with capacities greater than 10 million Btu per hour, the tune-up shall be conducted every year.
      [40 CFR 63.7500(a), 63.7540(a)(10), (11), and (12)]

ii. The tune-up shall be conducted while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up as specified below.
(A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown. For boilers with capacities less than 5 million Btu per hour, the Permittee may also perform the burner inspection during the next unscheduled unit shutdown, but the burner must be inspected at least once every 72 months.
(B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
(C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown).
(D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject.
(E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[40 CFR 63.7500(a), 63.7540(a)(10), (11), and (12)]

iii. For new or reconstructed boilers, the initial tune-up must be conducted within the following time periods following the initial startup of the source:
(A) 61 months for boilers with heat input capacities less than 5 million Btu per hour;
(B) 25 months for boilers with heat input capacities between 5 and 10 million Btu per hour; and
(C) 13 months for boilers with heat input capacities greater than 10 million Btu per hour.
[40 CFR 63.7515(d)]

iv. Each subsequent tune-up shall be conducted no more than the below time periods following the previous tune-up:
(A) 61 months for boilers with heat input capacities less than 5 million Btu per hour;
(B) 25 months for boilers with heat input capacities between 5 and 10 million Btu per hour; and
(C) 13 months for boilers with heat input capacities greater than 10 million Btu per hour.
[40 CFR 63.7515(d)]

v. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]

vi. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these work practice requirements are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

h. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. [40 CFR 63.7500(a)(1), Table 3 to 40 CFR Part 63, Subpart DDDDD] *This requirement has been met*.

Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

i. The following recordkeeping requirements apply. The Permittee shall:
i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
[40 CFR 63.7555(a)(1)]

ii. maintain on-site and submit, if requested by the DAQ, an annual report containing the information in paragraphs (A) through (C) below:
(A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the source;
(B) a description of any corrective actions taken as a part of the tune-up; and

(C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

iii. keep the associated records for Section 2.2 B.1.g through h.

iv. keep the following records, pursuant to 15A NCAC 02Q .0508(f) and 40 CFR 63.7555(h):

(A) types of fuels combusted during periods of gas curtailment, gas supply interruption, periodic testing maintenance and operator training;

(B) date and duration of periods of gas curtailment and gas supply interruption; and

(C) date and duration of periods of testing, maintenance and operator training while combusting liquid fuel.

v. keep:

(A) records in a form suitable and readily available for expeditious review;

(B) each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

(C) each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these recordkeeping requirements are not met or if the records show an exceedance of the operating restriction given in Section 2.2 B.1.c above.

Reporting Requirements [15A NCAC 02Q .0508(f)]

j. The following reporting requirements apply:

i. The Permittee shall submit compliance reports to the DAQ based on the following schedule:

(A) a five-year basis for boilers with heat input capacities less than 5 million Btu per hour;

(B) a two-year basis for boilers with heat input capacities between 5 and 10 million Btu per hour; and

(C) an annual basis for boilers with heat input capacities greater than 10 million Btu per hour.

The report shall cover the period from January 1 to December 31 for each covered year. The Permittee shall submit the report postmarked on or before January 30 for the preceding reporting period. [40 CFR 63.7550(a) and (b)]

ii. The compliance report shall also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX; https://cdx.epa.gov/). The Permittee shall use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the Permittee shall submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee shall submit the report to the EPA Administrator at the appropriate address listed in 40 CFR 63.13. The Permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

iii. The compliance report shall contain the following information:

(A) company name and address;

(B) process unit information, emissions limitations, and operating parameter limitations;

(C) date of report and beginning and ending dates of the reporting period;

(D) date of the most recent tune-up for each unit required according to Section 2.2 B.1.g. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown; and

(E) statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 CFR 63.7550(a) and (c), Table 9 to 40 CFR Part 63, Subpart DDDDD]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reporting requirements are not met.

C. Facility-wide emission sources:

1. 15A NCAC 02D .0600: MONITORING: RECORDKEEPING: REPORTING

Monitoring/Recordkeeping

a. The Permittee shall maintain an on-site listing of the emergency generators at this facility. At a minimum, the on-site listing shall include:
   i. an ID number for each emergency engine,
   ii. location of the emergency engine (building),
   iii. capacity of the emergency engine (in kilowatts), and
   iv. fuel type of the engine.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0600 if these records are not kept.

b. The Permittee shall keep records of the use of the temporary boilers (**ID Nos. ES-35B and ES-TEMPBOIL**) and the temporary generators (**ID Nos. ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B**). At a minimum, the records shall include, for each temporary boiler and/or generator:
   i. The date the temporary boiler and/or generator commenced operation.
   ii. The date the temporary boiler and/or generator ceased operation.
   iii. The length of time the temporary boiler and/or generator was in service.
   iv. A record of compliance with 40 CFR Part 60 Subpart Dc, 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ, and 40 CFR Part 63 Subpart DDDDD, as applicable.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0600 if these records are not kept.

c. The capacity of the temporary boilers and temporary generators shall not exceed:
   i. ES-35B: 72.3 million Btu per hour
   ii. ES-TEMPBOIL: 100 million Btu per hour
   iii. ES-TEMPGEN1500A: 1,500 kilowatts
   iv. ES-TEMPGEN1500B: 1,500 kilowatts
   v. ES-TEMPGEN900A: 900 kilowatts
   vi. ES-TEMPGEN900B: 900 kilowatts

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0600 if the size of the temporary sources exceeds these limits.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a semi-annual certification, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The certification shall:
   i. State that the on-site listing in Section 2.2 C.1.a, above, has been updated and is available to DAQ upon request, and
   ii. List the dates any of the temporary boilers and temporary generators (**ID Nos. ES-35B, ES-TEMPBOIL, ES-TEMPGEN1500A, ES-TEMPGEN1500B, ES-TEMPGEN900A, and ES-TEMPGEN900B**) were on-site.
   iii. All deviations shall be clearly identified.

State-enforceable only

2. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

a. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any Toxic Air Pollutant (TAP) listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TAP permitting emission rates (TPER) listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.

b. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements found in 15A NCAC 02D .1100 "Control of Toxic Air Pollutants."

c. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.

d. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

e. When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance 15A NCAC 02Q .0711.

Pollutant (CAS No.)	Carcinogens (lb/yr)	Chronic Toxicant (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Ethyl Acetate (141-78-6)	---	---	36	---

SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
IES-06WO IES-01AB IES-04PD5	Woodworking Operation, located at building 251 Abrasive Blasting, SAAF, located at building P-3354 Paint gun cleaners at MMD and SAAF
IES-01SD	Blade Sanding Shop at SAAF
IES-02SD	Blade Sanding Shop at SAAF
IES-04AB	One abrasive blast cabinet with media recovery and recycling system controlled by fabric filter (1,292 square feet of surface area, CD-04AB)
IES-05I	One natural gas-fired, multiple chamber, pet incinerator, 350 pounds per hour maximum charge rate, 1.4 million Btu per hour heat input primary chamber, and 1.0 million Btu per hour heat input secondary chamber
IES-04I	One natural gas-fired pet incinerator (250 pounds per hour maximum charge rate, multiple chamber, with 1.0 million Btu per hour (minimum) primary burner and a 600,000 Btu per hour (minimum) secondary burner)
IES-03E **MACT PPPPP**	One helicopter small engine test stand located at Simmons AAF
IES-04E **MACT PPPPP**	One helicopter large engine test stand located at Simmons AAF
IES-09H	Direct natural gas-fired make-up air heater (3.3 million Btu per hour total heat input capacity) located in the Materiel Maintenance Building (Y-4804)
IES-02T241	500 gallon HFRAST Diesel
IES-02T183B	1,000 gallon HFRAST Diesel
IES-02T254C	1,000 gallon HFRAST Diesel
IES-02T254D	1,000 gallon HFRAST Diesel
IES-02T390B	250 gallon HFRAST Diesel
IES-02TG137	500 gallon HFRAST Diesel
IES-02TG155	1,000 gallon HFRAST Diesel
IES-02TG250	200 gallon HFRAST Diesel
IES-02TG252	3,000 gallon HFRAST Diesel
IES-02TG260	1,000 gallon HFRAST Diesel
IES-02TG346	3,000 gallon HFRAST Diesel
IES-02TG707	1,500 gallon HFRAST Diesel
IES-02TG713	100 gallon HFRAST Diesel
IES-02TG764	303 gallon HFRAST Diesel
IES-02TG805	1,000 gallon HFRAST Diesel
IES-02TG9	300 gallon HFRAST Diesel
IES-02TG991	303 gallon HFRAST Diesel
IES-03T183A	1,000 gallon HFRAST Gasoline
IES-03T390A	500 gallon HFRAST Gasoline
IES-05T162A	1,000 gallon HFRAST F-24
IES-05T610C	6,000 gallon HFRAST F-24
IES-05TAVF	4,000 gallon HFRAST F-24
IES-05TG159	200 gallon HFRAST F-24
IES-05TSAN	8,000 gallon HFRAST F-24
IES-20T610B	6,000 gallon HFRAST Motor Oil
IES-03T558A	2,000 gallon E-85 storage tank
IES-03T558B	1,000 gallon E-85 storage tank
IES-03T625	1,000 gallon gasoline storage tank
IES-21T610A	6,000 gallon HFRAST Synthetic Oil
IES-11T759B	6,000 HFRUST Gasoline
IES-12T759A	10,000 gallon HFRUST F-24
IES-16T12824	420,000 gallon VFRAST F-24

Emission Source ID No.	Emission Source Description[1,2]
IES-16T12825	420,000 gallon, AST (vertical), F-24, Bldg. 813
IES-16T41102	840,000 gallon VFRAST F-24
IES-16T41104	840,000 gallon VFRAST F-24
IES-16T41113	442,819 gallon VFRAST F-24
IES-16T41114	2,310,000 gallon VFRAST F-24
IES-01UST	UST, gasoline, Building 3-2742
IES-03UST	UST, gasoline, Building A-1913
IES-04UST	UST, gasoline, Building Y-3223
IES-06PD5	Brake Cleaners
IES-07PD6	Jet Washers
IES-01L	Longstreet Landfill with a design capacity of 2.29 million cubic meters (closed)
IES-02L	Landfill 9 (closed)
IES-03L	Landfill 14 (closed)
IES-02N	Non-Destructive inspection, P3354
IES-04N	Non-Destructive inspection, Bldg. 712
IES-01T	HFRAST, #2 Fuel oil
IES-02T	HFRAST, Diesel
IES-03T	HFRAST, Gasoline
IES-04T	HFRAST, F-24
IES-05T	HFRAST, F-24
IES-06T	HFRUST, Off Spec. fuel
IES-07T	HFRUST, Used fuel
IES-08T	HFRUST, Used F-24
IES-09T	HFRUST, #2 Fuel oil
IES-10T	HFRUST, Diesel
IES-11T	HFRUST, Gasoline
IES-12T	HFRUST, F-24
IES-13T	HFRUST, Kerosene
IES-14T	VFRAST, #2 Fuel oil
IES-15T	VFRAST, Diesel
IES-16T	VFRAST, F-24
IES-17T	VFRAST, Used fuel
IES-18T	No. 2 fuel oil storage tank (20,000 gallon capacity)
IES-19T	No. 2 fuel oil storage tank (20,000 gallon capacity)
IES-VFRAST	Off Spec. fuel
IES-01FP	Fueling Point with 5,000 gallon F-24 Horizontal AST and 2,000 gallon Gasoline Horizontal AST
IES-02FP	Fueling Point with 6,000 gallon Gasoline Horizontal AST and 6,000 gallon Diesel Horizontal AST
IES-20T	50,000 gallon HFRAST Diesel
IES-21T	50,000 gallon HFRAST Diesel
IES-22T	50,000 gallon HFRAST Diesel
IES-05E	Outboard Engine Test Stand, E-2576
IES-07E	Outboard Engine Test Stand, 0-1900
IES-08E	Outboard Engine Test Stand ATF1
IES-01W	Welding, 2-1645
IES-02W	Welding, 251
IES-03W	Welding, 5-5211
IES-04W	Welding, A-2515
IES-05W	Welding, A-4505
IES-06W	Welding, C-8728
IES-09W	Welding, P-3354
IES-10W	Welding, O-1900

Emission Source ID No.	Emission Source Description[1,2]
IES-12W	Welding, Y-5015
IES-13W	Welding Shop, building 558
IES-15W	Welding Shop, building A2206
IES-16W	Welding Shop, building A2905
IES-17W	Welding Shop, building A3804
IES-18W	Welding Shop, building A4326
IES-19W	Welding Shop, building A4333
IES-20W	Welding Shop, building A4521
IES-21W	Welding Shop, building M8139
IES-22W	Welding shop, D-2340
IES-23W	Soldering shop, Yarborough Complex
IES-24W	Welding operations ATF1
IES-27W	Welding operation (A-3319)
IES-28W	Welding operation (Building M-8311)
IES-10PD558	Degreasing Operation (43 Trans.) building 558
IES-10PD712A	Degreasing Operation (Wheel and Tire) building 712 (1 of 2)
IES-10PD712B	Degreasing Operation (Wheel and Tire) building 712 (2 of 2)
IES-10PD715	Degreasing Operation (43 MXS) building 715
IES-10PD723	Degreasing Operation (AGE Maintenance) building 723
IES-10PD768	Degreasing Operation (AGE Maintenance) building 768
IES-10PD5005	Degreasing Operation (23 Trans.) building 5005
IES-HFRAST	Off Spec. gasoline storage tanks
IES-01SDU	Solvent Distillation Unit
IES-11C	Painting Room, H-1951
IES-01CM	Composting Operation
IES-10H	Direct natural gas-fired make-up air heater (3.3 million Btu hour heat input)
IES-938B	Natural gas-fired air make-up unit (7.00 million Btu per hour), Building A2537
IES-939B	Natural gas-fired air make-up unit (7.00 million Btu per hour), Building A2537
IES-940B	Natural gas-fired air make-up unit (7.00 million Btu per hour), Building A2537
IES-941B	Natural gas-fired air make-up unit (7.00 million Btu per hour), Building A2537
IES-00B-NG-WH	803 natural gas-fired hot water heaters, each with heat input capacity less than 1.6 million Btu per hour and meeting the definition of "hot water heater" under 40 CFR 63.7576 (583.31 million Btu per hour total heat input capacity)
IES-00B-O-WH	46 No. 2 oil-fired hot water heaters, each with heat input capacity less than 1.6 million Btu per hour and meeting the definition of "hot water heater" under 40 CFR 63.7576 (27.14 million Btu per hour total heat input capacity)
IES-00B-P-WH	29 propane-fired hot water heaters, each with heat input capacity less than 1.6 million Btu per hour and meeting the definition of "hot water heater" under 40 CFR 63.7576 (20.6 million Btu per hour total heat input capacity)
IES-00B-NGO-WH	7 natural gas/No. 2 fuel oil-fired hot water heaters each with heat input capacity less than 1.6 million Btu per hour and meeting the definition of "hot water heater" under 40 CFR 63.7576 (6.42 million Btu per hour total heat input capacity)
IES-00B-NGO **MACT DDDDD**	2 natural gas/No. 2 fuel oil-fired boilers, each with heat input capacity less than 2.25 million Btu per hour and subject to MACT Subpart DDDDD (4.25 million Btu per hour total heat input capacity)
IES-00B-NG **MACT DDDDD**	96 natural gas-fired boilers, each with heat input capacity less than 11.6 million Btu per hour and subject to MACT Subpart DDDDD (265.63 million Btu per hour total heat input capacity)
IES-00B-O **MACT DDDDD**	7 No. 2 oil-fired boilers, with heat input capacity less than 2.25 million Btu per hour and subject to MACT Subpart DDDDD (14.61 million Btu per hour total heat input capacity)

Emission Source ID No.	Emission Source Description[1,2]
IES-EMGEN-NEW **MACT ZZZZ** **NSPS IIII**	57 small diesel-fired emergency-use engines, each with engine capacity less than 644 horsepower and subject to NSPS Subpart IIII (12,520 horsepower total capacity)
IES-EMGEN-EX **MACT ZZZZ**	18 small diesel-fired emergency-use engines, each with engine capacity less than 644 horsepower and which commenced construction before the date in 40 CFR 60.4200(a)(2) and have not been modified or reconstructed after that date (4,835 horsepower total capacity)
IES-01TP **MACT DDDDD**	Tank cleaning and purging system with one 5.0 million Btu per hour heat input natural gas-fired water heater

[1] Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

[2] When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”

SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of

the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Title V Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements [15A NCAC 02Q .0508(f)]
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*
2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
   a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
      i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
         - name and location of the facility;
         - nature and cause of the malfunction or breakdown;
         - time when the malfunction or breakdown is first observed;
         - expected duration; and
         - estimated rate of emissions;
      ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
      iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

I.B **Reporting Requirements for Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Permit Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.C **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee 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.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508(l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the

facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent;
4. the method(s) used for determining the compliance status of the source during the certification period;
5. each deviation and take it into account in the compliance certification; and
6. 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 (CAM) occurred.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(3)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]
The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.

iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.

a. The written notification shall include:
   i. a description of the change at the facility;
   ii. the date on which the change will occur;
   iii. any change in emissions; and
   iv. any permit term or condition that is no longer applicable as a result of the change.
b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.