ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

??, 2022

Mr. Adam Miklos
Mill Manager
International Paper – New Bern Mill
1785 Weyerhaeuser Road
Vanceboro, North Carolina 28586

SUBJECT: Air Quality Permit No. 02590T58
Facility ID: 2500104
International Paper – New Bern Mill
Vanceboro, North Carolina
Craven County
Fee Class: Title V
PSD Class: Major

Dear Mr. Miklos:

In accordance with your completed Air Quality Permit Applications for a Significant modification of your Title V permit, received February 3, 2020, and a 502(b)(10) Notification received on March 25, 2020, we are forwarding herewith Air Quality Permit No. 02590T58 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.

Craven County has triggered increment tracking under PSD for PM_{10}, SO_2 and NOx. Any increment changes associated with this modification were addressed in the Part 1 permit applications (Nos. 2500104.18A and 2500104.18B).

This Air Quality Permit shall be effective from ??, 2022 until April 30, 2023, 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 Brian Bland at 919-707-8732 or Brian.Bland@ncdenr.gov.

Sincerely yours,

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

c: Michael Sparks, EPA Region 4 (Permit and Review)
Washington Regional Office
Central Files
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 Quality Permit No. 02590T57:*

Page	Section	Changes
All	All	Updated dates and permit revision number
3	N/A	List of Acronyms Attachment moved to in front of Section 1 of the air permit
4	1	Updated description of Packed Tower Type Wet Scrubber (ID No. CD 430-531) to 50 gallon per minute to align with manufacturer Recommendation Removed No. 4 and No. 6 fuel oils as permitted fuels for Recovery Boiler (ID No. ES 445-001) Removed * footnote and associated emission source tags for the Recovery Boiler (ID No. ES 445-001) and Continuous Digester (ID No. ES 402-141) Removed ** footnote and associated emission source tag for Smelt Dissolving Tank (ID No. ES 445-121) Removed No. 6 fuel oil as permitted fuel for Lime Kiln (ID No. ES 455-061
16	2.1 B.3.d	Updated wording for clarity
19	2.1 C.5.a	Added “than” to correct historical typo
34	2.1 I	Removed No. 4 and No. 6 fuel oils from Recovery Boiler (ID No. ES 445-001) description[1] Removed 15A NCAC 02D .0516 requirements associated with No. 4 and No. 6 fuel oils Updated NSPS Subpart BB reporting requirements to be consistent with similar facilities and following the Technical Services Section October 27, 2020 memorandum
37	2.1 I.7	Changed General Criteria - Indicator Range from 15% to 20% opacity to standardize with corrective action level in 40 CFR 63.864(k)(l)(i) Updated General Criteria - Quality Improvement Plan (QIP) Threshold wording to improve clarity
N/A	2.1 J.6	Removed “15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT” permit application requirement

Page	Section	Changes
43	2.1 K	Removed No. 6 fuel oil from Lime Kiln (ID No. ES 455-061) description Removed 15A NCAC 02D .0516 requirements associated with No. 6 fuel oil Updated NSPS Subpart BB reporting requirements to be consistent with similar facilities and following the Technical Services Section October 27, 2020 memorandum
46	2.1 K.5	Changed General Criteria - Indicator Range from 15% to 20% opacity to standardize with corrective action level in 40 CFR 63.864(k)(l)(i) Updated General Criteria - Quality Improvement Plan (QIP) Threshold wording to improve clarity
48	2.1 L.1.d.ii	Removed maximum flow rate for wet scrubber (ID No. CD-455-408)
54	2.1 N	Corrected citations that referred to Section 2.1 O
67	2.2 B.l	Removed requirements that applied prior to October 11, 2019 and now unnecessary "after October 11, 2019" qualifiers
N/A	2.2 C	Removed 112(j) Case-by-case MACT requirements
N/A	2.2 D.6	Removed "15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT" permit application requirement
N/A	2.3 A.2	Removed 15A NCAC 02Q .0317 requirement associated with No. 4 and No. 6 fuel oils
86	3 (was Attachment)	Insignificant Activities per 15A NCAC 02Q .0503(8) Attachment moved to Section 3 of the air permit Corrected description of ID No. IES-206-049-70 as fully described in AD#3696
89	4 (was Section 3)	Updated General Conditions to current version

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

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
02590T58	**02590T57**	**??, 2022**	**April 30, 2023**

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than October 31, 2022.

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: **International Paper – New Bern Mill**
Facility ID: **2500104**
Primary SIC Code: **2611**
NAICS Code: **32211**

Facility Site Location: **1785 Weyerhaeuser Road**
City, County, State, Zip: **Vanceboro, Craven County, NC 28586**
Mailing Address: **1785 Weyerhaeuser Road**
City, State, Zip: **Vanceboro, North Carolina 28586**

Application Numbers: **2500104.20A and 2500104.20B**
Complete Application Dates: **February 3, 2020 and March 25, 2020**

Division of Air Quality, Regional Office Address: **Washington Regional Office**
943 Washington Square Mall
Washington, North Carolina 27889

Permit issued this the ??th day of ??, 2022.

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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 SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all 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
Power Area			
ES 150-001 **Case-By-Case MACT; MACT Subpart DDDDD**	No. 1 Power Boiler - No. 2 fuel oil/natural gas-fired (579 million Btu per hour nominal maximum heat input)	NA	NA
ES 161-001 **NSPS Subpart Db; MACT Subpart S Control Device; Case-By-Case MACT; MACT Subpart DDDDD**	No. 2 Power Boiler - No. 2 fuel oil/propane/natural gas/LVHC gases/HVLC gases/SOGs-fired (287 million Btu per hour maximum heat input rate from by-product gas, natural gas, propane and fuel oil/267 million Btu per hour maximum heat input rate from oil only)	CD 161-018	Caustic scrubber (400 gallons per minute nominal liquid injection rate)
		CD 161-024	Chevron-type mist eliminator
ES 160-TMP	Temporary Boiler - No. 2 fuel oil-fired (greater than 30 million Btu/hour and less than 100 million Btu/hour nominal maximum heat input)	NA	NA
ES 155-999	Power Area Fugitive Sources	NA	NA
Foul Condensate Handling System			
ES 161-078 **NSPS Subpart BB; MACT Subpart S**	Steam Stripper (SOG source)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via LVHC (SOG) NCG Collection System
ES 401-007 **MACT Subpart S**	Stripper Feed Tank No. 1 (LVHC source)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System or HVLC NCG Collection System
ES 401-013 **MACT Subpart S**	Stripper Feed Tank No. 2 (LVHC source)		
ES 161-484 **MACT Subpart S**	LVHC Foul Gas Collection System Cooler	or	or
ES 402-722 **MACT Subpart S**	HVLC Foul Gas Collection System Cooler	ES 455-061	Lime Kiln via LVHC collection system
ES 402-943 **MACT Subpart S**	HVLC Gas Collection System Cooler		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Waste Water Treatment and IC Engines			
ES 185-000 and ES 185-010	Wastewater Treatment Systems	NA	NA
ES 185-127 **MACT Subpart ZZZZ**	River Oxygen Diesel-fired emergency-use motor (400 horsepower)	NA	NA
ES 185-118 **MACT Subpart ZZZZ; NSPS Subpart IIII**	Leachate Canal Diesel-fired Pump Engine (70 horsepower)	NA	NA
ES 100-004 **MACT Subpart ZZZZ; NSPS Subpart IIII**	Diesel-fired Fire Water Pump Engine (305 horsepower)	NA	NA
ES 101-104 **MACT Subpart ZZZZ**	Administrative Building Diesel-fired Emergency Generator (438 horsepower)	NA	NA
ES 455-062 **MACT Subpart ZZZZ**	Lime Kiln Diesel-fired Emergency Motor (54 horsepower)	NA	NA
Wood Yard			
ES 354-044	Log Debarking	NA	NA
ES 356-999	Pine Wood Chip Piles	NA	NA
Turpentine Recovery			
ES 401-704 **MACT Subpart S**	Turpentine Decanter	ES 161-001	No. 2 Power Boiler via LVHC/HVLC NCG Collection System
ES 401-709 **MACT Subpart S**	Underflow Decanter	or	or
ES 402-211 **NSPS Subpart BB; MACT Subpart S**	Primary Condenser	ES 445-001	Recovery Boiler via LVHC/HVLC NCG Collection System
ES 402-220 **NSPS Subpart BB; MACT Subpart S**	Secondary Condenser	or	or
ES 401-071-02 **MACT Subpart S**	Turpentine Storage Tank	ES 455-061	Lime Kiln via LVHC NCG Collection System
ES 401-076	Turpentine Sump	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Digester Area			
ES 402-119 **NSPS Subpart BB; MACT Subpart S**	Chip Bin (HVLC source)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC/LVHC NCG Collection System
ES 402-179 **NSPS Subpart BB; MACT Subpart S**	Blow Tank (HVLC source)		
ES 402-141 **NSPS BB; MACT S**	Continuous Digester (LVHC source)	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC/LVHC NCG Collection System
		or	or
		ES 455-061	Lime Kiln via LVHC NCG Collection System
ES 402-190 **NSPS Subpart BB; MACT Subpart S**	Filtrate Wash Liquor Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
ES 402-150 **NSPS Subpart BB; MACT Subpart S**	Primary Flash Tank		
ES 402-151 **NSPS Subpart BB; MACT Subpart S**	Secondary Flash Tank		
Washing and Screening			
ES 420-006 **NSPS Subpart BB; MACT Subpart S**	Filtrate Storage Tank No. 1	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
ES 420-008 **NSPS Subpart BB; MACT Subpart S**	Filtrate Storage Tank No. 2		
ES 420-025 **MACT Subpart S**	Foam Tank		
ES 420-010 **MACT Subpart S**	Brownstock Washer System		
ES 420-044 **MACT Subpart S**	Brown Stock Decker		
ES 420-123 **MACT Subpart S**	Primary Rejects Tank	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Washing and Screening (cont.)			
ES 420-140 **MACT Subpart S**	Secondary Rejects Tank	NA	NA
ES 420-332 **MACT Subpart S**	Brown Decker Filtrate Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
ES 420-029	Washed Stock Chest	NA	NA
ES 420-325 **MACT Subpart S**	Brown Stock Washed HD Chest	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
Oxygen Delignification Area			
ES 420-052	200 Ton Brownstock HD Chest	NA	NA
ES 420-229 **MACT Subpart S**	Oxygen Blow Tank	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
ES 420-235 **MACT Subpart S**	No. 1 Press Washer		
ES 420-259 **MACT Subpart S**	No. 1 Press Washer Level Tank		
ES 420-261 **MACT Subpart S**	No. 1 Press Washer Filtrate Tank		
ES 420-274 **MACT Subpart S**	Oxygen Interstage Pulp Tank	NA	NA
ES 420-280 **MACT Subpart S under AOS1**	No. 2 Press Washer	AOS 1: ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System during AOS 1 when No. 1 wash press is out of service.
ES 420-302 **MACT Subpart S under AOS1**	No. 2 Press Washer Level Tank		
ES 420-306 **MACT Subpart S under AOS1**	No. 2 Press Washer Filtrate Tank		
ES 420-202	White Liquor Oxidizer	CD 420-207	Dual Chevron-type Mist Eliminators

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Bleach Plant Area			
ES 425-047 **MACT Subpart S**	D1 Stage Tower	CD 425-101	Bleach Plant Fluidized Bed Wet Scrubber (660 gallons per minute nominal white liquor recirculation rate)
ES 425-054 **MACT Subpart S**	D1 Stage ClO2 Seal Box		
ES 425-052 **MACT Subpart S**	D1 Stage Bleach Washer		
ES 425-076 **MACT Subpart S**	D2 Stage Tower		
ES 425-083 **MACT Subpart S**	D2 Stage ClO2 Seal Box		
ES 425-081 **MACT Subpart S**	D2 Stage Bleach Washer		
ES 425-036 **MACT Subpart S**	Pre-Bleach Washer	NA	NA
ES 425-038 **MACT Subpart S**	Pre-Bleach Seal Tank	NA	NA
ES 425-060	Eop Stage Tower	NA	NA
ES 425-065	Eop Stage Bleach Washer	NA	NA
ES 425-067	Eop Stage Seal Box	NA	NA
Bleached Chemical Preparation Area			
ES 430-047	East Chlorine Dioxide Storage Tank (79,489 gallons)	CD 430-531	Packed Tower Type Wet Scrubber (50 gallon per minute nominal chilled water injection rate)
ES 430-542	Chlorine Dioxide Generator System		
ES 430-543	West Chlorine Dioxide Storage Tank (112,000 gallons)		
Evaporator Area			
ES 440-016 **NSPS Subpart BB; MACT Subpart S**	1A Effect Evaporator	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System
ES 440-015 **NSPS Subpart BB; MACT Subpart S**	1B Effect Evaporator		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES 440-014 **NSPS Subpart BB; MACT Subpart S**	Second Effect Evaporator		
ES 440-013 **NSPS Subpart BB; MACT Subpart S**	Third Effect Evaporator		
ES 440-012 **NSPS Subpart BB; MACT Subpart S**	Fourth Effect Evaporator		
ES 440-011 **NSPS Subpart BB; MACT Subpart S**	Fifth Effect Evaporator	or	or
ES 440-009 **NSPS Subpart BB; MACT Subpart S**	Sixth Effect Evaporator	ES 455-061	Lime Kiln via LVHC NCG Collection System
ES 440-400 **NSPS Subpart BB; MACT Subpart S**	C-1 Black Liquor Concentrator		
ES 440-401 **NSPS Subpart BB; MACT Subpart S**	C-2 Black Liquor Concentrator		
ES 440-850 **NSPS Subpart BB; MACT Subpart S**	HSC 1 Concentrator		
ES 440-852 **NSPS Subpart BB; MACT Subpart S**	HSC 2 Concentrator		
Evaporator Area (cont.)			
ES 440-008 **NSPS Subpart BB; MACT Subpart S**	Evaporator/Concentrator Hotwell System	ES 161-001	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System
		or	or
		ES 455-061	Lime Kiln via LVHC NCG Collection System

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES 440-713 **NSPS Subpart BB; MACT Subpart S**	No. 1 Pre-Evaporator	ES 161-001	No. 2 Power Boiler or Recovery Boiler via LVHC NCG Collection System
ES 440-719 **NSPS Subpart BB; MACT Subpart S**	No. 2 Pre-Evaporator	or	or
ES 440-720 **NSPS Subpart BB; MACT Subpart S**	No. 3 Pre-Evaporator	ES 455-061	Lime Kiln via LVHC NCG Collection System
ES 440-865	80% Black Liquor Storage Tank	NA	NA
Chemical Recovery			
ES 445-001 **MACT MM; NSPS BB; MACT S Control Device; PSD**	Recovery Boiler (New Design) - Black Liquor Solids/HVLC Gases/LVHC/SOG/Natural Gas/No. 2 fuel oil-fired boiler (4.5 million pounds of Black Liquor Solids per day nominal maximum firing rate, 346.7 million Btu per hour maximum heat input from natural gas and HVLC/LVHC/SOG)	CD 445-340 and CD 445-369 (IDs for each chamber)	Dry Bottom, two-chamber electrostatic precipitator (201,960 square feet of collection plate area, total)
ES 445-121 **MACT MM; NSPS BBa**	Smelt Dissolving Tank	CD 445-370	Wet Scrubber (735 gallons per minute nominal injection rate)
		ES 445-001	Recovery Boiler
Pulp Machine Area			
ES 465-001	Pulp Dryer Operation	NA	NA
Tall Oil Production			
ES 500-001	CTO Reactor System	ES 161-001 or ES 445-001	No. 2 Power Boiler or Recovery Boiler via HVLC NCG Collection System
Miscellaneous Sources			
HAULRDS	Haul roads	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Causticizing Area			
ES 455-003	No. 1 Green Liquor Clarifier	NA	NA
ES 455-403	No. 2 Green Liquor Clarifier	NA	NA
ES 455-015	No. 1 Causticizer	NA	NA
ES 455-017	No. 2 Causticizer	NA	NA
ES 455-019	No. 3 Causticizer	NA	NA
ES 455-020	No. 4 Causticizer	NA	NA
ES 455-410	No. 5 Causticizer	NA	NA
ES 455-061 **NSPS BB;** **MACT S Control Device;** **MACT MM**	Lime Kiln – No. 2 fuel oil/natural gas/LVHC gases-fired (118 million Btu per hour nominal maximum heat input rate)	CD 455-433	Single-chamber, three-field, high-voltage, negative-corona electrostatic precipitator (30,222 square feet of collection plate area)
ES 455-036	Mud Washer/Weak Wash Tank	NA	NA
ES 455-058	Lime Mud Filter Vacuum Pump	NA	NA
ES 455-059	Lime Conveyor Transfer Points (Hot Lime Pan Conveyor)	CD 455-751-00	simple cyclone (39.6 inches in diameter)
ES 455-073-08	Hot Lime Pan Conveyor		
ES 455-072-00	Hot Lime Crusher		
ES 455-074-08	Hot Lime Bucket Elevator	CD 455-754-00	Bagfilter (1,885 square feet of filter area)
ES 455-075-02	Hot Lime Bin		
ES 455-749-02	Fresh Lime Bin		
ES 455-079	Lime Mud Filter	NA	NA
ES 455-406	Lime Slaker	CD 455-408	Spray chamber wet scrubber (50 gallons per minute nominal injection rate)
ES 455-999	Bucket Conveyor Fugitive Sources	NA	NA

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 device(s) 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. No. 1 Power Boiler:
No. 2 fuel oil/natural gas-fired boiler (ID No. ES 150-001)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	0.195 pounds per million Btu heat input	15A NCAC 02D .0503(c)
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Nitrogen Oxides	0.8 pounds per million Btu heat input while firing oil or natural gas	15A NCAC 02D .0519
Visible Emissions	40 percent opacity	15A NCAC 02D .0521
Particulate Matter (filterable only)	Less than 98 tons per consecutive twelve-month period	15A NCAC 02Q .0317 (PSD Avoidance)
Particulate Matter (PM10) (filterable only)	Less than 82 tons per consecutive twelve-month period	15A NCAC 02Q .0317 (PSD Avoidance)
Sulfur Dioxide	Less than 1,440 tons per consecutive twelve-month period	15A NCAC 02Q .0317 (PSD Avoidance)
Nitrogen Oxides	Less than 240 tons per consecutive twelve-month period	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	Conduct energy assessment, annual tune-ups, and good work-practices. See Section 2.2 C.1.	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)
Regulated NSR Pollutants	See Permit Condition 2.2 D	15A NCAC 02D .0530(u)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100

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

a. Emissions of particulate matter (filterable and condensable combined) from the combustion of fuel oil that are discharged from this source into the atmosphere shall not exceed 0.195 pounds per million Btu heat input.

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 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 matter emitted from the firing of natural gas or No. 2 fuel oil in this source **(ID No. ES 150-001)** for this regulation.

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

a. Emissions of sulfur dioxide from this source (**ID Nos. ES 150-001**) 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.

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 A. 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/reporting is required for sulfur dioxide emissions from the firing of natural gas and/or No. 2 fuel oil in this source (**ID No. ES 150-001).**

3. 15A NCAC 02D .0519: CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS

a. Emissions of nitrogen oxides shall not exceed 0.8 pounds per million Btu of heat input from any oil or gas-fired boiler with a capacity of 250 million Btu per hour or more.

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 A. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

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

c. No Monitoring/Recordkeeping/reporting is required for nitrogen oxides emitted from the firing of natural gas or No. 2 fuel oil in this source for this regulation.

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the boiler (**ID No. ES 150-001**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 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 90 percent opacity.

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 A.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

b. No monitoring/recordkeeping/reporting is required for visible emissions emitted from this source **(ID No. ES 150-001)**.

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 major modifications, the boiler (**ID Nos. ES 150-001**) shall discharge into the atmosphere less than the following per consecutive twelve-month period:

Pollutant	Emission Limit (tons per consecutive twelve-month period)
Particulate Matter (TSP) [Filterable; Front Half Only]	98
Particulate Matter (PM10) [Filterable; Front Half Only]	82
Sulfur Dioxide	1,440
Nitrogen Oxides	240

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 limits given in Section 2.1 A. 5. a. (**ID No. ES 150-001**) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. To ensure compliance, the Permittee shall maintain records of the emissions of TSP, PM10, SO2, and NOx from No. 1 Power Boiler (**ID No. ES 150-001**) during each month. Emissions shall be calculated using the amount of gas and/or fuel oil fired during the month and the emission factor from the most recent DAQ-approved stack test or AP-42. The record of the emissions for each month shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the emissions for each month are not recorded.

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

d. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities within 30 days after each calendar year half, postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:

   i. the monthly emissions of TSP, PM10, SO2, and NOx from the No. 1 Power Boiler (**ID No. ES 150-001**) for the previous 17 months. The total emissions of TSP, PM10, SO2, and NOx from the No. 1 Power Boiler must be calculated for each of the 12-month periods over the previous 17 months; and
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

B. No. 2 Power Boiler:
No. 2 fuel oil/propane/natural gas/LVHC gases/HVLC gases/SOG -fired boiler (ID No. ES 161-001), controlled by caustic scrubber (ID No. CD-161-018) in series with chevron-type mist eliminator[1] (ID No. CD-161-024)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	0.180 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur Dioxide	0.20 pounds per million Btu heat input, and burn only "very low sulfur fuel"	15A NCAC 02D .0524 (40 CFR Part 60, Subpart Db)
Nitrogen Oxides	See Section 2.1 B.2	15A NCAC 02D .0524 (40 CFR 60, Subpart Db)
Visible Emissions	(while firing fuel oil in combination with any other fuel) 20 percent opacity	15A NCAC 02D .0524 (40 CFR 60, Subpart Db)
	(while not firing fuel oil) 20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	Conduct energy assessment, annual tune-ups, and good work practices. See Section 2.2 C.1	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)
Regulated NSR Pollutants	See Section 2.2 D	15A NCAC 02D .0530(u)

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

a. Emissions of particulate matter (filterable and condensable combined) from the combustion of fuel oil that are discharged from this source **(ID No. ES 161-001)** into the atmosphere shall not exceed 0.180 pounds per million Btu heat input.

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

b. If emissions 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 from the firing of No.2 fuel oil/natural gas /LVHC gases/HVLC gases/SOG in this source (**ID No. ES 161-001**) for this regulation.

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

a. Visible emissions from the source (**ID No. ES 161-001**) while fuel oil is not being burned 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.

1 Control devices CD-161-018 and CD-161-024 are only required for compliance while this source is burning LVHC/HVLC/SOG gasses.

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 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 when fuel oil is not burned in this source (**ID Nos. ES 161-001**).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart Db)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in 15A NCAC 02D .0524 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart Db, including Subpart A "General Provisions."

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

b. i. While firing fuel oil, sulfur dioxide (SO_2) emissions from this boiler shall not exceed 0.20 pounds per million Btu of heat input. [40 CFR 60.42b(a)].
   ii. Nitrogen oxides (NOx) emissions from this boiler shall not exceed 0.10 pounds per million Btu of heat input when fossil fuel alone is combusted. [40 CFR 60.44b(a), 40 CFR 60.49b(x)(1)(i)]
   iii. NOx emissions from this boiler shall not exceed 0.5 pounds per million Btu of heat input when fossil fuel and chemical by-product waste are simultaneously combusted. [40 CFR 60.49b(x)(1)(ii)]
   iv. While firing fuel oil, the Permittee shall not cause to be discharged into the atmosphere any gases from this boiler that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43b(f)]
   v. The Permittee shall only burn fuel in this boiler that meets the definition of "very low sulfur fuel" found in 40 CFR 60.42b.

c. i. The emission limit for NOx applies at all times. [40 CFR 60.44b(h), 40 CFR 60.44b(a)]
   ii. The opacity limit applies at all times fuel oil is being combusted, except during periods of startup, shutdown, or malfunction. [40 CFR 60.43b(f)]

d. Compliance with the NOx emission limits is determined based on a 30-day rolling average. Compliance with the SO_2 emission limit is determined as described in Section 2.1 B.3.i. [40 CFR 60.42b(e), 40 CFR 60.44b(i)]

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

e. 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 B.2.b., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

f. The Permittee shall install, calibrate, maintain, and operate a CEMS for measuring NOx and O_2 or CO_2 emissions discharged into the atmosphere from this boiler **(ID No. ES 161-018).** [40 CFR 60.46b(e), 40 CFR 60.48b(b)(1)]

i. The NOx CEMS shall be operated and record data during all periods of operation of this boiler except during periods of CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)]
ii. The CEMS shall record and calculate 1-hour NOx average emission rates per 40 CFR 60.13(h)(2). [40 CFR 60.48b(d)]
iii. The CEMS shall be installed, evaluated, and operated per the procedures under 40 CFR 60.13, and the NOx span value shall be determined according to 40 CFR 60.48b(e)(2). [40 CFR 60.48b(e)]

g. When NOx emission data has not been obtained due to CEMS malfunction or maintenance, the Permittee shall use a method listed in 40 CFR 60.48b(f) to provide emission data for a minimum of 75% of the operating hours in each operating day and for at least 22 out of 30 successive operating days.

h. In order to demonstrate compliance with the opacity limit while firing fuel oil in combination with SOG/LVHC/HVLC gases, the Permittee shall continuously monitor and record the following surrogate parameters [40 CFR 60.48b(a), 40 CFR 60.48b(j)(2), 40 CFR 60.48b(j)(7)]:

i. The stack gas temperature shall be maintained below 150 degrees F (3-hour average); and
ii The recirculating scrubber reagent flowrate shall be maintained above 400 gallons per minute (3-hour average).

i. The Permittee shall obtain and maintain fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from any fuel supplier that certify that the oil burned in this boiler meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this Paragraph, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. [40 CFR 60.42b(j)(2), 40 CFR 60.45b(j), 40 CFR 60.47b(f), 40 CFR 60.49b(r)(1)]

Reporting [15A NCAC 02Q .0508(f), 40 CFR 60.49b(h) – (j)]

j. The Permittee shall submit a summary report of the monitoring and recordkeeping activities, acceptable to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

i. All instances of deviations from the requirements of this permit must be clearly identified.
ii. All instances of excess emissions meeting the definitions under 40 CFR 60.49b(h) shall be clearly identified.

C. Temporary Boiler:
No. 2 fuel oil-fired boiler (ID No. ES-160-TMP)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	See Section 2.1 C.1.	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Sulfur Dioxide	Less than 40 tons per consecutive twelve-month period.	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Hazardous Air Pollutants	Meet definition of "temporary boiler" under MACT Subpart DDDDD	15A NCAC 02Q .0317 (15A NCAC 02D .1111 Avoidance)

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

a. Emissions of particulate matter (filterable and condensable combined) from the combustion of fuel oil that are discharged from this source into the atmosphere shall not exceed the allowable limit pursuant to 15A NCAC 02D .0503. The actual emission limit shall be determined by the specific heat input rating added to the total facility 02D .0503-subject heat input in million Btu per hour and the equation:

$$E = 1.090 \times Q^{-0.2594}$$

Where
E = allowable emission rate in pounds per million Btu
Q = Facility total 02D .0503-subject maximum heat input in million Btu per hour

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

b. If emissions 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 No. 2 fuel oil in this source for this regulation.

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

a. Visible emissions from the source (**ID No. ES-160-TMP**) 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.

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 .0521.

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

c. No monitoring, recordkeeping, or reporting is required for visible emissions when No. 2 fuel oil is burned in the source (**ID Nos. ES-160-TMP**).

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources 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.

Testing [15A NCAC 02D .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 .0516.

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

c. No monitoring, recordkeeping, or reporting is required for the combustion of No. 2 fuel oil in the source.

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
(for 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS)

a. In order to avoid the applicability of 15A NCAC 02D .0524 and 40 CFR Part 60, Subpart Dc, the temporary boiler (**ID No. ES-160-TMP**) shall:

i. combust distillate oil with a potential SO_2 emission rate no greater than 0.060 lb/MMBtu;
ii. be capable of being moved from one location to another; and
iii. remain onsite for no longer than 180 consecutive days as defined in 40 CFR 60.41c.

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

b. The Permittee shall notify the Regional Office in writing within 10 days of exceeding the 180 day period.

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 major modifications, the temporary boiler (**ID Nos. ES 160-TMP**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive twelve-month period.

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 limits given in Section 2.1 C.5.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. To ensure that emissions are less than the above-specified limits, the Permittee shall not burn more than 1,125,000 gallons of No. 2 fuel oil in the boiler (**ID Nos. ES 160-TMP**) per consecutive twelve-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of fuel burned exceeds this limit.

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

d. The Permittee shall record and maintain records of the amounts (in gallons) of No. 2 fuel oil burned in the boiler (ID Nos. ES 160-TMP) during each month. The record of the amounts of fuel (in gallons) burned during each month shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of fuel burned during each month are not recorded.

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

e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities within 30 days after each calendar year half, postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:

i. the monthly quantities of fuel oil burned in the boiler (**ID Nos. ES 160-TMP**) for the previous 17 months. The total quantities burned must be calculated for each of the twelve-month periods over the previous 17 months; and
ii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS (for 15A NCAC 02D. 1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY)

a. In order to avoid the requirements of 15A NCAC 02D .1111 and 40 CFR Part 63, Subpart DDDDD, the temporary boiler **(ID No. ES-160-TMP)** shall meet the definition of "temporary boiler" as defined in 40 CFR 63.7575:

i. the temporary boiler shall be capable of being moved from one location to another;
ii. the temporary boiler shall not be attached to a foundation;
iii. the temporary boiler (or any replacement for the temporary boiler) shall not perform the same (or similar) function for more than 12 consecutive months unless NCDAQ approves an extension; and
iv. the temporary boiler shall not be moved from one location to another within the facility but continues to perform the same or similar function in an attempt to circumvent the residence time requirements of this definition.

If any temporary boiler does not meet the definition above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

b. The Permittee shall maintain records of the dates that any temporary boiler is installed on-site and the dates that any temporary boilers are removed from the plant site. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records of are not created and retained as required above.

Notifications and Reports [15A NCAC 02Q .0508(f)]

c. Initial Notification. Within 15 days of installing any temporary and/or back-up boiler at the facility, the Permittee shall submit a written notification to the Regional Supervisor, DAQ. The notification shall indicate that actual date of the boiler installation, or where the notification is provided prior to such date, the anticipated date of boiler installation. Additionally, the report must contain the following information: [40 CFR 63.7550(a) and (c)]

i. Company name and address;

ii. Process unit information
iii. Date of report and beginning and ending dates of the reporting period;
iv. The total operating time during the reporting period

D. Foul Condensate Handling System consisting of:

- **Foul Condensate Steam Stripper (ID No. ES 161-078) generating stripper off gases (SOGs);**
- **Stripper Feed Tanks No. 1 and No. 2 (ID Nos. ES 401-007 and 401-013);**
- **LVHC Foul Gas Collection System Cooler (ID No. ES 161-484);**
- **HVLC Foul Gas Collection System Cooler (ID No. ES 402-722); and**
- **HVLC Gas Collection System Cooler (ID No. ES 402-943)**

Each controlled by either:

- **No. 2 Power Boiler (ID No. ES 161-001); or**
- **Recovery Boiler (ES No. 445-001); or**
- **Lime Kiln (ID No. ES 455-061)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	**Affected Source:** **ID No. ES 161-078** 5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
Hazardous Air Pollutants	See Permit Condition 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BB)

a. For the emission source (**ID No ES 161-078**), 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 02D .0524 "New Source Performance Standards" as promulgated in 40 CFR Part 60 Subpart BB "Standards of Performance for Kraft Pulp Mills", including Subpart A "General Provisions."

Emissions Limitations [15A NCAC 02D .0524]

b. No owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR Part 60, Subpart 60.283(a)(1)]:

i. The gases are combusted in a lime kiln subject to the provisions of 60.283(a)(5); or
ii. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1,200 °F) for at least 0.5 second

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

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to ensure that the stripper (**ID No. ES 161-078**) emissions are routed to the No. 2 Power Boiler (**ID No. ES 161-001**), Recovery Boiler (**ID No. ES No. 445-001**), or Lime Kiln (**ID No. ES 455-061**) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained.

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

d. The Permittee shall submit a semiannual report of excess emissions for periods of time that meet the criteria in 40 CFR 60.284(d) and are not excluded by 40 CFR 60.284(e).

e. The Permittee shall submit a summary report of the 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.

E. Stationary engines not subject to 40 CFR Part 60, Subpart IIII:

- **River Oxygen Diesel-fired Motor (ID Nos. ES 185-127),**
- **Lime Kiln Diesel-fired Emergency Motor (ID No. ES 455-062), and**
- **Administrative Building Diesel-fired Emergency Generator (ID No. ES 101-104)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxides	Less than 40 tons per consecutive twelve-month period total for the River Oxygen Diesel Motor (**ID No. 185-127**).	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)
Hazardous Air Pollutants	MACT emission standards See Section 2.1 E.4.	15A NCAC 02D .1111 (40 CFR Part 63 Subpart ZZZZ)

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

a. Emissions of sulfur dioxide from these sources **(ID Nos. ES 185-127, ES 455-062, and ES 101-104)** 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.

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.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/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources **(ID Nos. ES 185-127, ES 455-062, and ES 101-104)**.

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

a. Visible emissions from these sources 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.

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/reporting is required due to firing of diesel fuel in these sources **(ID Nos. ES 185-127, ES 455-062, and ES 101-104)**.

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, the river oxygen motor **(ID No. 185-127)** shall discharge into the atmosphere less than 40 tons of nitrogen dioxide per consecutive twelve-month period.

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 limits given in Section 2.1 E.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. To ensure that emissions are less than the above-specified limits, the Permittee shall not burn more than 170,000 gallons of diesel fuel in the motor (**ID No. 185-127**) per consecutive twelve (12) month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of fuel burned exceeds this limit.

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

d. To ensure compliance, the Permittee shall record and maintain records of the amounts (in gallons) of diesel fuel oil burned in the motor (**ID No. 185-127**) during each month. The record of the amounts of fuel (in gallons) burned during each month shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of fuel burned during each month are not recorded.

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

e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities and postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain the following:

i. The monthly quantities of diesel fuel oil burned in the motor (**ID No. 187-127**) for the previous 17 months. The total quantities burned must be calculated for each of the 12-month periods over the previous 17 months; and
ii. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY
(40 CFR Part 63, Subpart ZZZZ)

a. 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 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart ZZZZ, including Subpart A "General Provisions," by May 3, 2013.

Emission Limitations [40 CFR 63.6602, Table 2c]

b. The Permittee must comply with the following requirements:

i. change oil and filter every 500 hours of operation or annually, whichever comes first;
ii. inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and

iii. inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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

Monitoring, Installation, Collection, Operation and Maintenance Requirements [40 CFR 63.6625(e), (f), (h), (i) or (j)]

e. The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]

f. The Permittee must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

g. The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c MACT Subpart ZZZZ apply. [40 CFR 63.6625(h) and Table 2c MACT Subpart ZZZZ]

h. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c of MACT Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of MACT Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i), 40 CFR 63.6625(j), and Table 2c MACT Subpart ZZZZ]

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

Continuous Compliance [40 CFR 63.6605 and 63.6640]

i. The Permittee must operate the emergency stationary RICE according to the following requirements. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for less than 50 hours per year, as described in paragraphs i. though iii., below, is prohibited. If the engine is not operated according to the requirements in paragraphs i. through iii., below, the engine will not be considered an emergency engine under this Subpart and will need to meet all requirements for non-emergency engines: [40 CFR 63.6640 (f)(1)(i) through (iii)]

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 the purpose of maintenance checks and readiness testing, provided that the tests are recommended by DAQ, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition DAQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that DAQ standards require maintenance and testing of emergency RICE beyond 100 hours per year.

iii. The Permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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; except that the Permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

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

Recordkeeping Requirements [40 CFR 63.6655, except 40 CFR 63.6655(c)]

j. The Permittee must keep the following records:

i. A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) and monitoring equipment.

iii. Records of all required maintenance performed on the monitoring equipment.

iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.

k. The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and maintained according to the maintenance plan.

l. The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

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

Reporting Requirements [Table 2c to 40 CFR Part 63, Subpart ZZZZ, 15A NCAC 02Q .0508(f)]

m. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2c of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

n. The Permittee shall submit a summary report of monitoring and recordkeeping requirements 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 shall be clearly identified.

F. Turpentine Recovery System components:

- **Primary Condenser (ID No. ES 402-211) and**
- **Secondary Condenser (ID No. ES 402-220)**

Each controlled by the LVHC NCG Collection System routed to either:

- **No. 2 Power Boiler (ID No. ES 161-001); or**
- **Recovery Boiler (ES No. 445-001); or**
- **Lime Kiln (ID No. ES 455-061):**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
Hazardous Air Pollutants	See Permit Conditions 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BB)

a. 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 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."

Emissions Limitations [40 CFR 60.283(a)]

b. No owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR 60.283(a)(1)]:

i. The gases are combusted in a lime kiln subject to the provisions of 60.283(a)(5); or
ii. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1,200 °F) for at least 0.5 second

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

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to ensure that the emissions are routed to either the Lime Kiln (**ID No. ES455-061**) or No. 2 Power Boiler (**ID No. ES 161-001**) or Recovery Boiler (**ES No. 445-001**) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained.

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

d. The Permittee shall submit a semiannual report of excess emissions for periods of time that meet the criteria in 40 CFR 60.284(d) and are not excluded by 40 CFR 60.284(e).

e. The Permittee shall submit a summary report of the 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.

G. The Digester System consisting of:

- **Chip Bin (ID No. ES 402-119),**
- **Continuous Digester[2] (ID No. ES 402-141),**
- **Blow Tank (ID No. ES 402-179),**
- **Primary Flash Tank (ID No. ES 402-150),**
- **Secondary Flash Tank (ID No. ES 402-151), and**
- **Filtrate Wash Liquor Tank (ID No. ES 402-190), and;**
- **The Filtrate Storage Tanks No. 1[3] and No 2[3] (ID Nos. ES 420-006 and 420-008);**

Each controlled by the HVLC[2] NCG Collection System routed to either:

- **No. 2 Power Boiler (ID No. ES 161-001); or**
- **Recovery Boiler (ID No. ES 445-001)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
Hazardous Air Pollutants	See Permit Conditions 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BB)

a. 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 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."

Emissions Limitations [15A NCAC 02D .0524]

b. No owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1,200 °F) for at least 0.5 second. [40 CFR Part 60, Subpart 60.283(a)(1)]

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

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to insure that the emissions are routed to the No. 2 Power Boiler (ID No. ES 161-001) or the Recovery Boiler (ID No. ES 445-001) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained

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

d. The Permittee shall submit a semiannual report of excess emissions for periods of time that meet the criteria in 40 CFR 60.284(d) and are not excluded by 40 CFR 60.284(e).

2 Per 40 CFR 63.441, the Continuous Digester is defined as part of the LVHC system.
3 These sources are part of the Washing and Screening Area, but are included with the Digester System grouping due to shared NSPS control requirements.

e. The Permittee shall submit a summary report of the 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.

H. The Evaporator Area consisting of:

- **No. 1 Pre-Evaporator (ID No. ES 440-713),**
- **No. 2 Pre-Evaporator (ID No. ES 440-719),**
- **No. 3 Pre-Evaporator (ID No. ES 440-720),**
- **1A Effect Evaporator (ID No. ES 440-016),**
- **1B Effect Evaporator (ID No. ES 440-015),**
- **Second Effect Evaporator (ID No. ES 440-014),**
- **Third Effect Evaporator (ID No. ES 440-013),**
- **Fourth Effect Evaporator (ID No. ES 440-012),**
- **Fifth Effect Evaporator (ID No. ES 440-011),**
- **Sixth Effect Evaporator (ID No. ES 440-009),**
- **C-1 and C-2 Black Liquor Concentrators (ID Nos. ES 440-400 and 440-401), and**
- **Evaporator/Concentrator Hotwell System (ID No ES 440-008);**

Each controlled by the LVHC NCG Collection System routed to either:

- **No. 2 Power Boiler (ID No. ES 161-001); or**
- **Recovery Boiler (ES No. 445-001); or**
- **Lime Kiln (ID No. ES 455-061)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Total Reduced Sulfur (TRS)	5 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60 Subpart BB)
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100
Hazardous Air Pollutants	See Permit Condition 2.2 A	15A NCAC 02D .1111 (40 CFR Part 63 Subpart S)

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BB)

a. For the emission sources 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 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."

Emissions Limitations [15A NCAC 02D .0524]

b. For the emission sources above, no owner or operator shall cause to be discharged into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met [40 CFR Part 60, Subpart 60.283(a)(1)]:

i. The gases are combusted in a lime kiln subject to the provisions of 60.283(a)(5); or
ii. The gases are combusted with other waste gases in an incinerator or other device, and are subjected to a minimum temperature of 650 °C (1,200 °F) for at least 0.5 second

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

c. The Permittee shall follow the closed vent inspection procedures per Specific Condition 2.2 A to insure that the emissions are routed to either the Lime Kiln (**ID No. ES 455-061**) or No. 2 Power Boiler (**ID**

No. ES 161-001) or Recovery Boiler (**ES No. 445-001**) as specified above. The Permittee shall be deemed in noncompliance with 02D .0524 if these procedures are not followed or if the records are not maintained.

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

d. The Permittee shall submit a semiannual report of excess emissions for periods of time that meet the criteria in 40 CFR 60.284(d) and are not excluded by 40 CFR 60.284(e).

e. The Permittee shall submit a summary report of the 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.

I. Recovery Boiler (New Design):
Black Liquor Solids/Natural Gas/HVLC Gases/LVHC Gases/SOG gases/No. 2 fuel oil-fired boiler (ID No. ES-445-001) controlled by the Dry Bottom ESP (ID Nos. CD-455-340 and CD-455-369)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	3.0 pounds per equivalent tons of air dried pulp	15A NCAC 02D .0508
Sulfur Dioxide	2.3 pounds per million Btu heat input.	15A NCAC 02D .0516
Particulate Matter (filterable only)	0.10 g/dscm corrected to 8 percent oxygen	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
Total Reduced Sulfur	5 ppm by volume on a dry basis, corrected to 8 percent oxygen	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
Visible Emissions	Visible emissions shall not be more than 35 percent opacity	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
CO	BACT limits: See Section 2.1.I.6	15A NCAC 02D .0530
Particulate Matter (filterable+condensable)	Operate COMS per CAM plan.	15A NCAC 02D .0614
Hazardous Air Pollutants	See Permit Condition 2.2 B	15A NCAC 02D .1111 (40 CFR Part 63 Subpart MM)
Regulated NSR Pollutants	See Permit Condition 2.2 D	15A NCAC 02D .0530(u)

1. 15A NCAC 02D .0508: PARTICULATES FROM PULP AND PAPER MILLS

a. Emissions from the production of pulp and paper that are discharged from this source into the atmosphere shall not exceed 3.0 pounds of particulate matter (filterable and condensable combined) per equivalent tons of air dried pulp.

Testing [15A NCAC 02D .0501(c)(4)]

b. If emissions 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 I.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the Recovery Boiler (**ID No. ES 445-001**) for total particulate matter (filterable and condensable unless otherwise exempted per 02D. 2609) in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. In addition, the Permittee shall record and include in the test report the results of the monitoring requirements for this source (as specified in Section 2.2 B pursuant to 40 CFR Part 63, Subpart MM) during the test period. The testing shall be performed annually (or as required). If the results of the testing demonstrate results at less than 80 percent of the limit above, the testing frequency may be reduced to every five years. If the results of this or any test is above the limit given in Section 2.1 I.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

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

d. Particulate matter emissions from the Recovery Boiler (**ID No. ES 445-001**) shall be controlled by the Electrostatic Precipitator (**ID Nos. CD-455-340 and CD-455-369**). To ensure compliance with the

particulate matter standard, the Permittee shall comply with the 40 CFR Part 63, Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508 if the monitoring and recordkeeping is not conducted.

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping 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 this source 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.

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 I.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/reporting is required for sulfur dioxide emissions from the firing of natural gas and/or No. 2 fuel oil in this source (**ID No. ES 445-001).**

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BB)

a. 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 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."

Emissions Limitations [40 CFR 60.282(a), .283(a), and .284(c)]

b. Emissions from the Recovery Boiler (**ID No. ES 445-001**) shall not exceed:

i. 0.10 grams per dry standard cubic meter (g/dscm) (0.044 grains per dry standard cubic foot, gr/dscf) of particulate matter (filterable only) corrected to 8 percent oxygen. [§60.282(a)(1)(i)];
ii. 35 percent opacity [§60.282(a)(1)(ii)]; and
iii. 5 ppm of TRS by volume measured as hydrogen sulfide on a dry basis, corrected to 8 percent oxygen based on a 12-hour average [§60.283(a)(2) and §60.284(c)].

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

c. i. The Permittee completed the initial compliance demonstration on May 27, 2013 (test reference number 2013-089ST).
ii. If additional 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 I.3.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

d. Particulate matter emissions from the Recovery Boiler (**ID No. ES 445-001**) shall be controlled by the Electrostatic Precipitator (**ID Nos. CD-455-340 and CD-455-369**). To ensure compliance with the particulate matter standard, the Permittee shall comply with the 40 CFR Part 63, Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit.

e. Permittee shall calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from any Recovery Boiler. The span of this system shall be set at 70 percent opacity. [40 CFR 60.284(a)(1)]

f. The Permittee shall calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere. These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set: [40 CFR 60.284(a)(2)]

i. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
ii. At 25 percent oxygen for the continuous oxygen monitoring system.

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

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

g. The Permittee shall determine quarterly excess emissions for periods of time that meet the criteria in 40 CFR 60.284(d) and are not excluded by 40 CFR 60.284(e).

h. The Permittee shall submit a semiannual summary report of the monitoring and recordkeeping activities given in Sections 2.1 I.3.d through I.3.g above, determined on a quarterly basis, acceptable to the Regional Air Quality Supervisor, and 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.

4. ALTERNATIVE OPERATING SCENARIO

a. As an Alternate Operating Scenario (AOS) for complying with the PM emissions limits included in Sections 2.1 I.1.a. and Section 2.1 I.3.b. above, and Section 2.2 B. below, the Permittee can operate the Recovery Boiler (**ID No. ES 445-001**) while only one of the chambers of the dry bottom, two-chamber electrostatic precipitator (**ID Nos. 445-340 and CD 445-369**) is in operation.

b. The hours of operation of the Recovery Boiler (**ID No. ES 445-001**) while only one of the chambers of the dry bottom, two-chamber electrostatic precipitator (**ID Nos. CD 445-340 and CD 445-369**) is in operation, shall not exceed 500 hours per consecutive 12-month period.

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

c. The Permittee shall follow the monitoring and recordkeeping requirements in Section 2.2 B.1, below. The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0508(f) if this monitoring and recordkeeping is not performed.

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

d. The Permittee shall follow the reporting requirement in Section 2.1 I.6.c. below.

5. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The following Best Available Control Technology (BACT) limits for CO emissions from the Recovery Boiler (**ID No. ES 445-001**) is:

i. staged combustion;
ii. good combustion practices; and
iii. CO emissions from the Recovery Furnace shall not exceed the limit of 300 ppm at 8% O_2 (24-hour average).

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

b. To comply with the CO emissions limits from the Recovery Boiler (**ID No. ES 445-001**) the Permittee shall conduct an annual (no more than 12 months since the previous) stack test. 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 I.5.a.iii., 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/reporting is required to show compliance with CO emissions from this source **(ID No. ES 445-001)**.

6. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
(Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)

a. In order to avoid the applicability of 15A NCAC 02D .0530, the duration of operation of the Recovery Boiler (**ID No. ES 445-001**) under the AOS (see Section 2.1 I.4.) shall not exceed 500 hours per consecutive 12-month period.

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

b. While operating under the AOS, the Permittee shall keep daily records of the hours of operation of the electrostatic precipitator (**ID Nos. CD 445-340 and CD 445-369**), in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the hours of operation are not monitored.

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

c. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, 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. The report shall contain the monthly hours of operation of the electrostatic precipitator (**ID Nos. CD 445-340 and CD 445-369**) during the AOS mode, for the previous 17 months. The hours of operation must be calculated for each of the 12-month periods over the previous 17 months.

7. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. In order to assure compliance with 15A NCAC 02D .0508 and .0524 (40 CFR Part 60, Subpart BB), the Recovery Boiler **(ID No. ES 445-001)** shall comply with all applicable requirements of 15A NCAC 02D .0614 "Compliance Assurance Monitoring".

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

b. The Permittee shall comply with the monitoring approach as included in the following Table:

A. General Criteria	
1. Indicators	Stack outlet opacity
2. Measurement Approach	Continuous opacity monitoring system (COMS)
3. Indicator Range	Less than 20 percent opacity. An excursion occurs when opacity is above the indicator range. The excursion triggers corrective action and reporting requirement.
4. Quality Improvement Plan (QIP) Threshold	The QIP threshold is when the total duration of excursions is greater than 5 percent of the source operating time during any 6-month reporting period.
B. Performance Criteria	
1. Data Representativeness	The COMS shall be installed, operated, and maintained per manufacturer recommendations and 40 CFR Part 60, Appendix B.
2. QA/QC Practices and Criteria	1) Annual preventative maintenance and calibration. 2) Zero and span drift checked daily. 3) Filter audit conducted quarterly.
3. Monitoring Frequency	Once per 10-second period.
4. Data Averaging Period	Six-minute block averages using the COMS output.
5. Data Collection	Data acquisition system associated with COMS records measurements and periods of calibration.

Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9(a)]

c. The Permittee shall submit a summary report of all monitoring 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. In addition, the summary report shall contain the following information, as applicable:

i. Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
ii. Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

J. Smelt Dissolving Tank (ID No. ES 445-121) controlled by a Wet Scrubber (ID No. CD 445-370) and the Recovery Boiler (ID No. ES 445-001)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	0.6 pounds per equivalent tons of air dried pulp	15A NCAC 02D .0508
Particulate Matter (filterable only)	0.2 pounds per ton of black liquor solids (BLS)	15A NCAC 02D .0524 (NSPS Subpart BBa)
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Total Reduced Sulfur (TRS)	0.033 pounds per ton of BLS	15A NCAC 02D .0524 (NSPS Subpart BBa)
Hazardous Air Pollutants	See Permit Condition 2.2 B	15A NCAC 02D .1111 (40 CFR Part 63 Subpart MM)
TRS	Less than 10 tons per consecutive twelve-month period during the AOS	15A NCAC 02Q .0317 (15A NCAC 02D .0530)

1. 15A NCAC 02D .0508: PARTICULATES FROM PULP AND PAPER MILLS

a. Emissions from the production of pulp and paper that are discharged from this source into the atmosphere shall not exceed 0.6 pounds of particulate matter (filterable and condensable combined) per equivalent tons of air dried pulp.

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

b. If emissions 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 J.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

c. No testing other than that required under permit condition 2.1 I.1.c is required to demonstrate compliance with the emission limit above provided the Smelt Dissolving Tank is being vented into the Recovery Boiler. The Permittee may demonstrate compliance with the emission limit above when venting to the atmosphere following the wet scrubber by conducting a performance test according to a protocol approved by the DAQ. Details of emissions testing and reporting requirements can be found in General Condition JJ.

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

d. Particulate matter emissions from the Smelt Dissolving Tank (**ID No. ES 445-121**) shall be controlled by the Wet Scrubber (**ID No. CD 445-001**). To ensure compliance, the Permittee shall comply with the 40 CFR 63, Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508 if this monitoring is not conducted or the records are not kept.

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping 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 smelt tank (**ID Nos. ES 445-121**) 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.

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 J.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. To ensure compliance, the Permittee shall follow the 40 CFR Part 63, Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 02D .0521 if the monitoring and recordkeeping are not maintained.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BBa)

a. 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 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart BBa, including Subpart A "General Provisions."

Emissions Limitations [40 CFR 60.282a(a), 40 CFR 60.283a(a)]

b. Per 40 CFR Part 60, Subpart BBa, emissions from the Smelt Dissolving Tank (**ID No. ES 445-121**) shall not exceed:

i. 0.1 grams of particulate matter (filterable only) per kilogram black liquor solids (dry weight) [0.2 pounds per ton black liquor solids (dry weight)] [§60.282a(a)(3)];
ii. 0.016 grams of TRS per kilogram black liquor solids as hydrogen sulfide (H_2S) (0.033 pounds per ton of black liquor solids as H_2S). [§60.283a(a)(4)]

Testing [15A NCAC 02Q .0508(f), 40 CFR 60.285a]

c. The Permittee shall demonstrate compliance with the emission limit(s) by testing the Smelt Dissolving Tank (**ID No. ES 445-121**) for particulate matter and TRS emissions in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ and §60.285a. Following the startup of the Smelt Dissolving Tank (**ID No. ES 445-121**), the initial stack test shall be performed within 60 days after achieving the maximum production rate at which the Smelt Dissolving Tank (**ID No. ES 445-121**) will be operated during the AOS, but not later than 180 days after initial start-up. The first of the 5-year repeat tests must be conducted no later than 5 years following the initial performance test, and thereafter within 5 years from the date of the previous performance test. If the results of this test are above the limits given in Section 2.1 J.3.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

d. Particulate matter emissions from the Smelt Dissolving Tank (**ID No. ES 445-121**) shall be controlled by the Wet Scrubber (**ID No. CD 445-001**). To ensure compliance, the Permittee shall comply with the 40 CFR Part 63, Subpart MM monitoring and recordkeeping requirements as specified in Section 2.2 B of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if this monitoring is not conducted or the records are not kept.

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

e. The Permittee shall submit a summary report of the 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.

f. Within 60 days after the date of completing the initial performance test and each repeat performance test required by Section 2.1.J.3.c, the Permittee must submit the results of the performance test following the procedure specified below. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test, the permittee must submit the results of the performance test to the EPA 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/).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. [§60.288a(b)]

g. To establish affirmative defense in any action to enforce such a standard the Permittee must satisfy the requirements of §60.286a(a) and must timely meet the reporting requirements in §60.286a(b). The affirmative defense report must be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard. [§60.286a(a), §60.286a(b)]

4. ALTERNATIVE OPERATING SCENARIO

a. As an Alternate Operating Scenario (AOS) the Permittee can bypass the Recovery Boiler (**ID No. ES 445-001**) and have the emissions from the Smelt Dissolving Tank **(ID No. 445-121**) only controlled by the Wet Scrubber (**ID No. CD 445-370**).

b. During this period of AOS, the Permittee must follow the following requirements:

1. The Recovery Boiler (**ID No. ES 445-001**) can burn no more than 2.18 million pounds of black liquor solids per day;
2. The caustic addition to the Wet Scrubber (**ID No. CD 445-370**) shall be at least 19 gallons per minute (3-hour average);
3. The minimum flow rate of the Wet Scrubber (**ID No. CD 445-370**) must be at least 1,950 gallons per minute [gpm] (3-hour average); and
4. The non-condensable gases (NCGs) are to be routed to other control devices permitted for the control of non-condensable gases (NCGs).
5. The Permittee shall record the date and start time of the AOS and the duration.

If the Permittee operates the Recovery Boiler **(ID No. ES 445-001)** or wet scrubber **(ID No. CD 445-370)** outside of the parameters listed in paragraph 2.1 J.4.b. during periods of the AOS, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 and in noncompliance with 15A NCAC 02D .1111.

c. These parameter values do not apply during performance testing. If, during performance testing, the parameter values are not adhered to, are more stringent (i.e, the minimum liquid scrubber flowrate is greater), and are relied upon to demonstrate compliance, the permittee shall submit a request to revise the value(s) in the permit at the same time the test report required pursuant to General Condition JJ.4 is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514. If, during performance testing, the parameter values are not adhered to and are less stringent (i.e, the minimum liquid scrubber flowrate is less), the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0515.

5. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for (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, the Permittee during the period of the Alternate Operating Scenario (AOS) of the Smelt Dissolving Tank **(ID No. 445-121**) as described above in 2.1 J.4., above, shall discharge into the atmosphere less than 10 tons of TRS (total reduced sulfur) per consecutive twelve-month period:

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 limits given in Section in 2.1 J.5.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. To ensure that emissions are less than the above-specified limits, the Permittee shall record the date and start time of the AOS and the duration.

d. The Permittee shall calculate and record the emissions of TRS (total reduced sulfur) during the AOS by using an emission factor of 0.014 pounds of TRS per ton of black liquor solids (TBLS) processed in the Smelt Dissolving Tank (**ID No. 445-121**).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the TRS emissions exceed the limit above, or if the Permittee fails to record date/start time/duration of the AOS, or fails to record and calculate the emissions of TRS during the AOS.

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

e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of emissions of TRS during the AOS from the Smelt Dissolving Tank (**ID No. 445-121**), and postmarked on or before January 30 of each calendar year for the preceding 6-month period between July and December, and July 30 of each calendar year for the preceding 6-month period between January and June. The report shall contain, at a minimum:

i. the monthly emissions of TRS during the AOS from the Smelt Dissolving Tank (**ID No. 445-121**) for the previous 17 months, and
ii. The total quantities of TRS during the AOS must be calculated for each of the 12-month periods over the previous 17 months.

K. Lime Kiln:
No. 2 fuel oil/natural gas/LVHC gases-fired lime kiln (ID No. ES 455-061) controlled by the Electrostatic Precipitator (ID No. CD-455-433)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	0.5 pounds per equivalent tons of air dried pulp	15A NCAC 02D .0508
Sulfur Dioxide	2.3 pound per million Btu heat input	15A NCAC 02D .0516
Opacity	20 percent opacity	15A NCAC 02D .0521
Particulate Matter (filterable only)	0.13 grains per dry standard cubic foot (gr/dscf) corrected 10 percent oxygen when fuel oil is being fired, and 0.066 gr/dscf corrected to 10 percent oxygen when natural gas is being fired.	15A NCAC 02D .0524 (40 CFR 60 Subpart BB)
Total Reduced Sulfur (TRS)	8 ppm by volume on a dry basis, corrected to 10 percent oxygen	15A NCAC 02D .0524 (40 CFR Part 60, Subpart BB)
Particulate Matter (filterable+condensable)	Operate COMS per CAM plan.	15A NCAC 02D .0614
Hazardous Air Pollutants	See Permit Condition 2.2 B	15A NCAC 02D .1111 (40 CFR Part 63, Subpart MM)

1. 15A NCAC 02D .0508: PARTICULATES FROM PULP AND PAPER MILLS

a. Emissions from the production of pulp and paper that are discharged from this source into the atmosphere shall not exceed 0.5 pounds of particulate matter (filterable+condensable) per equivalent tons of air dried pulp.

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

b. If emissions 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 K.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the Lime Kiln (**ID No. ES 455-061**) for total particulate matter (filterable and condensable unless otherwise exempted per 02D. 2609) in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. In addition, the Permittee shall record and include in the test report the results of the monitoring requirements for this source (as specified in Section 2.2 B pursuant to 40 CFR Part 63, Subpart MM) during the test period. The testing shall be performed annually or as required. If the results of the testing demonstrate results at less than 80 percent of the limit above, the testing frequency may be reduced to every five years. If the results of this or any test is above the limit given in Section 2.1 I.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0508.

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

d. Particulate matter emissions from the Lime Kiln (**ID No. ES 455-061**) shall be controlled by the Electrostatic Precipitator (**ID No. CD 455-433**). To ensure compliance with the particulate matter limitation, the Permittee shall comply with the 40 CFR Subpart 63, Subpart MM monitoring, recordkeeping and reporting requirements as specified in Section 2.2 B. of this permit. The Permittee

shall be deemed in noncompliance with 15A NCAC 02D .0508 if these parameters are not monitored or these records are not maintained.

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping 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 this source 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.

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 K.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/reporting is required for sulfur dioxide emissions from the firing of natural gas and/or No. 2 fuel oil in this source (**ID No. ES 455-061).**

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

a. Visible emissions from the lime kiln (**ID No. ES 455-061**) shall not be more than 20 percent opacity when averaged over a six-minute period. Compliance with the opacity limit shall be determined as follows:

i. No more than four six-minute periods shall exceed the opacity standard in any one day; and
ii. The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

A. Excess emissions during startup and shutdown shall be excluded from the determinations in paragraphs 2.1 K.3 b.i. and b.ii. above, if the excess emissions are exempted according to the procedures set out in 02D .0535(g).
B. Excess emissions during malfunctions shall be excluded from the determinations in paragraphs b.i. and b.ii. above, if the excess emissions are exempted according to the procedures set out in 02D .0535(c).

All periods of excess emissions shall be included in the determinations in paragraphs b.i. and b.ii above until such time that the excess emissions are exempted according to the procedures in 02D .0535.

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

c. 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 K.3 above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

d. Continuous emissions monitoring and recordkeeping of opacity shall be performed as described in Section 2.2 B.1.d., below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if the monitoring is not performed, if the monitored values exceed the limitations given in 2.1 K.3 above, or if the records are not maintained.

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities, acceptable to the Regional Air Quality Supervisor, within 30 days after each calendar year quarter, postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart BB)

a. 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 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart BB, including Subpart A "General Provisions."

Emissions Limitations [40 CFR 60.282]

b. Per 40 CFR Part 60, Subpart BB emissions from the Lime Kiln (**ID No. ES 455-061**) shall not exceed:

i. 0.13 gr/dscf of particulate matter (filterable only) corrected to 10 percent oxygen when firing fuel oil and 0.066 gr/dscf of particulate matter corrected to 10 percent oxygen when firing natural gas. [§60.282(a)(3)(i) and (ii)]
ii. 8 ppm of TRS by volume on a dry basis, corrected to 10 percent oxygen based on a 12-hour average [§60.283(a)(5) and 60.284(c)].

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

c. If emissions testing for PM 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 K. 4.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

d. Particulate matter emissions from the Lime Kiln (**ID No. ES 455-061**) shall be controlled by the Electrostatic Precipitator (**ID No. CD 455-433**). To ensure compliance with the particulate matter limitation, the Permittee shall comply with the 40 CFR 63 Subpart MM monitoring, recordkeeping and reporting requirements as specified in Section 2.2 B. of this permit.

e. The Permittee shall calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere. These systems shall be located downstream of

the control device(s) and the spans of these continuous monitoring system(s) shall be set: [40 CFR 60.284(a)(2)]

i. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
ii. At 25 percent oxygen for the continuous oxygen monitoring system.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these parameters are not monitored or these records are not maintained.

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

f. The Permittee shall determine quarterly excess emissions for periods of time that meet the criteria in 40 CFR 60.284(d) and are not excluded by 40 CFR 60.284(e).

g. The Permittee shall submit a semiannual summary report of the monitoring and recordkeeping activities given in Sections 2.1 K.4.d through K.4.f above, determined on a quarterly basis, acceptable to the Regional Air Quality Supervisor, and 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.

5. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. In order to assure compliance with 15A NCAC 02D .0508 and .0524 (40 CFR Part 60, Subpart BB), the Lime Kiln **(ID No. ES 455-433)** shall comply with all applicable requirements of 15A NCAC 02D .0614 "Compliance Assurance Monitoring".

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

b. The Permittee shall comply with the monitoring approach as included in the following Table:

A. General Criteria	
1. Indicators	Stack outlet opacity
2. Measurement Approach	Continuous opacity monitoring system (COMS)
3. Indicator Range	Less than 20 percent opacity. An excursion occurs when opacity is above the indicator range. The excursion triggers corrective action and reporting requirement.
4. Quality Improvement Plan (QIP) Threshold	The QIP threshold is when the total duration of excursions is greater than 5 percent of the source operating time during any 6-month reporting period.

B. Performance Criteria	
1. Data Representativeness	The COMS shall be installed, operated, and maintained per manufacturer recommendations and 40 CFR Part 60, Appendix B.
2. QA/QC Practices and Criteria	1) Annual preventative maintenance and calibration. 2) Zero and span drift checked daily. 3) Filter audit conducted quarterly.
3. Monitoring Frequency	Once per 10-second period.
4. Data Averaging Period	Six-minute block averages using the COMS output.
5. Data Collection	Data acquisition system associated with COMS records measurements and periods of calibration.

Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9(a)]

c. The Permittee shall submit a summary report of all monitoring 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. In addition, the summary report shall contain the following information, as applicable:

i. Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
ii. Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

L. Lime Slaker (ID No. ES 455-406) controlled by a Spray Chamber Wet Scrubber (ID No. CD 455-408)

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pound per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
TAP Emissions	See Permit Condition 2.3 A	15A NCAC 02D .1100

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

a. Emissions of particulate matter (filterable and condensable combined) from this source 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 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 L.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 Lime Slaker shall be controlled by the wet scrubber (**ID No. CD-455-408**). To ensure compliance and the effective operation of the scrubber, the Permittee shall monitor and record, once per day, the scrubber solution flow rate. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If the emission source(s) is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. The readings shall be recorded in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. To ensure quality, the flow rate gauges or devices shall be calibrated annually.

d. The Permittee has established a site-specific minimum flow rate of 50 gallons per minute for the wet scrubber (**ID No. CD-455-408)**.

If the flow rate readings recorded as required in Section 2.1. L.1.c., above, are observed to be below the established minimum, the Permittee shall inspect the scrubber for malfunctions and clean or repair, as necessary.

e. The results of inspection and maintenance activities, discussed above for the scrubber, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative of DAQ 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 normal operating range for the scrubber parameters;
iv. the causes for any variance from the normal operating range for the scrubber; and
v. corrective actions taken.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the required records are not maintained and/or if the required monitoring and maintenance actions are not performed.

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

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

g. 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.

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

a. Visible emissions from the Lime Slaker (**ID No. ES 455-406**) 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.

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 L.2.a. (**ID No. ES 455-406**) 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 the Permittee shall observe the emission points of this source for any visible emissions above normal. If the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. If visible emissions from this source 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 L.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

d. The results of the monitoring 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 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.

M. Lime Handling:

- **Lime Conveyor Transfer Points (ID Nos. ES 455-059),**
- **Hot Lime Pan Conveyor (ID No. ES 455-073-08),**
- **Hot Lime Crusher (ID No. ES 455-072-00),**
- **Hot Lime Bucket Elevator (ID No. ES 455-074-08),**
- **Hot Lime Bin (ID No. ES 455-075-02), and**
- **Fresh Lime Bin (ID No. ES 455-749-02)**

Each controlled by a bagfilter (ID No. CD-455-751-00) installed in series with a simple cyclone (ID No. CD 455-754-00):

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter (filterable+condensable)	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pound per hour P = process weight rate in tons per 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 (filterable and condensable combined) from these sources 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 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 M. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from these sources shall be controlled by the bagfilter and cyclone. To ensure compliance, the Permittee shall perform inspections and maintenance, 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 twelve-month period following the initial inspection) internal inspection of the bagfilter's and cyclone's structural integrity.

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

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

d. The results of inspection and maintenance 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 bagfilter or cyclone; and
iv. any 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 bagfilters within 30 days of a written request by the DAQ.

f. 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.

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

a. Visible emissions from these sources 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.

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 M. 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 the Permittee shall observe the emission points of this source for any visible emissions above normal. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. If visible emissions from this source 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 M.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

d. The results of the monitoring 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 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.

N. Stationary engines subject to 40 CFR Part 60, Subpart IIII

- **Diesel-fired Fire Water Pump Engine (ID No. ES 100-004)**
- **Leachate Canal Diesel-fired Pump Engine (ID No. ES 185-118)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Multiple pollutants	See Section 2.1 N.3	15A NCAC 02D .0524 (40 CFR Part 60, Subpart IIII)
Hazardous Air Pollutants	Meet the requirements of NSPS Subpart IIII	15A NCAC 02D .1111 (40 CFR Part 63, Subpart ZZZZ)

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

a. Emissions of sulfur dioxide from these sources 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.

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 N.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/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources.

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

a. Visible emissions from these sources 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.

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 N.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 sources.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart IIII)

Applicability [15A NCAC 02Q .0508(f), 40 CFR 60.4200(a)(2)(i) and (ii)]

a. For the Leachate Canal Diesel Pump **(ID No. ES 185-118)** and Fire Water Pump Engine **(ID No. ES 100-004**), 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 IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

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

b. Pursuant to 40 CFR 60.4218, 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.

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

c. The Permittee shall comply with the emission standards in 40 CFR 60.4202 **(ID No. ES 185-118)** and Table 4 of NSPS Subpart IIII **(ID No. ES 100-004**) for all pollutants, for the same model year and maximum engine power for these engines. [40 CFR 60.4205(b) and (c)]

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

d. The Permittee shall use diesel fuel in the engines that meet the requirements of 40 CFR 80.510(b) 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)]

e. 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 conditions 2.1 N.3.c and 2.1 N.3.d, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

f. The engines have 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 engines, 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)]

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

g. 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)]

h. The Permittee shall comply with the emission standards in condition 2.1 N.3.c by purchasing an engine certified to the emission standards in condition 2.1 N.3.c above. The engines shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]

i. In order for the engines to be considered emergency stationary ICEs under this condition, any operation other than emergency operation, maintenance and testing, emergency demand response, 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 paragraphs i. ii. A through C of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 2.1 N.3.i.iii of this condition counts as part of the 100 hours per calendar year allowed by this paragraph 2.1 N.3.i.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.
(B) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.
(C) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

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 and emergency demand response provided in paragraph 2.1 N.3.i.ii. of this condition. Except as provided in paragraph 2.1 N.3.i.iii(A) of this condition, 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. 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: [40 CFR 60.4211(f)]

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
(B) 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.
(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
(D) The power is provided only to the facility itself or to support the local transmission and distribution system.
(E) 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.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the requirements in conditions f. through i. are not met.

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

j. To ensure compliance, the Permittee shall perform inspections and maintenance on the engines as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance 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 engine;
iv. any variance from manufacturer's recommendations, if any, and corrections made;
v. the hours of operation of the engine in emergency and non-emergency service. [40 CFR 60.4214(b)]
vi. 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)]; and
vii. documentation from the manufacturer that the engine is certified to meet the emission standards in condition 2.1 N.3.c.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

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

k. 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.

l. If the Permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 horsepower that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in conditions 2.1 N.3.i.ii(B) and (C) or that operates for the purposes specified in condition 2.1 N.3.i.iii(A), the Permittee shall submit an annual report according to the requirements at 40 CFR 60.4214(d). Thus report must be submitted to the Regional Supervisor and the EPA. [40 CFR 60.4214(d)]

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart ZZZZ)

Applicability [40 CFR 63.6585, 6590(a)(2)(ii)]

a. For these engines (stationary RICE with a site rating of equal to or less than 500 brake horsepower 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."

Stationary RICE subject to Regulations under 40 CFR Part 60 [15 A NCAC 02Q. 0508(f)]

b. Pursuant to 40 CFR 63.6590(c)(6), these sources must meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR part 60 Subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.

If the requirements in condition b. are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

O. Fugitive dust emission sources:

- Power Area Fugitive Sources (ID No. ES 155-999)
- Log Debarking (ID No. ES 354-044)
- Pine Wood Chip Piles (ES 356-999)
- Bucket Conveyor Fugitive Sources (ID No. ES 455-999)
- Haul roads (ID No. HAULRDS)

Regulated Pollutant	Limits/Standards	Applicable Regulations
TAPs	See Section 2.3 A.1.b.	15A NCAC 02D .1100
Fugitive dust	Do not cause or contribute to fugitive dust complaints See Section 3.MM.	15A NCAC 02D .0540

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. 40 CFR Part 63, Subpart S Affected Sources:

- **Bleaching System Sources consisting of:**
  - D1 Stage Tower (ID No. ES 425-047);
  - D1 Stage ClO2 Seal Box (ID No. ES 425-054);
  - D1 Bleach Hood and Washer (ID No. ES 425-052);
  - D2 Stage Tower (ID No. ES 425-076);
  - D2 Stage ClO2 Seal Box (ID No. ES 425-083);
  - D2 Bleach Washer (ID No. ES 425-081);

  Each exhausting to Bleach Plant Fluidized Bed Wet Scrubber (ID No. CD 425-101), via closed-vent collection system

- **Low Volume High Concentration (LVHC) System consisting of:**
  - Foul Condensate Handling System consisting of:
    - Stripper Feed Tank No. 1 (ID No. ES 401-007);
    - Stripper Feed Tank No. 2 (ID No. ES 401-013); and
    - LVHC Foul Gas Collection System Cooler (ID No. ES 161-484);

    Each exhausting to:
      - No. 2 Power Boiler (ID No. ES 161-001) via closed-vent collection system; or
      - Recovery Boiler (ID No. ES 445-001) via closed-vent collection system; or
      - Lime Kiln (ID No. ES 455-061) via closed-vent collection system.

    and:
    - Steam Stripper (ID No. ES 161-078) exhausting to No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ID No. ES 445-001)

  - Turpentine System consisting of:
    - Turpentine Decanter (ID No. ES 401-704);
    - Underflow Decanter (ID No. ES 401-709);
    - Primary Condenser (ID No. ES 402-211);
    - Secondary Condenser (ID No. ES 402-220); and
    - Turpentine Storage Tank (ID No. ES 401-071-02)

    Each exhausting to:
      - No. 2 Power Boiler (ID No. ES 161-001) via closed-vent collection system; or
      - Recovery Boiler (ID No. ES 445-001) via closed-vent collection system; or
      - Lime Kiln (ID No. ES 455-061) via closed-vent collection system.

  - Digester System consisting of:
    - Continuous Digester[4] (ID No. ES 402-141) exhausting to:
      - No. 2 Power Boiler (ID No. ES 161-001) via closed-vent collection system; or
      - Recovery Boiler (ID No. ES 445-001) via closed-vent collection system; or
      - Lime Kiln (ID No. ES 455-061) via closed-vent collection system.

4 The Digester is included with the closed vent system for the Digester System, as specified in Section 2.1 G.1.

- Evaporator area consisting of:
  - Evaporator/Concentrator Hotwell System (ID No. ES 440-008);
  - Nos. 1, 2, and 3 pre-evaporators (ID Nos. ES 440-713, -719, and -720);
  - 1A and 1B effect evaporators (ID Nos. ES 440-016 and -015);
  - Second through Sixth effect evaporators (ID Nos. ES 440-014, -013, -012, -011, and -009);
  - C-1 and C-2 black liquor concentrators (ID Nos. ES 440-400 and -401); and
  - HSC 1 and 2 concentrators (ID Nos. ES 440-850 and -852)

  Each exhausting to:
  - No. 2 Power Boiler (ID No. ES 161-001) via closed-vent collection system; or
  - Recovery Boiler (ID No. ES 445-001) via closed-vent collection system; or
  - Lime Kiln (ID No. ES 455-061) via closed-vent collection system.

- **High Volume Low Concentration (HVLC) System consisting of:**
  - Gas Collection System Coolers consisting of:
    - HVLC Foul Gas Collection System Cooler (ID No. ES 402-722); and
    - HVLC Gas Collection System Cooler (ID No. ES 402-943)

    Each exhausting to No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ID No. ES 445-001)

  - Digester Area consisting of:
    - Chip Bin (ID No. ES 402-119);
    - Blow Tank (ID No. ES 402-179);
    - Filtrate Wash Liquor Tank (ID No. ES 402-190);
    - Primary Flash Tank (ID No. ES 402-150); and
    - Secondary Flash Tank (ID No. ES 402-151)

    Each exhausting to No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ID No. ES 445-001)

  - Washing and Screening:
    - Primary and Secondary Rejects Tanks (ID Nos. 420-123 and -140) with no control devices

    and:
    - Foam Tank (ID No. ES 420-025);
    - Filtrate Storage Tanks Nos. 1 and 2 (ID Nos. ES 420-006 and -008);
    - Brown stock Washer System (ID No. ES 420-010);
    - Brown stock Decker (ID No. ES 420-044)
    - Brown Decker Filtrate Tank (ID No. ES 420-332);
    - Brown Stock Washed HD Chest (ID No. ES 420-325);

    Each exhausting to No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ID No. ES 445-001)

  - Oxygen Delignification Area:
    - Oxygen Blow Tank (ID No. ES 420-229);
    - No. 1 Press Washer, Level Tank, and Filtrate Tank (ID Nos. ES 420-235, -259, and -261); and
    - No. 2 Press Washer, Level Tank, and Filtrate Tank (ID Nos. ES 420-280, -302, and -306)5

    Each exhausting to No. 2 Power Boiler (ID No. ES 161-001) or Recovery Boiler (ID No. ES 445-001)

5 These systems only exhaust to the Recovery Boiler when the No. 1 Press Washer is temporarily out of service.

- **Miscellaneous Sources:**
  - Oxygen Interstage Pulp Tank (ID No. ES 420-274);
  - Washer and Seal Tank (ID Nos. ES 425-036 and -038); and

  Each with no control devices.

Regulated Pollutant	Limits/Standards	Applicable Regulations
Hazardous Air Pollutants	Limits for the bleaching, LVHC, HVLC, and condensate collection systems. See Section 2.2 A.1.	15A NCAC 02D .1111 (40 CFR Part 63, Subpart S)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart S)

a. 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 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart S "National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry", including Subpart A "General Provisions" as defined per 63.440(g) and indicated per Table 1 of Subpart S. These emission standards shall apply at all times except as otherwise specified in 40 CFR Part 63, Subpart S.

Sources with no requirements [40 CFR 63.443(a)]

b. The following sources are subject to the rule, but have no control requirements because they do not meet the definitions of, or are not included in, any categories for existing sources under §63.443, §63.445, or §63.446:

i. Primary Rejects Tank **(ID No. ES 420-123)**;
ii. Secondary Rejects Tank **(ID No. ES 450-140)**;
iii. Oxygen Interstage Pulp Tank **(ID No. ES 420-274)**;
iv. Pre-Bleach Washer **(ID No. ES 425-036)**; and
v. Pre-Bleach Seal Tank **(ID No. ES 425-038)**

Standards for enclosures and closed-vent systems [40 CFR 63.450]

c. Each enclosure and closed-vent system required by this Section shall meet the following requirements: [§63.450(a) through (d)]

i. Each enclosure shall maintain negative pressure at each opening, as demonstrated by the testing procedures in §63.457(e).
ii. Each enclosure that was closed during the most recent performance test shall be maintained in the same closed and sealed position at all times, except when necessary for sampling, inspection, maintenance, or repairs.
iii. Each component of the closed-vent system that is operated at positive pressure and located prior to a control device shall be designed and operated with no detectable leaks.
iv. Each bypass line in the closed-vent system shall either:

A. Be monitored according to §63.450(d)(1); or
B. Maintain the bypass in the closed position and seal it such that the bypass cannot be opened without breaking the seal.

If each enclosure and/or closed-vent system is not properly operated and maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Standards for the pulping system [40 CFR 63.443]

d. The Permittee shall ensure that each system listed in §63.443(a)(1) is enclosed, vented into a closed-vent system, and routed to a control device. [§63.443(a) and (c)]

   i. When routed to the Lime Kiln **(ID No. ES 455-061)**, the HAP emission stream shall be introduced with the primary fuel or into the flame zone. [§63.443(d)(4)(i)]
   ii. When routed to the No. 2 Power Boiler (**ID No. ES 161-001**) or Recovery Boiler (**ID No. ES 445-001**), the HAP emission stream shall be introduced with the combustion air or into the flame zone. [§63.443(d)(4)(ii)]

e. Periods of excess emission reported under §63.455 shall not be considered a violation of Section 2.2 A.1.d. provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed the following levels: [§63.443(e)]

   i. One percent for control devices used to reduce the total HAP emissions from the low volume, high concentration (LVHC) system;
   ii. Four percent for control devices used to reduce the total HAP emissions from the high volume, low concentration (HVLC) system; and
   iii. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

If the Permittee does not operate and control the sources in the pulping system as required above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Standards for the bleaching system [40 CFR 63.445]

f. The Permittee shall ensure that each bleaching stage of the subject bleaching system shall be enclosed and vented to a closed-vent system and routed to wet scrubber **(ID No. CD 425-101)**. [§63.445(b)]

g. The wet scrubber **(ID No. CD 425-101)** shall either: [§63.445(c)]

   i. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent (or more) by weight; or
   ii. Achieve an outlet concentration of 10 ppmv (or less) of total chlorinated HAP; or
   iii. Achieve an outlet mass emission rate of 0.002 pounds of total chlorinated HAP mass per ton of oven-dried pulp (ODP).

h. The Permittee shall use no hypochlorite or chlorine for bleaching in the bleaching system. [§63.445(d)(2)]

If the Permittee does not operate and control the bleaching system as required above and/or if the permittee uses a disallowed material in the bleaching system, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Standards for kraft pulping process condensates [40 CFR 63.446]

i. The Permittee shall ensure that pulping process condensates from the systems listed in §63.446(b) and that contain more than 11.1 pounds of HAP per ton of ODP are conveyed in a closed collection system that meets the following requirements: [§63.446(b), (c)(3), and (d)]

i. Each closed collection system shall meet the individual drain system requirements specified in §63.960, 63.961, and 63.962, except that closed vent systems and control devices shall be designed and operated according to Section 2.2 A.1.c.
ii. Any condensate tanks used in the closed collection system shall meet the requirements of §63.446(d)(2).

j. The Permittee shall ensure that pulping process condensates from the systems listed in §63.446(b) are treated such that at least 10.2 pounds of HAP per ton of ODP are removed from the pulping process condensates, calculated on a 30-day rolling average. [§63.446(e)]

k. Each HAP removed from the pulping process condensate system shall be conveyed in a closed-vent system and controlled in the same manner as Section 2.2 A.1.d. [§63.446(f)]

l. For each control device used to treat pulping process condensates, periods of excess emissions reported under §63.455 shall not be a violation of Sections 2.2 A.1.i, j, and k provided that the time of excess emissions divided by the total process operating time does not exceed 10 percent during a semi-annual reporting period. [§63.446(g)]

If the Permittee does not operate and control the pulping process and the collected condensates as required above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Testing [15A NCAC 02Q .0508(f), 40 CFR 63.457]

m. If emissions testing is required, the testing shall be performed in accordance General Condition JJ.

n. The Permittee shall conduct a performance test on the wet scrubber **(ID No. CD 425-101)** [§63.457(a)]:

i. The Permittee completed the initial performance test on July 6, 2016 (test reference number 2016-121ST).
ii. Repeat performance tests shall be conducted within 60 months of the previous performance test.
iii. Performance testing shall follow the procedures and applicable requirements of §63.457 in addition to General Condition JJ.

If the Permittee does not perform the required testing and/or if the results of these tests are above the limits given in Section 2.2 A.1.b. through h., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Monitoring [15A NCAC 02Q .0508(f), 40 CFR 63.453]

o. The Permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS), on the Bleach Plant Wet Scrubber (**ID No. CD 425-101**). The CMS shall include a continuous recorder. The CMS shall monitor the following parameters: [§63.453(c) and (m)]

i. The pH of the scrubber effluent (minimum pH is 9.5 on a 3-hour average);
ii. The scrubber inlet gas fan motor load (greater than or equal to 30 percent on a 3-hour average);
iii. The scrubber liquid influent recirculation rate (minimum 660 gallons per minute on a 3-hour average)

p. For each enclosure and closed-vent system, the Permittee shall: [§63.453(k)]

i. Perform a visual inspection of each closure mechanism at least once every 30 days in order to ensure the mechanism is closed and sealed;
ii. Perform a visual inspection of each closed-vent system at least once every 30 days. This inspection shall include, at a minimum: ductwork, piping, enclosures, and connections to covers for visible evidence of defects;

iii. For positive pressure portions of closed-vent systems, demonstrate no detectable leaks annually using the procedures in §63.457(d);
iv. Demonstrate annually that each enclosure opening is maintained at negative pressure per §63.457(e);
v. Demonstrate that emission gasses are not diverted through bypass lines at least once every 30 days; and
vi. If a system does not pass a required inspection, the Permittee shall perform corrective action per §63.453(k)(6).

q. For each pulping process condensate closed collection system used to comply with Section 2.2 A.1.i., the Permittee shall: [§63.453(l)]

i. Visually inspect each closed collection system according to §63.964, except as noted in §63.453(l)(1).
ii. Measure annually each condensate tank used in the closed collection system to determine that there are no detectable leaks.
iii. If a system does not pass a required inspection or measurement, the Permittee shall perform corrective action per §63.964(b).

r. The Permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a CMS on the steam stripper **(ID No. ES 161-078)** that monitors the Steam-to-Feed Ratio (SFR). The CMS shall include a continuous recorder. [§63.453(m)]

i. The SFR shall be at least 15.9 percent.
ii. The SFR shall be calculated using the following formula:

$$SFR = 100\% \times \left[\frac{(FS) - \left(CF \times \rho \times \left(\frac{T_1 - T_2}{1{,}000} \right) \right)}{(CF \times \rho)} \right]$$

Where:
SFR = Steam-to-Feed Ratio (percent)
FS = Feed steam (thousand pounds per hour)
CF = Condensate flowrate (gallons per hour)
T_1 = Stripper bottom temperature (°F)
T_2 = Condensate feed temperature (°F)
ρ = density of hot condensate, determined to be 7.9 pounds per gallon

s. The Permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a CMS to monitor the HAP content of the pulping process condensates collection system. The CMS shall include a continuous recorder. The CMS shall be operated to ensure that the condensates collected contain more than 11.1 pounds of HAP per ton of ODP based on a 30-day rolling average. The HAP content for each stream shall be validated on an annual basis. [§63.446(c)(3), §63.453(m) and (n)]

t. 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. [§63.453(q)]

If the Permittee does not operate the required CMSs and/or perform the required monitoring, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Startup/Shutdown/Malfunction [15A NCAC 02D .1109]

u. During the periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the subject emission sources, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the Permittee reduce emissions from the above emission source to the greatest extent which is consistent with safety and good air pollution control practices.

Recordkeeping [15A NCAC 02Q .0508(f), 40 CFR 63.454]

v. The Permittee shall prepare and maintain a site-specific inspection plan for each enclosure opening, closed-vent system, and closed collection system. [§63.454(b)]

w. The Permittee shall record the output of each CMS. [§63.454(d)]

x. For each bypass line being monitored according to Section 2.2 A.1.c.iv.A, the Permittee shall record the flow indicator at least once every 15 minutes. [§63.454(e)]

y. The Permittee shall record the occurrence and duration of each malfunction and keep records of each corrective action taken. [§63.454(g)]

z. The Permittee shall keep all records in a logbook (written or electronic format) on-site and make the logbook available to an authorized representative on request.

If the Permittee does not keep the required records, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Reporting [15A NCAC 02Q .0508(f), 40 CFR 63.455]

aa. The Permittee shall submit a summary report to the Regional Supervisor, DAQ, 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, at a minimum:

i. Instances of excess emissions, malfunctions, and any deviations during the reporting period; or
ii. If there were no instances of excess emissions, malfunctions, or deviations, a statement to that effect.

bb. The Permittee shall comply with the reporting requirements of 40 CFR Part 63, Subpart A as specified in Table 1 of 40 CFR Part 63, Subpart S.

B. 40 CFR Part 63, Subpart MM Affected Sources:

- **Recovery Boiler (ID No. ES 445-001) exhausting to two-chamber electrostatic precipitator (ID No. CD 445-073)**
- **Lime Kiln (ID No. ES 455-061) exhausting to single-chamber electrostatic precipitator (ID No. CD 445-433)**
- **Smelt Dissolving Tank (ID No. ES 445-121) exhausting to either:**
  - **Wet scrubber (ID No. CD 445-370) in series with Recovery Boiler (ID No. ES 445-001); or**
  - **Wet scrubber (ID No. CD 445-370)**

Regulated Pollutant	Limits/Standards	Applicable Regulations
Hazardous Air Pollutants (particulate matter and visible emissions as a surrogate)	• Filterable particulate emission limits: See Section 2.2 B.1.b • Opacity operating standards: See Section 2.2 B.1.f • Operate COMS and CPMS: See Sections 2.2 B.1.d and e	15A NCAC 02D .1111 (40 CFR Part 63, Subpart MM)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart MM)

a. 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 02D .1111 "Maximum Achievable Control Technology", as promulgated in 40 CFR Part 63, Subpart MM " National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills", and Subpart A "General Provisions".

Emission Limits [40 CFR 63.862]

b. The following emission limits apply:

i. The particulate matter (PM, filterable only) emission rate from Recovery boiler **(ID No. ES 445-001)** shall be less than or equal to 0.044 grains per dry standard cubic foot (gr/dscf), corrected to 8% oxygen. [§63.862(a)(1)(i)(A)]

ii. The PM emission rate from Lime kiln **(ID No. ES 455-061)** shall be less than or equal to 0.064 gr/dscf, corrected to 10% oxygen. [§63.862(a)(1)(i)(C)]

iii. The PM emission rate from Smelt dissolving tank **(ID No. ES 445-121)** shall be less than or equal to 0.20 pounds per ton of black liquor solids (lb/TBLS) fired. [§63.862(a)(1)(i)(B)]

iv. At all times, the owner or operator must 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. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which 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.

Testing [15A NCAC 02Q .0508(f), 40 CFR 63.865]

c. i. The Permittee shall demonstrate compliance for each affected source with an initial performance test no later than October 13, 2020. Thereafter, the Permittee shall conduct a subsequent performance test no later than five years after the previous performance test.

ii. All emissions testing shall be performed according to the procedures in §63.7, §63.865, and General Condition JJ.

If the results of any testing indicate an emission rate greater than the emission limits presented in the table above and/or the Permittee does not conduct required testing, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Monitoring [15A NCAC 02Q .0508(f), 40 CFR 63.864]

d. The Permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for the Recovery Boiler **(ID No. ES 445-001)** and Lime kiln **(ID No. ES 455-061)** in accordance with Performance Specification 1 (PS-1) in Appendix B to 40 CFR Part 60 and §63.6(h) and 63.8. In addition: [§63.864(d)]

i. each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period; and

ii. As specified in §63.8(g)(2), each 6-minute COMS data average must be calculated as the average of 36 or more data points, equally spaced over each 6-minute period.

e. The Permittee shall maintain proper operation of the automatic voltage control (AVC) for each electrostatic precipitator **(**ESP; **ID Nos. CD 445-073 and CD 455-433)**. [§63.864(e)(1)]

f. The Permittee shall install, calibrate, and maintain a continuous parameter monitoring system (CPMS) that monitors and records the caustic addition flow rate and total scrubber liquid flow rate on the wet scrubber **(ID No. CD 445-370)**. Each CPMS shall record data at least once per 15-minute period and meet the accuracy requirements in §63.864(e)(10)(ii). [§63.864(e)(10)]

i. Primary operating scenario (POS) –

During periods when the exhaust from the wet scrubber **(ID No. CD 445-370)** is entirely routed to the Recovery Boiler **(ID No. ES 445-001)**, there are no monitoring requirements for the wet scrubber **(ID No. CD 445-370)**.

ii. Alternate operating scenario (AOS) –

(A) During periods when the exhaust from the wet scrubber **(ID No. CD 445-370)** is <u>not</u> entirely routed to the Recovery Boiler **(ID No. ES 445-001)**, the Permittee shall operate the caustic addition flow rate and total scrubber liquid flow rate CPMS associated with the wet scrubber **(ID No. CD 445-370)** and reduce the firing rate of black liquor solids in the Recovery Boiler **(ID No. ES 445-001)**. During these periods of AOS, the Permittee must comply with following site-specific parameter ranges, based on a 3-hour rolling average:

(1) Caustic scrubbing solution addition to the wet scrubber **(ID No. CD 445-370)** shall be at least 19 gallons per minute.
(2) The total scrubbing liquid flowrate shall be at least 1,950 gallons per minute.

(3) The firing rate of black liquor solids (BLS) in the Recovery Boiler **(ID No. ES 445-001)** shall be less than 2.18 million pounds per day.

(B) The Permittee may conduct new performance testing per §63.864(j)(3) in order to establish new parameters. These parameter values do not apply during performance testing. If, during performance testing, the parameter values are not adhered to, are more stringent (i.e, the minimum liquid scrubber flowrate is greater), and are relied upon to demonstrate compliance, the permittee shall submit a request to revise the value(s) in the permit at the same time the test report required pursuant to General Condition JJ.4 is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514. If, during performance testing, the parameter values are not adhered to and are less stringent (i.e, the minimum liquid scrubber flowrate is less), the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0515.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the COMS and CPMS are not operated and maintained.

g. The Permittee shall implement corrective action if any of the follow situations occur during times when spent pulping liquor or lime mud are being fed (as applicable):

i. The average visible emissions (VE) from the Recovery boiler **(ID No. ES 445-001)** and/or Lime kiln **(ID No. ES 455-061)** for ten consecutive 6-minute periods are greater than 20 percent opacity. [§63.864(k)(1)(i)]

ii. The 3-hour rolling average of a parameter value associated with the Recovery boiler **(ID No. ES 445-001)**, Lime kiln **(ID No. ES 455-061)**, and/or Smelt dissolving tank **(ID No. ES 445-121)** is outside the range established with Section 2.2 B.1.f. [§63.864(k)(1)(ii), (v), and (vi)]

h. The following scenarios constitute a violation of the emission limits in Section 2.2 B.1.b:

i. When the VE from the Recovery boiler **(ID No. ES 445-001)** is greater than 35 percent opacity for two (or more) percent of the operating time during any semiannual period. [§63.864(k)(2)(i)]

ii. When the VE from the Lime kiln **(ID No. ES 455-061)** is greater than 20 percent opacity for three (or more) percent of the operating time during any semiannual period. [§63.864(k)(2)(iii)]

iii. When six (or more) instances occur during any 6-month reporting period where the 3-hour average of parameter values associated with the Recovery boiler **(ID No. ES 445-001)** and/or the Smelt dissolving tank **(ID No. ES 445-121)** AOS are outside the range established with Section 2.2 B.1.f. [§63.864(k)(2)(iii) and (vi)]

i. For purposes of determining the number of non-opacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period. [§63.864(k)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if corrective action is not taken when appropriate and/or monitoring shows a violation of an emission limit.

Recordkeeping [15A NCAC 02Q .0508(f), 40 CFR 63.866]

j. The Permittee shall maintain a record that details any occurrence when corrective action is required and when a violation occurs according to Section 2.2 B.1.g. [§63.866(b)]

k. In addition to any general records required by §63.10(b)(2)(iii) and (vi) through (xiv), the Permittee shall maintain records of: [§63.866(c)]

i. BLS firing rates (in units of tons per day) for the Recovery Boiler;

ii. Calcium oxide (CaO) production rates (in units of tons per day) for the Lime Kiln;

iii. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the site-specific levels, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

iv. Records of parameter operating limits established for each affected source or process unit;

v. Records demonstrating compliance with the requirement in to maintain proper operation of an ESP's AVC.

l. The permittee shall maintain the following records [63.866(d)(1)]:

i. In the event that an affected unit fails to meet an applicable standard, including any emission limit in §63.862 or any opacity or CPMS operating limit in §63.864, record the number of failures. For each failure record the date, start time, and duration of each failure.

ii. For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, and the following information:

(A) For any failure to meet an emission limit in §63.862, record an estimate of the quantity of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions.
(B) For each failure to meet an operating limit in §63.864, maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.
(C) Record actions taken to minimize emissions in accordance with §63.860(d) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

m. All 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 the required plans are not developed and/or if the above records are not maintained.

Reporting [15A NCAC 02Q .0508(f), 40 CFR 63.867]

n. The Permittee shall submit to the Regional Air Quality Supervisor a 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. The report shall contain, at a minimum [15A NCAC 02Q .0508(f)]:

i. A summary of the monitoring and recordkeeping activities during the reporting period;

ii. All instances of deviations from the requirements of this permit (e.g. measured parameters outside of their acceptable ranges) must be clearly identified;

iii. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS

downtime is less than 5 percent of the total reporting period operating time, only the summary report is required to be submitted. This report will be titled "Summary Report—Gaseous and Opacity Excess Emissions and Continuous Monitoring System Performance" and must contain the information specified in §63.867(c)(1); and

iv. If the total duration of monitoring exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or any violations according to §63.864(k)(2) occurred, information from both the summary report and the excess emissions and continuous monitoring system performance report must be submitted. This report will be titled "Excess Emissions and Continuous Monitoring System Performance Report" and must contain the information specified in §63.867(c)(3) and §63.10(c)(5) through (14).

o. The owner or operator must submit semiannual excess emissions reports containing the information specified in §63.867 (c)(1) through (5). The owner or operator must submit semiannual excess emission reports and summary reports following the procedure specified in paragraph (d)(2) of this section as specified in §63.10(e)(3)(v)

p. The Permittee may choose to combine semiannual summary reports and/or quarterly excess emissions reports with the same reports under 40 CFR Part 63, Subpart S (see Section 2.2 A.1). [§63.867(c)(2)]

q. Within 60 days after the date of completing each repeat performance test required by Section 2.2 B.1.c, the Permittee must submit the results of the performance test following the procedure specified below.

For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test, the permittee must submit the results of the performance test to the EPA 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/).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If the permittee claims that some of the performance test information being submitted is confidential business information (CBI), the owner or operator must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (d)(1)(i).

r. The Permittee must submit the notifications required in §63.9(b) and §63.9(h) (including any information specified in §63.867(b)) and semiannual reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov).) The Permittee must upload an electronic copy of each notification in CEDRI beginning with any notification specified in this paragraph that is required after October 11, 2019. The Permittee must use the appropriate electronic report in CEDRI for Subpart MM listed on the CEDRI Web site (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri) for semiannual reports. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee must submit the report to the Administrator at all the appropriate addresses listed in §63.13. Once the form has been available in CEDRI for 1 year, Permittee must begin submitting all subsequent

reports via CEDRI. The reports must be submitted by the deadlines specified in Subpart MM, regardless of the method in which the reports are submitted.

C. 40 CFR Part 63, Subpart DDDDD Affected Sources:

No. 1 Power Boiler (ID No. ES 150-001); and
No. 2 Power Boiler (ID No. ES 161-001)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	Burn "gas 1" fuels; Conduct energy assessment; Conduct initial and subsequent tune-ups; and Work practices	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart DDDDD)

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

a. For these boilers (**ID Nos. 150-001 and 161-001**), 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 [§63.7575]

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

c. The Permittee:

i. 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; and
ii. may choose to operate a continuous oxygen trim system.

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

40 CFR Part 63 Subpart A General Provisions [§63.7565]

d. The Permittee shall comply with the requirements of 40 CFR 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.

Compliance Date [40 CFR 63. 7510(e), §63.56(b)]

e. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [§63.7545(e), §§63.7530(e), (f)]

f. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and submitted by July 19, 2019. The notification shall contain the following:

i. a description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
ii. the following certification(s) of compliance, as applicable:

(A) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63 Subpart DDDDD at the site according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)' [i.e., Section 2.2 C.2.i.i through v and o.ii]; and
(B) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [i.e., Section 2.2 C.2.n] and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.
(C) "No secondary materials that are solid waste were combusted in any affected unit."

g. 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 must include the information in §63.7545(f). [§63.7545(f)]

General Compliance Requirements [§63.7505(a), §63.7500(f)]

h. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating except during periods of startup and shutdown.

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

i. The Permittee shall conduct a tune-up on each boiler (**ID Nos. 150-001 and 161-001**) as specified below.

i. (A) If the Permittee maintains and operates an oxygen trim system on a boiler (per Section 2.2 C.2.c.ii.), the Permittee shall conduct a tune-up on that boiler at least once every five years. [§63.7540(a)(12)]
(B) If the Permittee chooses to not maintain and operate an oxygen trim system on that boiler, the Permittee shall conduct a tune-up on that boiler at least once every year. [§63.7540(a)(10)]

ii. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection anytime prior to the tune-up or delay the burner inspection until the next scheduled or unscheduled unit shutdown, but shall inspect each burner at least once every:

(A) 72 months if the Permittee chooses to operate and maintain an oxygen trim system; or
(B) 36 months if the Permittee does not choose to operate and maintain an oxygen trim system.

iii. 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;
iv. 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. If applicable, oxygen trim system shall have the oxygen level set to a level no lower than the oxygen concentration measured during the most recent tune-up;
v. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and
vi. Measure the concentrations in the effluent stream of carbon monoxide 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.

[§63.7500(a), §63.7540(a)(10), (12)]

j. i. Each tune-up per Section 2.2 C.2.i.i.A. shall be conducted no more than 61 months after the previous tune-up. [§ 63.7515(d)]
ii. Each tune-up per Section 2.2 C.2.i.i.B. shall be conducted no more than 13 months after the previous tune-up

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

l. 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. [§63.7500(a)(3)]

m. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 C.2.d through m are not met.

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

n. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

o. The Permittee shall keep the following:

i. 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 Administrator, an annual report containing the information in paragraphs (A) through (C) below: [40 CFR 63.7540(a)(10)(vi)]

(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.

iii. the associated records for Section 2.2 C.2.i through n.
iv. 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.

p. The Permittee shall: [40 CFR 63.7560, 63.10(b)(1)]

i. maintain records in a form suitable and readily available for expeditious review;
ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
iii. keep 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.

q. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Section 2.2 C.2.o through p.

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

r. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit compliance reports to the DAQ on a 5-year basis (or on an annual basis if the boiler does not operate an O_2 trim system). The Permittee shall submit the compliance report postmarked on or before January 30 for the preceding 5-year period. The first report shall be postmarked on or before January 30, 2024 (or January 30, 2020 if the boiler does not operate an O_2 trim system) covering the compliance period from May 20, 2019 through December 31, 2023.

s. The compliance report must 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/).) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may 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, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

t. The compliance report must contain the following information:

i. company name and address;
ii. process unit information, emissions limitations, and operating parameter limitations;
iii. date of report and beginning and ending dates of the reporting period;
iv. include the date of the most recent tune-up for each unit required according to Section 2.1 X.X.i. Include the date of the most recent burner inspection.
v. 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]

D.

- **No. 1 Power Boiler (ID No. ES 150-001);**
- **No. 2 Power Boiler (ID No. ES 161-001);**
- **Recovery Boiler (ID No. ES 445-001);**
- **Lime Kiln (ID No. ES 455-061);**
- **Pulp Dryer Operations (ID No. ES 465-001);**
- **Pulp Mill;**
- **All 2009 Recovery Boiler Upgrade affected units; and**
- **Continuous Digester (ID No. ES 402-141).**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Regulated NSR Pollutants	Projected Actual Emissions Reporting	15A NCAC 02D .0530(u)

1. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

2009 Recovery Boiler Upgrade Project

a. Pursuant to 15A NCAC 02D .0530(u), because the Permittee relied on projected actual emissions for the purposes of demonstrating that the 2009 Recovery Boiler Upgrade Project (Application 2500104.08D, Permit 02590R37) did not result in a significant emissions increase, the Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This report is only required for the 10 years following implementation of the 2009 Recovery Boiler Upgrade Project.

   i. The upgrade project was completed in CY 2010.
   ii. The last report will be required for CY 2020.

b. The report shall contain:

   i. Each of the parameters in the below table; and
   ii. The items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

Emission Source(s)	Parameter	Projection (annual unless otherwise provided)*
No. 1 Power Boiler	Oil Use	2,655 Mgal
No. 2 Power Boiler	Oil Use	4,583 Mgal
	Gasifier Gas	637,200 MMBtu
Gasifier	BLS Firing	54,000 tons BLS

Emission Source(s)	Parameter	Projection (annual unless otherwise provided)*
Gasifier Preheater	Oil Use	386 Mgal
Recovery Boiler	BLS Firing	766,500 tons BLS
	Oil Use	1,134 Mgal
	Natural Gas Use	169 mmscf
Lime Kiln	Lime Throughput	93,232 ton CaO
Pulp Mill	Pulp Production	474,614 ADTP (unbleached)
All 2009 Recovery Boiler Upgrade affected units	CO emissions	662.87 tons

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the Permittee shall include in the annual report an explanation as to why the actual rates exceeded the projection.

2. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

Pulp Operations/Dryer Modification

a. Pursuant to 15A NCAC 02D .0530(u), because the Permittee relied on projected actual emissions for the purposes of demonstrating that the Pulp Operations/Dryer Modification (Application 2500104.10A, Permit 02590R40) did not result in a significant emissions increase, the Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This report is only required for the 10 years following implementation of the Pulp Operations/Dryer Modification.

i. The modification was completed in CY 2013.
ii. The last report will be required for CY 2023.

b. The report shall contain:

i. Each of the parameters in the below table; and
ii. The items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

Emission Source(s)	Parameter	Projection (annual unless otherwise provided)*
Pulp Dryer	Throughput	357,209 ADTFP

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection

3. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements for installation of the turbine generator (38.1 MW), associated with Power Boilers 1 and 2 and Recovery Boiler [Application No. 2500104.13A, Permit No. T47].

In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the testing, record keeping and reporting requirements in Section 2.2 D.3. b. through d. below.

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

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ.

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

c. The Permittee shall maintain records of actual emissions (in tons per year) for NO_x, CO, and CO_2e, and fuel usage (fuel oil in gallons), for Power Boilers 1 and 2, and Recovery Boiler, on a calendar year basis for five years, following the commencement of operation of the turbine generator.

i. The new turbine generator was installed in CY 2014.
ii. The last report will be required for CY 2019.

The Permittee shall make the information documented and maintained in this Section available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

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

d. The Permittee shall submit a report for actual emissions for NO_x, CO, and CO_2e, and fuel usage to the Director postmarked no later than 60 days after the end of each calendar year during which the records in this Section must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

The reported fuel usage for each of the five calendar years will be compared to the respective projection as included below:

Emission Source	Parameters	Projection* (Per consecutive 12-months)
No. 1 Power Boiler	Fuel Oil Burning	1,391,000 gallons
No. 2 Power Boiler	Fuel Oil Burning	4,302,000 gallons
Recovery Furnace	Fuel Oil Burning	1,855,610 gallons

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection.

4. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

2013 Increase the permitted Recovery Furnace throughput to 4.5 million pounds BLS/day

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the "2013 Increase the permitted Recovery Furnace throughput to 4.5 million pounds BLS/day" Upgrade Project (Application 2500104.11B, Permit 02590T48) did not result in a significant emissions increase, the Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. This

report is only required for the 10 years following implementation of the "2013 Increase the permitted Recovery Furnace throughput to 4.5 million pounds BLS/day" Upgrade Project.

i. The upgrade project was completed in CY 2013.
ii. The last report will be required for CY 2023.

b. The report shall contain:

i. Each of the parameters in the below table; and
ii. The items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

Emission Sources	Parameter	Projection
No. 1 Power Boiler	Heat Input from Oil or Gas	446,943 MMBtu/yr
No. 2 Power Boiler	Heat Input from Oil or Gas	1,095,000 MMBtu/yr
Recovery Boiler	BLS Firing	821,250 TBLS/yr
	Heat Input from Oil or Gas	756,269 MMBtu/yr
Lime Kiln	Lime Throughput	100,375 Tons CaO/yr
Pulp Mill	Digester Production	428,413 ADST/yr

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the Permittee shall include in the annual report an explanation as to why the actual rates exceeded the projection.

5. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

2018 Pulp Increase Project

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements for the "Pulp Increase" Project as fully described in Application No. 2500104.18B. In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the record keeping and reporting requirements in Sections 2.2 D.5.b and c below.

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

b. The Permittee shall maintain records of actual emissions for the pollutants in Table 2.2 D.5.1 in tons per year on a calendar year basis for five years following the implementation of the "Pulp Increase" Project as fully described in Application No. 2500104.18B. The Permittee shall make the information, documented and maintained in this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

c. **Reporting** [15A NCAC 02Q .0508(f)]
The Permittee shall submit a report of the emissions of the pollutants in Table 2.2 D.5.1 to the Director within 60 days after the end of each calendar year during which the records in Section 2.2 D.5.b above must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

The reported actual emissions for each of the five calendar years for the following pollutants will be compared to the respective projected actual emissions as included below:

Table 2.2 D.5.1

Pollutant	Projected Actual Emissions* (tons per year)
VOC	320
PM (filterable only)	197
PM_{10}	74
$PM_{2.5}$	54
SO_2	25
NOx	535
CO	715
CO2e	936,741
Pb	4.5E-03
H2SO4	4
H_2S	9
TRS	14

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the Permittee shall include in the annual report an explanation as to why the actual rates exceeded the projection.

2.3- STATE-ENFORCEABLE REQUIREMENTS

A. Facility-Wide Emission Sources

1. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

Pursuant to 15A NCAC 02D .1100 and in accordance with the approved air toxic compliance demonstration (incorporated with Permit No. 02590T57 issued pursuant to Application No. 2500104.20C), the following emission limits shall not be exceeded for the following toxic air pollutants:

Source ID(s)	Source Description(s)	Compound	Emission Limit		
			lb/hr	lb/day	lb/year
ES 430-047 ES 430-542 ES 430-543	East Chlorine Dioxide Storage Tank Chlorine Dioxide Generator System West Chlorine Dioxide Storage Tank	Chloroform			3,910
		Chlorine (24hr)		217	
		Chlorine (1hr)	9.16		
		Phenol	0.12		
ES 425-036 ES 425-038 ES 425-060 ES 425-065 ES 425-067	Pre-Bleach Washer Pre-Bleach Seal Tank Eop Stage Tower Eop Stage Bleach Washer Eop Stage Seal Box	Acrolein	0.01		
		Benzene			55.94
		Chloroform			29,559
		Formaldehyde	0.29		
		HCl	22.66		
		MMC	2.65E-02		
		n-Hexane		42.74	
		Phenol	1.51		
ES 425-090 ES 425-093 ES 425-305	Bleached Stock HD Chests (3)	Benzene			0.46
		Chloroform			507
		H_2S		0.97	
		MMC	1.83E-03		
		n-Hexane		5.91	
IES 430-022	Sulfuric Acid Tank	Sulfuric Acid (1hr)	6.79E-06		
		Sulfuric Acid (24hr)		1.63E-04	
IES T-101	Sulfuric Acid Tank	Sulfuric Acid (1hr)	6.79E-06		
		Sulfuric Acid (24hr)		1.63E-04	
ES 500-001	CTO Reactor System	Acrolein	1.05E-04		
		Benzene			0.39
		Chloroform			3.51
		MMC	4.28E-04		
		n-Hexane		0.64	
ES 465-001	Pulp Dryer Operation	Acrolein	3.02		
		Benzene			1,960
		Chloroform			4,311
		Formaldehyde	4.61		
		MMC	0.96		
		Phenol	35.18		
ES 420-052	200 Ton Brownstock HD Chest	Benzene			1.54
		Chloroform			1,690
		H_2S		3.25	
		MMC	0.01		
		n-Hexane		19.70	
ES 420-202	White Liquor Oxidizer	Benzene			60.93
		Formaldehyde	0.11		

Source ID(s)	Source Description(s)	Compound	Emission Limit lb/hr	lb/day	lb/year
		n-Hexane		98.51	
ES 420-029	Washed Stock Chest	Benzene			1.54
		Chloroform			1,690
		H_2S		3.25	
		MMC	6.09E-03		
		n-Hexane		19.70	
IES 445-132	Black Liquor Dump Tank	Acrolein	4.70E-04		
		Benzene			1.19
		Chloroform			20.42
		Formaldehyde	1.87E-02		
		H_2S		18.56	
		MMC	0.11		
		n-Hexane		3.56	
		Phenol	0.10		
IES 440-027	55% Black Liquor Storage Tank	Acrolein	4.70E-04		
		Benzene			1.19
		Chloroform			20.42
		Formaldehyde	1.87E-02		
		H_2S		18.56	
		MMC	0.11		
		n-Hexane		3.56	
		Phenol	0.10		
IES 440-032	Evaporator Boilout Tank	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	
IES 420-056	BMP Collection Tank	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	
IES 440-016	Soap Skimmer Tank	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	
IES 440-030	Soap Storage Tank No. 1 (soap concentrator)	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	

Source ID(s)	Source Description(s)	Compound	Emission Limit lb/hr	lb/day	lb/year
IES 440-765	Soap Storage Tank No. 2 (soap storage)	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	
IES 440-001	No. 1 Weak Black Liquor Storage Tank	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	
IES 440-004	No. 2 Weak Black Liquor Storage Tank	Acrolein	7.71E-03		
		Benzene			3.25
		Chloroform			0.32
		Formaldehyde	4.33E-03		
		H_2S		0.77	
		MMC	1.53E-02		
		n-Hexane		1.62	
IES 440-861 IES 455-395	CRP Salt Cake Return Tank Ash Mix Tank	Acrolein	8.31E-03		
		Benzene			1.89
		Formaldehyde	3.19E-02		
		Phenol	9.58E-02		
ES 455-015	No. 1 Causticizer	Ammonia	3.60		
		H_2S		35.62	
ES 455-017	No. 2 Causticizer	Ammonia	3.60		
		H_2S		35.62	
ES 455-019	No. 3 Causticizer	Ammonia	3.60		
		H_2S		35.62	
ES 455-020	No. 4 Causticizer	Ammonia	3.60		
		H_2S		35.62	
ES 455-410	No. 5 Causticizer	Ammonia	3.60		
		H_2S		35.62	
ES 455-406	Lime Slaker	Ammonia	47.68		
		H_2S		281.71	
IES 430-026 IES 430-029	Sodium Chlorate Dissolving Tank Sodium Chlorate Day Tank	Chlorine (24hr)		40.72	
		Chlorine (1hr)	1.70		
IES 401-705	Turpentine Loading	H_2S		22.55	
		MMC	0.41		
IES 185-010	WTS Clarifier F901	Ammonia	8.82		
		Chloroform			10,366
		Formaldehyde	0.28		
		Phenol	4.87E-02		
IES 140-003 IES 140-008	Nos. 1 & 2 Raw Water Clarifiers	Benzene			126
		Chloroform			400
		Phenol	1.57E-05		
ES 185-000	Wastewater Treatment Systems	Ammonia	1.25		

Source ID(s)	Source Description(s)	Compound	Emission Limit lb/hr	lb/day	lb/year
		Chloroform			15,799
		Formaldehyde	0.14		
		Phenol	2.01E-02		

SECTION 3: Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
IES 140-003	Raw Water Clarifier No. 1
IES 140-008	Raw Water Clarifier No. 2
IES 140-400	Water Filtration Area Cooling Tower
IES 150-090	Waste Oil Tank
IES 155-702	No. 6 Fuel Oil Tank
IES 155-710	No. 6 Fuel Oil Tank (40,000 gallon)
IES 155-711	No. 2 Fuel Oil Tank (20,000 gallon)
IES 185-127-02	River Oxygen Diesel Tank
IES 354-052	Log Chipping/Screening
IES 356-070	Import Chip Truck Dump
IES 356-108	Woodyard Fines Hopper
IES 356-112	Woodyard Screens
IES 356-122	Chip Silo No. 1
IES 356-124	Chip Silo No. 2
IES 356-130	Chip Conveyor to Pulp Mill
IES 356-144	Hog Fuel Pile
IES 356-238	Chip Silo No. 3
IES 356-315	Woodyard Overthick Slicers
IES 401-705	Turpentine Loading
IES 420-056	BMP Collection Tank
IES 425-090	No. 1 Bleached Stock HD Chest
IES 425-093	No. 2 Bleached Stock HD Chest
IES 425-305	No. 3 Bleached Stock HD Chest
IES 430-022	Sulfuric Acid Tank
IES 430-026	Sodium Chlorate Dissolving Tank
IES 430-029	Sodium Chlorate Day Tank

IES 430-217	Methanol Storage Tank No. 2 (North)
IES 430-224	Methanol Storage Tank No. 1 (South)
IES 440-001	No. 1 Weak Black Liquor Storage Tank
IES 440-004	No. 2 Weak Black Liquor Storage Tank
IES 440-016	Soap Skimmer Tank
IES 440-027	55% Black Liquor Storage Tank
IES 440-030	Soap Storage Tank No.1 (soap concentrator)
IES 440-032	Evaporator Boilout Tank (187)
IES 440-765	Soap Storage Tank No. 2 (soap storage)
IES 440-861	CRP Salt Cake Return Tank
IES 445-132	Black Liquor Dump Tank
IES 455-006	Dregs Washer Tank
IES 455-021	Causticizer Sump
IES 455-822-02	500,000-gallon clarified white liquor storage tank
IES 455-028	No. 2 White Liquor Clarifier
IES 455-043	Lime Mud Storage Tank No. 1
IES 455-395	Ash Mix Tank (4,700 gallon)
IES 455-400	Green Liquor Stabilization Tank
IES 455-407	Slaker Classifier
IES 455-422	Lime Mud Mix Tank
IES 455-732	Lime Mud Storage Tank No. 2
IES 455-710	White Liquor Storage Tank
IES 455-711	White Liquor Standpipe
IRB2-FOT	No. 2 fuel oil tank
IES T-101	Sulfuric Acid Storage Tank (5,000 gallon)
IES 206-049-70 **NSPS JJJJ** **MACT ZZZZ**	Natural Gas-fired emergency generator (228 horsepower)
IES-CT	Cooling Towers

IES-WWTKS	Tanks and drums containing petroleum products, each with capacity less than 10,000 gallons and not subject to NSPS Subpart Kb

[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.