



North Carolina Department of Environment and Natural Resources  
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary  
B. Keith Overcash, P.E., Director

February 26, 2008

Mr. Thomas B. Stines  
Plant Manager  
Norandal USA, Inc.  
1709 Jake Alexander Boulevard  
Salisbury, North Carolina 28146

Dear Mr. Stines:

**SUBJECT: Air Quality Permit No. 02397T19**  
**Facility ID: 03/80/00057**  
**Norandal USA, Incorporated**  
**Salisbury**  
**Rowan County**  
**Fee Class: Title V**

In accordance with your completed Air Quality Permit Application for a renewal/2Q .0516 modification to your Title V permit received July 12, 2006, we are forwarding herewith Air Quality Permit No. **02397T19** to Norandal USA, Inc., 1709 Jake Alexander Boulevard, Salisbury, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 of Part I. **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.

**Permitting Section**

1641 Mail Service Center, Raleigh, North Carolina 27699-1641  
2728 Capital Blvd., Raleigh, North Carolina 27604  
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Mr. Thomas B. Stines

Pursuant to 15A NCAC 2Q .0203(e), in addition to any otherwise applicable fee, the Permittee shall be assessed a non-attainment area RACT fee.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with **both** the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

**The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the 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 GS 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 GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.**

For PSD increment tracking purposes, nitrogen oxides emissions from this modification have increased by 8.1 pounds per hour.

In addition, specific changes and additions as summarized in the attachment below have been made to the permit (note: this list may not include all changes and additions).

This Air Quality Permit shall be effective from February 26, 2008 to January 31, 2013, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Mr. Thomas B. Stines

February 26, 2008  
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Should you have any questions concerning this matter, please contact Rahul P. Thaker, P.E., QEP, at (919) 715-6238.

Sincerely yours,

Donald R. van der Vaart, Ph.D., P.E.  
Chief

Enclosure

c: Gregg Worley, EPA Region 4  
Mooresville Regional Office  
Connie Horne, Cover letter only  
Gladys Woods, Cover letter only  
Central Files

**Norandal USA, Inc.**  
**Air Quality Permit No. 02397T19**  
**Attachment**

Emission Source ID	Emission Source Description	Insignificant Activity Regulation
I-WL	waste oil loading operations	15A NCAC 2Q .0503(8)
I-TH	two natural gas-fired heaters (2 million Btu per hour heat input capacity)	15A NCAC 2Q .0503(8)
I-PL	one propane loading station	15A NCAC 2Q .0503(8)
I-PST	petroleum product storage tanks	15A NCAC 2Q .0503(8)
I-TSC	trim scrap handling system with three cyclones	15A NCAC 2Q .0503(8)
I-WO	one waste oil/water collection tank	15A NCAC 2Q .0503(8)
I-PCT	parts cleaning tanks	15A NCAC 2Q .0503(8)
I-MS2	one caster tip preparation workshop with bagfilter	15A NCAC 2Q .0503(8)
I-LL	one leveling line with wet scrubber	15A NCAC 2Q .0503(8)
I-MST	one mineral spirits storage tank (10,000 gallon capacity)	15A NCAC 2Q .0503(8)
I-AO	one acid dip operation	15A NCAC 2Q .0503(8)
I-FO1, I-FO2, and I-FO3	three fuel oil tanks	15A NCAC 2Q .0503(8)
I-K1, I-K2, I-K3	three kerosene tanks	15A NCAC 2Q .0503(8)
I-NG1, I-NG2, I-NG3, I-NG4, I-NG5, I-NG6, and I-NG7	seven nitrogen generators	15A NCAC 2Q .0503(8)
I-NS	one nitrogen separator	15A NCAC 2Q .0503(8)

**Norandal USA, Inc.**  
**Air Quality Permit No. 02397T19**  
**Attachment**

The following changes were made to the Norandal USA, Inc. Air Permit No. 02397T18:

<b>Old Page No.</b> [Air Permit No. 02397T18]	<b>New Page No.</b> [Air Permit No. 02397T19]	<b>Condition No.</b>	<b>Changes</b>
3 and 4	3 and 4	Section 1 Table	Include all new sources and control devices: FF-25 and FF-26, SMS Mill, FR-9 through FR-14, MD-5 through MD-7, and SMS-ME. Remove the footnote for previous 501(c)(2) modification.
5	5	Section 2.1 A.	Include new furnaces: FF-25 and FF-26, and FR-9 through FR-14.
5	5	Section 2.1 A. Table	Include new applicable requirements for 2D .0902(f), .1100, 2Q .0317 (NAA NSR Avoidance and RACT Avoidance). Correct applicability for all anneal furnaces from 2D .0515 to .0503.
5	6	Section 2.1 A.1.	Re-number it to Section 2.1 A.2.
6	7	Section 2.1 A.2.	Re-number it to Section 2.1 A.3.
6	7	Section 2.1 A.3.	Re-number it to Section 2.1 A.4.
7	19	Section 2.1 A.4.	Re-number it to Section 2.2 A.8., and revise the existing 2Q .0711 condition to include all toxics which were less than TPERs.
-	6	Section 2.1 A.1.	Include this (new) correct requirement for 2D .0503 for all existing and new anneal furnaces.
5	6	Section 2.1 A.2.	Remove the applicability of all existing anneal furnaces from 2D .0515. Only melt and holding furnaces are subject to 2D .0515.
6	7	Section 2.1 A.3.a.	Include identification numbers for emission sources for this requirement.
6	7	Section 2.1 A.4.a., b. and d.	Include new sources for applicability to 2D .0521.
8	9	Section 2.1 B.	Include new rolling mill SMS Mill and associated control device SMS-ME.
8	9	Section 2.1 B. Table	Include applicability of 2D .0521, .0614, .0902(f), and 2Q .0317 (NAA NSR) for new rolling mill.
9	9	Section 2.1 B.1.b., c. and d.	Include applicability of 2D .0521 for new mill.
-	11	Section 2.1 B.3.	Include new requirement for CAM for all rolling mills and anneal furnaces.
10	12	Section 2.1 C.	Include new degassers MD-5 through MD-7.
10	12	Section 2.1 C. Table	Include applicable requirements of 2D .1100 and 2Q .0711. Remove the incorrect requirement for 2D .0515 for all degassers.

11	13	Section 2.1 C.1.	Remove this requirement.
-	12	Section 2.1 C.2.	Make it Section 2.1 C.1.
12	13	Section 2.2 A.	Include new requirements for 2D .0902(f), .1100, and 2Q .0317 (NAA NSR Avoidance and RACT Avoidance).
12	18	Section 2.2 A.1.	Renumber it Section 2.2 A.6., and include record keeping requirements for "clean charge" materials.
13	17	Section 2.2 A.3.	Renumber it Section 2.2 A.4.
-	14	Section 2.2 A.1.	Include this new requirement for 2D .0902(f).
-	16	Section 2.2 A.3.	Include this new requirement for 2D .1100.
-	17	Section 2.2 A.5.	Include this new requirement for Avoidance for NAA NSR.
-	18	Section 2.2 A.7.	Include this new requirement for Avoidance for RACT.

**State of North Carolina  
Department of Environment  
and Natural Resources**

**Division of Air Quality**



## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
<b>02397T19</b>	<b>02397T18</b>	February 26, 2008	January 31, 2013

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 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, 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:** **Norandal USA, Incorporated**  
**Facility ID:** **03/80/00057**

**Facility Site Location:** **1709 Jake Alexander Boulevard**  
**City, County, State, Zip:** **Salisbury, Rowan County, North Carolina 28146**

**Mailing Address:** **1709 Jake Alexander Boulevard**  
**City, State, Zip:** **Salisbury, North Carolina 28146**

**Application Number:** **8000057.06A**  
**Complete Application Date:** **July 12, 2006**  
**Primary SIC Code:** **3353**  
**Division of Air Quality,**  **Mooresville Regional Office**  
**Regional Office Address:** **919 North Main Street**  
**Mooresville, North Carolina 28115**

Permit issued this the February 26, 2008.

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Donald R. van der Vaart, Ph.D., P.E., Chief, Air Permits Section  
By Authority of the Environmental Management Commission

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(Including specific requirements, testing, monitoring, recordkeeping, and  
reporting requirements)

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ATTACHMENT

List of Acronyms

**PART II**

This permit does not include a Part II.

**PART I**

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in Part I of this permit unless otherwise specified.

Under Title 15A NCAC 2Q, the operation of emission source(s) and associated air pollution control device(s) and appurtenances listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

## 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
FR-1	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum melt furnace No. 1 (20 tons design capacity and 16 million Btu per hour heat input capacity)	n/a	n/a
FR-2	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum holding furnace No. 1 (10 tons design capacity and 4 million Btu per hour heat input capacity)	n/a	n/a
FR-3	one natural gas/No. 2 fuel oil/spent rolling oil-fired high purity aluminum melt furnace (10 tons design capacity and 10 million Btu per hour heat input capacity)	n/a	n/a
FR-4	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum melt furnace No. 2 (40 tons design capacity and 25.5 million Btu per hour heat input capacity)	IN-2	afterburners (2.5 million Btu per hour heat input capacity)
FR-5	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum holding furnace No. 2 (15.2 tons design capacity and 4 million Btu per hour heat input capacity)	n/a	n/a
FR-6	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum melt furnace No. 3 (30 tons design capacity and 16 million Btu per hour heat input capacity)	n/a	n/a
FR-7	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum holding furnace No. 3 (10 tons design capacity and 4 million Btu per hour heat input capacity)	n/a	n/a
FR-8	one natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum holding furnace No. 4 (10 tons design capacity and 4 million Btu per hour heat input capacity)	n/a	n/a
FR-9	one natural gas-fired melt furnace equipped with low-NOx burners (50 tons design capacity and 30 million Btu per hour heat input capacity)	n/a	n/a
FR-10	one natural gas-fired aluminum holding furnace equipped with low-NOx burners (40 tons design	n/a	n/a

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	capacity and 12 million Btu per hour heat input capacity)		
FR-11	one natural gas-fired aluminum melt furnace equipped with low-NOx burners (50 tons design capacity and 30 million Btu per hour heat input capacity)	n/a	n/a
FR-12	one natural gas-fired aluminum holding furnace equipped with low-NOx burners (40 tons design capacity and 12 million Btu per hour heat input capacity)	n/a	n/a
FR-13	one natural gas-fired aluminum melt furnace equipped with low-NOx burners (50 tons design capacity and 30 million Btu per hour heat input capacity)	n/a	n/a
FR-14	one natural gas-fired aluminum holding furnace equipped with low-NOx burners (40 tons design capacity and 12 million Btu per hour heat input capacity)	n/a	n/a
FF-1 through FF-6	six natural gas-fired coil anneal furnaces (3.3 million Btu per hour heat input capacity, each)	n/a	n/a
FF-10 and FF-11	two natural gas-fired coil anneal furnaces (3 million Btu per hour heat input capacity, each)	n/a	n/a
FF-20 and FF-21	two natural gas-fired coil anneal furnaces (13.5 million Btu per hour heat input capacity, each)	n/a	n/a
FF-22 and FF-23	two natural gas-fired coil anneal furnaces (18 million Btu per hour heat input capacity, each)	n/a	n/a
FF-24	one natural gas-fired coil anneal furnace (process rate equal to 6000 pounds per hour and 18 million Btu per hour heat input capacity)	n/a	n/a
FF-25	one natural gas-fired coil anneal furnace (process rate equal to 6000 pounds per hour and 18 million Btu per hour heat input capacity)	n/a	n/a
FF-26	one natural gas-fired coil anneal furnace (process rate equal to 6000 pounds per hour and 18 million Btu per hour heat input capacity)	n/a	n/a
RM-1, RM-2, and RM-3 <b>CAM</b>	three cold rolling mills for aluminum	RM-1ME, RM-2ME, RM-3MEN, and RM-3MES	four oil mist eliminators
RM-4 and RM-5 <b>PSD CAM</b>	two cold rolling mills for aluminum	RM-4ME and RM-5ME  RM-4SS and RM-5SS	two oil mist eliminators  two stack skimmers
SMS Mill <b>CAM</b>	one cold rolling mill for aluminum	SMS-ME	one mist eliminator
MD-1 through MD-4	four in-line degassers/filters	n/a	n/a
MD-5	three rotary in-line degassers	n/a	n/a

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
through MD-7			

## 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. Three natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum melt furnaces Nos. 1, 2 and 3 (ID Nos. FR-1, FR-4, and FR-6) with associated afterburners (ID No. IN-2) installed on FR-4**

**One natural gas/No. 2 fuel oil/spent rolling oil-fired high purity aluminum melt furnace (ID No. FR-3)**

**Three natural gas-fired aluminum melt furnaces equipped with low-NOx burners (ID Nos. FR-9, FR-11, and FR-13)**

**Four natural gas/No. 2 fuel oil/spent rolling oil-fired aluminum holding furnaces Nos. 1, 2, 3, and 4 (ID Nos. FR-2, FR-5, FR-7, and FR-8)**

**Three natural gas-fired aluminum holding furnaces equipped with low-NOx burners (ID Nos. FR-10, FR-12, and FR-14)**

**Fifteen natural gas-fired coil anneal furnaces (ID Nos. FF-1 through FF-6, FF-10, FF-11, FF-20 through FF-24, FF-25, and FF-26)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.36 lb/million Btu each (FF-1 through FF-6, FF-10, FF-11, FF-20, FF-21, and FF-22) 0.34 lb/million Btu (FF-23) 0.33 lb/million Btu (FF-24) 0.30 lb/million Btu each (FF-25 and FF-26)	15A NCAC 2D .0503
particulate matter	$E=4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour  (FR-1 through FR-14)	15A NCAC 2D .0515
sulfur dioxide	2.3 pounds per million Btu heat input (FR-1 through FR-14, FF-1 through FF-6, FF-10, FF-11,	15A NCAC 2D .0516

Regulated Pollutant	Limits/Standards	Applicable Regulation
	and FF-20 through FF-26)	
sulfur dioxide	spent rolling oil firing - 1.0% sulfur by weight (FR-1 through FR-8)	15A NCAC 2D .0516
visible emissions	40 percent opacity (FF-1 through FF-6, FF-20, FF-21, FR-1, and FR-2)	15A NCAC 2D .0521(c)
	20 percent opacity (FF-10, FF-11, FF-22 through FF-26, and FR-3 through FR-14)	15A NCAC 2D .0521(d)
volatile organic compounds	See Section 2.2 A.1.	15A NCAC 2D .0902(f) [RACT for VOC]
volatile organic compounds	See Section 2.2 A.2.	15A NCAC 2D .0958
toxic air pollutants	See Section 2.2 A.3. State-enforceable only	15A NCAC 2D .1100
odorous emissions	See Section 2.2 A.4. State-enforceable only	15A NCAC 2D .1806
volatile organic compounds	See Section 2.2 A.5.	15A NCAC 2Q .0317 [Avoidance for NAA NSR]
hazardous air pollutants	See Section 2.2 A.6.	15A NCAC 2Q .0317 [Avoidance for MACT]
nitrogen oxides	See Section 2.2 A.7.	15A NCAC 2Q .0317 [Avoidance for RACT]
toxic air pollutants	Section 2.2 A.8. State-enforceable only	15A NCAC 2Q .0711

**1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from anneal furnaces (FF-1 through FF-6, FF-10, FF-11, FF-20, FF-21, and FF-22) into the atmosphere shall not exceed 0.36 pound per million Btu heat input each.

Emissions of particulate matter from the combustion of natural gas that are discharged from anneal furnace (FF-23) into the atmosphere shall not exceed 0.34 pound per million Btu heat input.

Emissions of particulate matter from the combustion of natural gas that are discharged from anneal furnace (FF-24) into the atmosphere shall not exceed 0.33 pound per million Btu heat input.

Emissions of particulate matter from the combustion of natural gas that are discharged from anneal furnaces (FF-25 and FF-26) into the atmosphere shall not exceed 0.30 pound per million Btu heat input each.

[15A NCAC 2D .0503(a)]

**Testing** [15A NCAC 2D .0501(c)(3)]

- 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 A. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas in anneal furnaces (FF-1 through FF-6, FF-10, FF-11, and FF-20 through FF-26).

**2. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from these sources (FR-1 through FR-14) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

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

**Testing** [15A NCAC 2D .0501 (c)(3)]

- 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 2D .0515.

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

- c. No monitoring/recordkeeping/reporting is required for particulate matter emissions.

**3. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from the combustion sources (FR-1 through FR-14, FF-1 through FF-6, FF-10, FF-11, and FF-20 through FF-26) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**Testing** [15A NCAC 2D .0501(c)(4) ]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. 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 2D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the combustion of natural gas.
- d. The maximum sulfur content of any spent rolling oil received and burned in any furnace shall not exceed 1.0 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the spent rolling oil exceeds this limit.
- e. The Permittee shall collect and analyze one sample of spent rolling oil by December 30 of each calendar year in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A. 3. d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.
- f. The Permittee shall record in a logbook (written or electronic format) the amount of spent rolling oil delivered to and combusted at the facility on an annual basis. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the records are not kept.
- g. The Permittee shall submit a summary report of the spent rolling oil test results, postmarked on or before January 30 of each calendar year. The Permittee shall include in the report the total gallons of contaminated kerosene combusted at the facility for the previous 12 months. All instances of deviations from the requirements of this permit must be clearly identified.

**4. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the emission sources FF-1 through FF-6, FF-20, FF-21, FR-1, and FR-2 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. [15A NCAC 2D .0521 (d)]
- b. Visible emissions from the emission sources FF-10, FF-11, FF-22 through FF-26, and FR-3 through FR-14 shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- c. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of this test are above any limit given in Section 2.1 A. 4. a. and b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- d. To assure compliance, once a day the Permittee shall observe the emission points of these sources (FF-10, FF-11, FF-22 through FF-26, and FR-3 through FR-14) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. However, daily observations for visible emissions for each source shall be taken only when the source is operating. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The Permittee shall establish Anormal≡ for the sources (FF-25, FF-26, and FR-9 through FR-14) in the first 30 days following the start-up. If visible emissions from the sources (FF-10, FF-11, FF-22 through FF-26, and FR-3 through FR-14) 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 2D .0501(c)(8) is below the limit given in Section 2.1 A.3. a. or b. 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 2D .0521.

- e. Visible emissions from the aluminum melt furnace No. 2 (ID No. FR-4) shall be controlled by afterburners. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
  - i. monthly external inspection of the ductwork and afterburners noting the structural integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if the ductwork, fume incinerator, or afterburners are not inspected and maintained.

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

- f. 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 2D .0521 if the records are not kept.
- g. The results of inspection and maintenance for the afterburners 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; and
- iii. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if the records are not kept.

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

- h. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- i. The Permittee shall submit a summary report of the observations 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.

**B. Three cold rolling mills (ID Nos. RM-1, RM-2, and RM-3) with associated mist eliminators (ID Nos. RM-1ME, RM-2ME, RM-3MEN, and RM-3MES)**

**Two cold rolling mills (ID Nos. RM-4 and RM-5) with associated mist eliminators (ID Nos. RM-4ME and RM-5ME) and stack skimmers (ID Nos. RM-4SS and RM-5SS)**

**One cold rolling mill (ID No. SMS Mill) with associated mist eliminator (ID No. SMS -ME)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	40 percent opacity (RM-1, RM-2, and RM-3)	15A NCAC 2D .0521
	20 percent opacity (RM4, RM5, and SMS Mill)	
volatile organic compounds	as defined in specific conditions (RM-4 and RM-5)	15A NCAC 2D .0530
volatile organic compounds	See Section 2.1 B.3. (RM-1 through RM-5, and SMS Mill)	15A NCAC 2D .0614 [40 CFR 64]
volatile organic compounds	See Section 2.2 A.1.	15A NCAC 2D .0902(f) [RACT for VOC]
volatile organic compounds	See Section 2.2 A.2.	15A NCAC 2D .0958
odorous emissions	See Section 2.2 A.4. State-enforceable only	15A NCAC 2D .1806
volatile organic compounds	See Section 2.2 A.5.	15A NCAC 2Q .0317(a)(2) [Avoidance for NAA NSR]

**1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the rolling mills (RM-1, RM-2, and RM-3) 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. [15A NCAC 2D .0521 (c)]

- b. Visible emissions from the rolling mills (RM-4, RM5, and SMS Mill) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- c. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above any limit given in Section 2.1 B. 1.a. (RM-1, RM-2, and RM-3) or b. (RM-4, RM-5, and SMS Mill) above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- d. To assure compliance, once a week the Permittee shall observe the emission points of these sources (RM-1, RM-2, RM-3, RM-4, RM5, and SMS Mill) for any visible emissions above normal. Visible emissions for each source shall be taken only when the source is operating. The Permittee shall establish Anormal≡ for the source (SMS Mill) in the first 30 days following the start-up. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 B.1.a. or b. 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 2D .0521.

- e. Visible emissions from the rolling mills shall be controlled by the associated mist eliminators. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
  - i. monthly external inspection of the ductwork and mist eliminators noting the structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if the ductwork or mist eliminators are not inspected and maintained.

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

- f. 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;
  - iii. the results of any corrective actions performed; and
  - iv. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if the records are not kept.

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

- g. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- h. The Permittee shall submit a summary report of the observations 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 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. The following Best Available Control Technology (BACT) limits shall not be exceeded:

EMISSION SOURCE	POLLUTANT	BACT	
		EMISSION LIMIT	CONTROL TECHNOLOGY
Two aluminum rolling mills (RM-4 and RM-5)	VOC	-	mist eliminator and stack skimmer, and use of rolling oil consisting of 98% saturated aliphatic hydrocarbons

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- c. The Permittee shall perform inspection and maintenance on mist eliminators (RM-4ME and RM-5ME), and keep records as per Section 2.1 B.1. e. and f. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if requirements of Section 2.1 B.1. e. and f. are not complied with.
- d. The Permittee shall keep records for each shipment of rolling oil received documenting the amount of saturated aliphatic hydrocarbons. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained or if the amount of saturated aliphatic hydrocarbons in any shipment of rolling oil received is less than 98 percent.

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

- e. Reporting requirements for inspection and maintenance, performed on mist eliminators (RM-4ME and RM-5ME) in Section 2.1 B. 1. g., shall be sufficient to assure compliance with 15A NCAC 2D .0530.
- f. The Permittee shall submit a summary report consisting of the amount of saturated aliphatic hydrocarbons in rolling oil received 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.

**3. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]**

- a. The aluminum rolling mills (RM-1, RM-2, RM-3, RM-4, RM5, and SMS Mill) shall comply with all applicable requirements of 15A NCAC 2D .0614 "Compliance Assurance Monitoring".
- b. Mist eliminators (RM-1ME, RM-2ME, RM-3MEN, RM-3MES, RM-4ME, RM-5ME, and SMS-ME) shall be properly operated and maintained to control VOC emissions from the aluminum rolling mills (RM-1, RM-2, RM-3, RM-4, RM5, and SMS Mill).

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

c. The amperage load on drive motors of each mist eliminator shall be as following:

<b>Mist Eliminator</b>	<b>Normal Operating Range for Drive Motor Amperes</b>
RM-1ME	74.8-171.3
RM-2ME	35.6-102.3
RM-3MEN	15.9-36.6
RM-3MES	15-34.5
RM-4ME	47.2-135.7
RM-5ME	36.8-105.8
SMS-ME	to be determined

If the amperage load on drive motor is outside the above normal operating range, the Permittee shall assure that the interlock mechanism of the mist eliminator automatically (without manual input) shuts down the associated aluminum rolling mill. If any aluminum rolling mill is in operation even though the amperage load on the drive motor of the associated mist eliminator is outside the above corresponding range, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0614.

- d. For aluminum rolling mill SMS Mill, the Permittee shall establish the normal operating range for amperage load on drive motor of the associated mist eliminator SMS-ME and submit a permit application to amend the air permit using the procedures in 2Q .0515 "Minor Permit Modifications" within 180 days of start-up of SMS Mill. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614, if the requirements of this Section are not complied with.
- e. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a weekly visual inspection of the interlock mechanism of each mist eliminator;
  - ii. a monthly visual inspection of the system ductwork (aluminum rolling mill to stack tip) and material collection unit for leaks; and
  - iii. an annual (for each 12 month period following the initial inspection) internal inspection of the mist eliminator's structural integrity.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the interlock mechanism, ductwork and mist eliminators are not inspected and maintained.
- f. 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 date, time, and duration for each event when interlock mechanism of the mist eliminator has shutdown the aluminum rolling mill;
  - iii. the results of each inspection;
  - iv. the results of any corrective actions performed to bring the shut-downed aluminum rolling mill back in operation;
  - v. the results of any maintenance performed on the mist eliminators; and
  - vi. any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if these records are not maintained.

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

- g. The Permittee shall submit a summary report of all monitoring and record keeping 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.

**C. Seven in-line degassers/filters (ID Nos. MD-1 through MD-7)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	20 percent opacity (MD-1 through MD-7)	15A NCAC 2D .0521
toxic air pollutants	See Section 2.2 A.3. State-enforceable only	15A NCAC 2D .1100
odorous emissions	See Section 2.2 A.4. State-enforceable only	15A NCAC 2D .1806
toxic air pollutants	Section 2.2 A.8. State-enforceable only	15A NCAC 2Q .0711

**1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the in-line degassers/filters (MD-1 through MD-7) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above any limit given in Section 2.1 C. 1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. Visible emissions for each source shall be taken only when the source is operating. The Permittee shall establish Anormal≡ for the source (MD-5 through MD-7) in the first 30 days following the start-up. 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 2D .0501(c)(8) is below the limit given in Section 2.1 C. 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 2D .0521.

**Recordkeeping** [15A NCAC 2Q .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 2D .0521 if the records are not kept.

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

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

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

### A. Facility-wide

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
volatile organic compounds	See Section 2.2 A.1. (FF-1 through FF-6, FF-10, FF-11, FF-20 through FF-26, RM-1, RM-2, RM-3, RM-4, RM5, and SMS Mill)	15A NCAC 2D .0902(f) [RACT for VOC]
volatile organic compounds	See Section 2.2 A.2. (FF-1 through FF-6, FF-10, FF-11, FF-20 through FF-26, RM-1, RM-2, RM-3, RM-4, RM5, SMS Mill, and FR-1 through FR-14)	15A NCAC 2D .0958
toxic air pollutants	See Section 2.2 A.3. State-enforceable only (FR-1 through FR-14, and MD-1 through MD-7)	15A NCAC 2D .1100
odorous emissions	See Section 2.2 A.4. State-enforceable only (FF-1 through FF-6, FF-10, FF-11, FF-20 through FF-26, RM-1, RM-2, RM-3, RM-4, RM5, SMS Mill, FR-1 through FR-14, and MD-1 through MD-7)	15A NCAC 2D .1806
volatile organic compounds	See Section 2.2 A.5. (FF-1 through FF-6, FF-10, FF-11, FF-20 through FF-26, RM-1, RM-2, RM-3, RM-4, RM5, SMS Mill, and FR-1 through FR-14)	15A NCAC 2Q .0317(a)(2) [Avoidance for NAA NSR]
hazardous air pollutants	See Section 2.2 A.6. (FR-1, FR-3, FR-4, FR-6, FR-9, FR-11, and FR-13)	15A NCAC 2Q .0317(a)(5) [Avoidance for MACT]
nitrogen oxides	See Section 2.2 A.7. (FF-1 through FF-6, FF-10, FF-11, FF-20 through FF-26, and FR-1 through FR-14)	15A NCAC 2Q .0317(a)(7) [Avoidance for RACT]
toxic air pollutants	See Section 2.2 A.8. State-enforceable only (FR-1 through FR-14, and MD-1 through MD-7)	15A NCAC 2Q .0711

### 1. 15A NCAC 2D .0902(f): REASONABLY AVAILABLE CONTROL TECHNOLOGY FOR VOC

- a. The following Reasonably Available Control Technology (RACT) limits shall not be exceeded:

EMISSION SOURCE	POLLUTANT	RACT	
		EMISSION LIMIT	CONTROL TECHNOLOGY
		TONS/YR	

		RACT	
Aluminum rolling mills (RM-1 through RM-5, and SMS Mill)	VOC	-	mist eliminator and stack skimmer, and use of rolling oil consisting of 98% saturated aliphatic hydrocarbons
Anneal Furnace (FF-1 through FF-6)	VOC	1.66 (each)	use of rolling oil consisting of 98% saturated aliphatic hydrocarbons
Anneal Furnace (FF-10 and FF-11)	VOC	1.66 (each)	use of rolling oil consisting of 98% saturated aliphatic hydrocarbons
Anneal Furnace (FF-20 and FF-21)	VOC	6.93 (each)	use of rolling oil consisting of 98% saturated aliphatic hydrocarbons
Anneal Furnace (FF-22 through FF-26)	VOC	9.42 (each)	use of rolling oil consisting of 98% saturated aliphatic hydrocarbons

**Testing** [15A NCAC 2Q .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 2.2 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0902(f).

**Monitoring/Recordkeeping** [15A NCAC 2D .0903]

- c. For aluminum rolling mills (RM-4 and RM-5), monitoring/recordkeeping requirements in Section 2.1 B.2.c. and d. shall be sufficient to assure compliance with 15A NCAC 2D .0902(f). If the requirements of Section B.2.c. and d. are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0902(f).
- d. For aluminum rolling mills (RM-1 through RM-3, and SMS Mill), the Permittee shall perform inspection and maintenance on mist eliminators (RM-1ME, RM-2ME, RM-3MEN, RM-3MES, and SMS-ME), and keep records as per Section 2.1 B.1. e. and f. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0902(f) if requirements of Section 2.1 B.1. e. and f. are not complied with.
- e. For aluminum rolling mills (RM-1 through RM-3, and SMS Mill), the Permittee shall keep records for each shipment of rolling oil received documenting the amount of saturated aliphatic hydrocarbons. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0902(f) if these records are not maintained or if the amount of saturated aliphatic hydrocarbons in any shipment of rolling oil received is less than 98 percent.

**Reporting** [15A NCAC 2D .0903]

- f. Reporting requirements for mist eliminators (RM-4ME and RM-5ME) in Section 2.1 B.2.e. and f. shall be sufficient to assure compliance with 15A NCAC 2D .0902(f).
- g. Reporting requirements for mist eliminators (RM-1ME, RM-2ME, RM-3MEN, RM-3MES, and SMS-ME) in Section 2.1 B. 1. g., shall be sufficient to assure compliance with 15A NCAC 2D .0902(f).
- h. For aluminum rolling mills (RM-1 through RM-3, and SMS Mill), the Permittee shall submit a summary report consisting of the amount of saturated aliphatic hydrocarbons in rolling oil received 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 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS**

- a. Pursuant to 15A NCAC 2D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds

as a product of chemical reactions, and whose emissions of VOC are greater than 15 pounds per day; the Permittee shall:

- i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
  - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
  - iii. store wipe rags containing volatile organic compounds in closed containers,
  - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
  - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
  - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 2D .0958(c)]
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
- i. flush parts in the freeboard area,
  - ii. take precautions to reduce the pooling of solvent on and in the parts,
  - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
  - iv. not fill cleaning machines above the fill line,
  - v. not agitate solvent to the point of causing splashing. [15A NCAC 2D .0958(d)]

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

- c. To assure compliance with paragraphs (a) and (b) above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

- d. The results of the inspections 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 inspection; and
  - ii. the results of each inspection noting whether or not noncompliant conditions were observed.
- If the required records are not maintained the permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

- e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

State-enforceable only

**3. 15A NCAC 2D .1100 CONTROL OF TOXIC AIR POLLUTANTS**

- a. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Sources	Pollutants	Emission Rates

Melt and Holding Furnaces (FR-1 through FR-14)	Arsenic and inorganic arsenic compounds	1.84 lbs/yr
Melt and Holding Furnaces (FR-1 through FR-14)	Benzene	11.19 lbs/yr
Melt and Holding Furnaces (FR-1 through FR-14)	Beryllium	1.4 lbs/yr
Melt and Holding Furnaces (FR-1 through FR-14)	Cadmium	1.4 lbs/yr
Melt and Holding Furnaces (FR-1 through FR-14)	Bioavailable chromate pigments as chromium (VI) equivalent	1.4 lbs/yr
Melt and Holding Furnaces (FR-1 through FR-14)	Formaldehyde	0.0444 lb/hr
Melt and Holding Furnaces, and Degassers (FR-1 through FR-14, and MD-1 through MD-7)	Chlorine	0.87 lb/day
Melt and Holding Furnaces, and Degassers (FR-1 through FR-14, and MD-1 through MD-7)	Hydrogen Chloride	0.069 lb/hr

**Testing** [15A NCAC 2D .1105]

- b. No testing is required.

**Monitoring/Recordkeeping/Reporting** 15A NCAC 2D .1105]

- c. The Permittee shall record monthly the emission rates of bioavailable chromate pigments as chromium (vi) equivalent.  
f. Within 30 days of a written request from the DAQ, the Permittee shall submit a summary report of and monthly emission rates of bioavailable chromate pigments as chromium (vi) equivalent.

State-enforceable only

**4. 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

**5. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0531: SOURCES IN NONATTAINMENT AREAS**

- a. In order to avoid applicability of 15A NCAC 2D .0531(f), volatile organic compound (VOC) emissions from the facility wide sources shall be less than 1,486 tons per consecutive 12-month period.

**Testing** [15A NCAC 2D .0501(c)(17)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test exceed the limit given in Section 2.2 A.5.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0531.

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

- c. To ensure compliance with the emission limit specified in Section 2.2 A.5.a. above, the Permittee shall conduct the following monitoring and recordkeeping:  
i. Calculate the VOC emissions from the melt, holding, and anneal furnaces on a monthly basis according to the following formula:

$$\text{VOC, tons/month} = \left[ \sum \{0.34 \text{ lb}/10^3 \text{ gallon} \times A \text{ gallon/month}\} + \sum \{5.5 \text{ lb}/10^6 \text{ scf} \times (B) \text{ scf/month}\} \right] / [2000 \text{ lbs/ton}]$$

Where,

A = No. 2 fuel oil usage in gallons per month for each melt or holding furnace, if it burned this fuel in a given month.

B = natural gas usage in standard cubic feet per month for each melt, holding, or anneal furnace, if it burned this fuel in a given month.

- ii. Calculate the VOC emissions (due to volatalization of rolling oil) for each aluminum rolling mill for each month using the mass balance approach as prescribed here: total quantity of rolling oil entering the given rolling mill - total waste oil transferred off-site from a given rolling mill.
- iii. Calculate the VOC emissions (due to volatalization of rolling oil) for each anneal furnace for each month on a monthly basis according to the following formula:

$$\text{VOC, tons/month} = \frac{[\sum \{7 \text{ lbs}/10,000 \text{ lbs annealed aluminum} \times C \text{ lbs/month}\}]}{[2000 \text{ lbs/ton}]}$$

Where,

C = amount of aluminum annealed for each anneal furnace.

VOC emissions calculations shall be recorded in an emissions log. In addition, the Permittee shall make available to officials of the Division of Air Quality, upon request, copies of the monthly emissions log. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0531 if these records are not maintained or the actual 12-month rolling average emissions of VOC exceed the limit in Section 2.2 A.5.a. above.

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

- d. 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 following:
  - i. The monthly VOC emissions for the previous 17 months for facility wide sources. The emissions must be calculated for each of the 12-month periods over the previous 17 months.All instances of deviations from the requirements of this permit must be clearly identified.

**6. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for  
15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY [40 CFR 63  
SUBPART RRR]**

- a. In order to avoid applicability of 15A NCAC 2D .1111 (40 CFR 63 Subpart RRR "National Emission Standards for Secondary Aluminum Production"), the Permittee shall limit the aluminum raw materials for its melt furnaces (FR-1, FR-3, FR-4, FR-6, FR-9, FR-11, and FR-13) to only clean charge, customer returns and internal scrap, and shall not operate sweat furnaces, thermal chip dryers, scrap dryers/delacquering kilns/decorating kilns [40 CFR 63.1500(a) and .1503].

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

- b. The Permittee shall maintain records consisting of types of raw materials processed in the melt furnaces (FR-1, FR-3, FR-4, FR-6, FR-9, FR-11, and FR-13) and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2Q .1111 if these records are not maintained or the types of raw materials are not monitored.

**7. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for  
15A NCAC 2D .1402(d): REASONABLY AVAILABLE CONTROL TECHNOLOGY FOR  
NITROGEN OXIDES**

- a. In order to avoid applicability of 15A NCAC 2D .1402(d), nitrogen oxides (NOx) emissions from the facility wide sources shall be less than 100 tons per consecutive 12-month period and less than 560 lbs per calendar day beginning May 1 through September 30 of any year [15A NCAC 2D .1402(h)(5)].

**Testing** [15A NCAC 2D .0501(c)(7)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test exceed the limit given in Section 2.2 A.7.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1402(d).

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

- c. To ensure compliance with the emission limits specified in Section 2.2 A.7.a. above, the Permittee shall conduct the following monitoring and recordkeeping:
- i. Calculate the NOx emissions from the melt, holding, and anneal furnaces on a monthly basis according to the following formula:

$$\text{NOx, tons/month} = \left[ \sum \{20 \text{ lb}/10^3 \text{ gallon} \times A_m \text{ gallon/month}\} + \sum \{100 \text{ lb}/10^6 \text{ scf} \times B_{1m} \text{ scf/month}\} + \sum \{50 \text{ lb}/10^6 \text{ scf} \times B_{2m} \text{ scf/month}\} \right] / [2000 \text{ lbs/ton}]$$

Where,

$A_m$  = No. 2 fuel oil usage in gallons per month for each melt or holding furnace, if it burned this fuel in a given month.

$B_{1m}$  = natural gas usage in standard cubic feet per month for each melt, holding, or anneal furnace [without low-NOx burners], if it burned this fuel in a given month.

$B_{2m}$  = natural gas usage in standard cubic feet per month for each melt, holding, or anneal furnace [with low-NOx burners], if it burned this fuel in a given month.

- ii. Calculate the NOx emissions from the melt, holding, and anneal furnaces on a daily basis for each calendar day beginning May 1 through September 30 of each year according to the following formula:

$$\text{NOx, lbs/day} = \left[ \sum \{20 \text{ lb}/10^3 \text{ gallon} \times A_d \text{ gallon/day}\} + \sum \{100 \text{ lb}/10^6 \text{ scf} \times B_{1d} \text{ scf/day}\} + \sum \{50 \text{ lb}/10^6 \text{ scf} \times B_{2d} \text{ scf/day}\} \right]$$

Where,

$A_d$  = No. 2 fuel oil usage in gallons per day for each melt or holding furnace, if it burned this fuel in a given day.

$B_{1d}$  = natural gas usage in standard cubic feet per day for each melt, holding, or anneal furnace [without low-NOx burners], if it burned this fuel in a given day.

$B_{2d}$  = natural gas usage in standard cubic feet per day for each melt, holding, or anneal furnace [with low-NOx burners], if it burned this fuel in a given day.

NOx emissions calculations (daily and monthly) shall be recorded in an emissions log. In addition, the Permittee shall make available to officials of the Division of Air Quality, upon request, copies of the daily and monthly emissions log. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1402(d) if these records are not maintained or the actual daily emissions of NOx during the calendar day beginning May 1 through September 30 of any

year exceed the limit in Section 2.2 A.7.a. above or the actual 12-month rolling average emissions of NOx exceed the limit in Section 2.2 A.7.a. above.

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

- d. 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 following:
  - i. The monthly NOx emissions for the previous 17 months for facility wide sources. The emissions must be calculated for each of the 12-month periods over the previous 17 months.
  - ii. The highest daily NOx emissions during each month of the semi-annual reporting period for facility wide sources.

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

**8. 15A NCAC 2Q .0711: EMISSION RATES REQUIRING A PERMIT**

- a. Pursuant to 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit,” for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that the facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed the TPERs listed in 15A NCAC 2Q .0711.
  - i. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
  - ii. Prior to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 “Control of Toxic Air Pollutants”.
  - iii. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lbs/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
benzo(a)pyrene (50-32-8)	2.2			
n-hexane (110-54-3)		23		
manganese and compounds		0.63		
mercury, aryl and inorganic compounds		0.013		
toluene (108-88-3)		98		14.4
xylene (1330-20-7)		57		16.4

- b. The Permittee is allowed to use spent rolling oil supplied by a DAQ-approved vendor in sources (FR-1 through FR-8) as follows:
  - i. **Specifications** - The spent rolling oil shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

Constituent/Property	Allowable Level
Arsenic	1 ppm maximum
Cadmium	2 ppm maximum
Chromium	5 ppm maximum
Lead	100 ppm maximum

Total Halogens	1000 ppm maximum
Flash Point	100 F minimum
Ash	1.0 % maximum

The Permittee is responsible for ensuring that the spent rolling oil meets the approved criteria for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by DAQ as a result of any sampling and analysis of the spent rolling oil.

**Monitoring Requirements**

- ii. The Permittee shall collect and analyze a sample of the spent rolling oil by December 30 of each calendar year. Each representative sample shall be tested for the constituents/properties as listed in Section 2.2 A.8.b.i. above.

**Record keeping Requirements**

- iii. The Permittee shall maintain at the facility for a minimum of five years, and shall make available to representatives of the DAQ upon request, accurate records of the following:
  - (A) the actual amount of spent rolling oil delivered to, and fired at the facility on an annual basis.
  - (B) the results of any analytical testing of the spent rolling oil as it is sampled and tested by the vendor.

**Reporting Requirements**

- iv. Within 30 days after each calendar year, the Permittee shall submit in writing to the Regional Supervisor, DAQ, the following:
  - (A) a summary of the results of the analytical testing for the previous 12 months.
  - (B) the total gallons of spent rolling oil fired at the facility for the previous 12 months.

## SECTION 3 - GENERAL CONDITIONS

This section describes terms and conditions applicable to this Title V facility. All references to the “permit” in this section apply only to Part I of the permit.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
  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 2Q .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 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 Environment and Natural Resources upon request.
- C. **Severability Clause** [15A NCAC 2Q .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 2Q .0507(e) and 2Q .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 NO<sub>x</sub> 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
- E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]
- 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. **Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

1. Section 502(b)(10) Changes [15A NCAC 2Q .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.
2. Off Permit Changes [15A NCAC 2Q .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.
3. Emissions Trading [15A NCAC 2Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A. **Reporting Requirements for Excess Emissions and Permit Deviations**

[15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]

“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 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. *(Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.)*

“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.

#### Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
  - a. Pursuant to 15A NCAC 2D .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 2D .0535(f)(3).

#### Permit Deviations

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. 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.B. Other Requirements under 15A NCAC 2D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .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 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .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 2Q .0508(e) and 2Q .0513(b)]  
This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.
- L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .0508(f) and 2Q .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 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. 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; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 2Q .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 2Q .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 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .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 2Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. 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 2Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .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 2Q .0107 and 2Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .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 2Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 2Q .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 2Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .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 2Q .0501(e)]

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 2Q .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. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -  
FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

**FF. Title IV Allowances [15A NCAC 2Q .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 2D .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 2D .0300.

**HH. Registration of Air Pollution Sources [15A NCAC 2D .0200]**

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 2D .0202(b).

**II. Ambient Air Quality Standards [15A NCAC 2D .0501(e)]**

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 2D .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 2Q .0508(i)(16)]**

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the DAQ and follow the procedures outlined below. The Permittee must request **in writing** and receive approval from the DAQ for an alternate test method or procedure.

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.

3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
  - a. a certification of the test results by sampling team leader and facility representative;
  - b. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);
  - c. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
  - d. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
  - e. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
  - f. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

**KK. Reopening for Cause** [15A NCAC 2Q .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 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .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 2Q .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 2Q .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. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

## ATTACHMENT

### List of Acronyms

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CAA</b>	Clean Air Act
<b>DAQ</b>	Division of Air Quality
<b>DENR</b>	Department of Environment and Natural Resources
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound