

County of Forsyth



OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

FORSYTH COUNTY GOVERNMENT CENTER
201 N. CHESTNUT STREET
WINSTON-SALEM, N. C. 27101-4120

PERMIT TO CONSTRUCT/OPERATE
AIR QUALITY CONTROL
CLASS: TITLE V

PERMIT NUMBER	EFFECTIVE DATE	EXPIRATION DATE	RENEWAL DUE
00465-TV-13	May 22, 2015	June 30, 2017	September 30, 2016

Facility Name: Phoenix Aluminum, LLC
Mailing Address: 220 East Polo Road
City, State, Zip: Winston-Salem, NC 27105

Facility Location: 1300 Cunningham Avenue
City: Winston-Salem, NC

In accordance with the provisions set forth in the Forsyth County Air Quality Technical Code and Chapter 3 of the Forsyth County Code, "Air Quality Control", the facility identified above is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit", the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations contained within this permit. Additionally, any emissions activities determined from your air quality permit application as meeting the definition for insignificant activities contained in Rule 3Q .0503 have been listed for informational purposes as an "ATTACHMENT."

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 Forsyth County Office of Environmental Assistance and Protection and received an Air Quality Permit, except as provided in this permit or in accordance with applicable provisions of the Forsyth County Air Quality Technical Code.

This permit supersedes all previous permits issued to the permittee by the Forsyth County Office of Environmental Assistance and Protection.

Peter B. Lloyd, Ph.D., P.E., Program Manager
Compliance Assistance & Permitting Division

5/22/2015

DATE:

Phoenix Aluminum, LLC
Air Quality Permit # 00465-TV-13
May 22, 2015

Table of Contents

PART I
AIR QUALITY OPERATING PERMIT

SECTION 1: FACILITY-WIDE PERMITTED EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)1

SECTION 2: FACILITY GENERAL ADMINISTRATIVE CONDITIONS.....3

2.1 General Provisions.....3

2.2 Permit Availability.....3

2.3 Submissions4

2.4 Severability Clause.....4

2.5 Duty to Comply4

2.6 Need to Halt or Reduce Activity Not a Defense.....4

2.7 Permit Shield.....4

2.8 Circumvention.....5

2.9 Good Air Pollution Control Practice5

2.10 Reporting Requirements for Excess Emissions and Permit Deviations.....5

2.11 Emergency Provisions.....6

2.12 Permit Fees.....7

2.13 Annual Emission Inventory Requirements7

2.14 Compliance Certification.....7

2.15 Retention of Records8

2.16	NESHAP - Recordkeeping Requirement for Applicability Determinations	8
2.17	Duty to Provide Information	8
2.18	Duty to Supplement or Correct Application	9
2.19	Certification by Responsible Official	9
2.20	Inspection and Entry	9
2.21	Averaging Times	10
2.22	Compliance Testing	10
2.23	General Emissions Testing and Reporting Requirements	10
2.24	Termination, Modification, and Revocation of the Permit	11
2.25	Permit Reopenings, Modifications, Revocations and Reissuances, or Terminations	11
2.26	Permit Renewal	11
2.27	Reopening for Cause	12
2.28	Construction and Operation Permits	12
2.29	Permit Modifications	12
2.30	Inspection Activities	13
2.31	Standard Application Form and Required Information	13
2.32	Property Rights	13
2.33	Refrigerant Requirements (Stratospheric Ozone and Climate Protection)	13
2.34	Prevention of Accidental Releases - Section 112(r)	13
2.35	Title IV Allowances	13
2.36	Air Pollution Alert, Warning or Emergency	14
2.37	Registration of Air Pollution Sources	14
2.38	Ambient Air Quality Standards	14
2.39	Odor	14
SECTION 3: SPECIFIC LIMITATIONS AND CONDITIONS		15
3.1	ANNEALING OVENS AO01 THROUGH AO08 AND AO14 THROUGH	

AO20 (ID Nos. ES200-001 through ES200-015):15

3.2 ALUMINUM ROLLING MILLS RM19, AND RM21 THROUGH RM26 (ID Nos. ES200-016 through ES200-022)18

3.3 REVERBERATORY ALUMINUM MELTING FURNACES AND HOLDING HEARTHS:RF-02 (16 million Btu per hour heat input rate, ID No. ES200-036); RF-03 (36 million Btu per hour heat input rate, ID No. ES200-037); and RF-04 (22 million Btu per hour heat input rate, ID No. ES200-081), with SIDEWELL EMISSIONS EXHAUSTING TO AN AFTERBURNER (16 million Btu per hour heat input rate, ID No. CD200-004).20

3.5 GENERAL FACILITY-WIDE EMISSION SOURCE CONDITIONS.....22

SECTION 4: CONTROL OF TOXIC AIR POLLUTANTS LOCAL ENFORCEMENT ONLY24

**SECTION 1:
FACILITY-WIDE PERMITTED EQUIPMENT AND ASSOCIATED AIR
POLLUTION CONTROL DEVICE(S)**

Emission Source ID #	Emission Source Description	Control Device ID #	Control Device Description
ES200-001 through ES200-015 001-004 and 006-008 5 9 10 011 and 012 013 and 015 14	Annealing ovens AO01 through AO08 and AO14-AO20: AO01-AO04 and AO06-AO08 natural gas/propane-fired (0.85 million Btu per hour heat input rate each) AO05 natural gas/propane-fired (3.4 million Btu per hour heat input rate) AO14 (electric) AO15 natural gas/propane-fired (8.0 million Btu per hour heat input rate) AO16 and AO17 natural gas/propane-fired (1.4 million Btu per hour heat input rate each) AO18 and AO20 natural gas/propane-fired (2.8 million Btu per hour heat input rate each) AO19 natural gas/propane-fired (16.0 million Btu per hour heat input rate)	N/A	None
ES200-016 through ES200-022	Aluminum rolling mills RM19, and RM21-RM26:	N/A	None

Emission Source ID #	Emission Source Description	Control Device ID #	Control Device Description
ES200-036 and ES200-037	Holding hearth (RF-02) natural gas/No. 2 fuel oil/propane-fired (16 million Btu per hour heat input rate) and Reverberatory aluminum melting furnace (RF-03) natural gas/No. 2 fuel oil/propane-fired (20 million Btu per hour heat input rate) with holding hearth natural gas/No. 2 fuel oil/propane-fired (16 million Btu per hour heat input rate)	None	None
ES200-081	Reverberatory aluminum melting furnace (RF-04) natural gas/No. 2 fuel oil/propane-fired (22 million Btu per hour heat input rate). It includes a sidewell for charging internal runaround scrap.	CD200-004	Afterburner to control emissions from the sidewell, natural gas/No. 2 fuel oil/propane-fired (16 million Btu per hour heat input rate)
ES200-079 and ES200-080	Two degassing units (DG-1 and DG-2) used to introduce fluxing gases into the molten aluminum. The units use electric heaters.	None	None

SECTION 2: FACILITY GENERAL ADMINISTRATIVE CONDITIONS

2.1 General Provisions [Subchapter 3A and Rule 3Q .0508(i)(16)]

- A. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in Subchapters 3D and 3Q of the FCAQTC.
- B. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Subchapter 3A of the Forsyth County Air Quality Ordinance (FCAQO), including assessment of civil and/or criminal penalties. This permit is valid only for the specific processes and operations applied for and indicated in the air quality permit application. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and enforcement action by this Office.
- C. This permit is not a waiver of or approval of any other permits that may be required for other aspects of the facility which are not addressed in this permit.
 - D. 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. This permit does not allow the permittee to cause pollution in contravention of local laws or rules, unless specifically authorized by an order from the Director, or to cause pollution in contravention of state laws or rules.
- E. Terms and conditions contained herein shall be enforceable by this Office, the U.S. EPA and citizens of the United States as defined in the federal Clean Air Act, except those identified as **Locally Enforceable Only** requirements which are enforceable by this Office.
- F. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained or modified without the appropriate and valid permits issued by this Office, unless the source is exempted by rule. This Office may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the applicable requirements.
- G. In addition to the authority found in Rules 3D.0501 and 3Q.0508(i)(16), any deviation from the monitoring provisions of this permit may result in a request by this Office to submit data on rates of emissions in order to demonstrate compliance with any applicable regulation.

2.2 Permit Availability [Rules 3Q .0507(k), .0508(i)(16), .0508(i)(9) and .0110]

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 this Office or the U.S. EPA upon request.

2.3 Submissions [Rules 3Q .0507(c), .0508(i)(16) and .0104]

All documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required to be sent to this Office by this permit shall be submitted to the Forsyth County Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120.

2.4 Severability Clause [Rule 3Q .0508(i)(2)]

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any specific circumstance, is challenged, the application of the provision in question to other circumstances, as well as the remainder of this permit's provisions, shall not be affected.

2.5 Duty to Comply [Rule 3Q .0508(i)(3)]

The permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2.6 Need to Halt or Reduce Activity Not a Defense [Rule 3Q .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.

2.7 Permit Shield [Rule 3Q .0512(a)]

- A. 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.
- B. A permit shield shall not alter or affect:
1. the power of the Forsyth County Board of Commissioners, Director, or Governor under NCGS 143-215.3(a)(12) or the U.S. EPA under Section 303 of the federal Clean Air Act;
 2. 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;
 3. the applicable requirements under Title IV of the Clean Air Act; or
 4. the ability of the Director or the U.S. EPA under Section 114 of the federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- C. A permit shield shall not apply to any change made at a facility that does not require a permit or to any permit revision made under Rule 3Q .0523.

D. A permit shield shall not extend to minor permit modifications made under Rule 3Q .0515.

2.8 **Circumvention** [Rules 3D .0502 and 3Q .0508(i)(16)]

No person shall circumvent any permitted air pollution control device, or allow the emissions of regulated air pollutants without the applicable air pollution control device operating properly. Unless otherwise specified by this permit, no permitted emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

2.9 **Good Air Pollution Control Practice** [Rules 3D .0502 and 3Q .0508(i)(16)]

At all times, the equipment listed in *Section 1* shall be operated and maintained in a manner consistent with the design and emissions control as applied for in the application.

2.10 **Reporting Requirements for Excess Emissions and Permit Deviations** [Rules 3D .0535(f) and 3Q .0508(f)(2), 3Q .0508(i)(16) and 3Q .0508(g)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections 3D .0500, .0900, .1200 or .1400; or by a permit condition; or that exceeds a **Locally Enforceable Only** emission limit established in a permit issued under Section 3Q .0700. (*Note: This definition applies where the NSPS does not further define excess emissions for an affected NSPS emissions source.*)

"Deviation" - means any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions.

A. Sources subject to Rules 3D .0524, .1110 or .1111
Excess Emissions and Permit Deviations

1. If the source specific NSPS (3D .0524) or NESHAP (3D .1110 or .1111) defines "excess emissions", these shall be reported as prescribed in 3D .0524, .1110 or .1111.
2. If the source specific NSPS (3D .0524) or NESHAP (3D .1110 or .1111) does NOT define "excess emissions", the permittee shall report excess emissions as deviations from permit requirements as prescribed in paragraph 3, below.
3. In addition to any specific NSPS or NESHAP reporting requirements the permittee shall upon becoming aware:
 - a. report to this Office any deviations from permit requirements by the next business day, unless an alternative reporting schedule is specifically provided in the permit, and
 - b. report in writing to this Office all deviations from permit requirements or any excess emissions within two business days, unless an alternative reporting

schedule is specifically provided in the permit. The written report shall include the probable cause of such deviations and any corrective actions or preventative actions taken. Reports of all deviations from permit requirements shall be certified by a responsible official.

B. Sources NOT subject to Rules 3D .0524, 1110 or .1111

1. Excess Emissions Greater than Four Hours in Duration [3D .0535(f)]

The permittee shall report excess emissions greater than four hours in duration as prescribed in Rule 3D .0535(f) including, but not limited to the following:

- a. Notify this Office of any such occurrence by 9:00 a.m. Eastern time of this Office's next business day of becoming aware of the occurrence as described in Rule 3D .0535(f)(1);
- b. Notify this Office immediately when corrective measures have been accomplished; and
- c. Submit, if requested, to this Office within 15 days after the request, a written report as described in Rule 3D .0535(f)(3).

2. Excess Emissions Less than Four Hours in Duration and Deviations [3Q .0508(f)]

The permittee shall report excess emissions less than four hours in duration and deviations from permit requirements as follows:

- a. Report to this Office any excess emissions less than four hours in duration and any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit; and
- b. Report in writing to this Office any excess emission less than four hours in duration or any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such excess emissions and deviations and any corrective actions or preventative actions taken. All reports of excess emissions and deviations from permit requirements shall be certified by a responsible official.

C. Other Requirements under Rule 3D .0535 (Rule 3D .0535(g) is **Locally Enforceable Only**.)

The permittee shall comply with all other requirements contained in Rule 3D .0535.

2.11 **Emergency Provisions** <40 CFR 70.6(g)>

The permittee shall be subject to the following provision with regard to emergencies:

- A. 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.

- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in paragraph C below are met.
- C. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - 1. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - 2. the permitted facility was at the time being properly operated;
 - 3. 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
 - 4. the permittee submitted notice of the emergency to this Office 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, and steps taken to mitigate emissions, and corrective actions taken.
- D. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- E. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

2.12 Permit Fees [Rules 3Q .0206(b), .0508(i)(10)) and .0519(a)(4)]

If, within 30 days after being billed, the permittee fails to pay an annual permit fee required under Subchapter 3Q .0200 of the FCAQTC, the Director may initiate action to terminate this permit under Rule 3Q .0519 of the FCAQTC.

2.13 Annual Emission Inventory Requirements [Rule 3Q .0207]

The permittee shall report to the Director by June 30th of each year the actual emissions of each air pollutant listed in Rule 3Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form(s) as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

2.14 Compliance Certification <40 CFR 70.6(c)> [Rules 3Q .0508(n) and .0508((i)(16))]

By March 1st unless another date is established by the Director, the permittee shall submit to this Office and the U.S. EPA (U.S. EPA Region 4, Air Enforcement Section, Mail Code: 4APT-AEEB, 61 Forsyth Street, S.W., Atlanta, GA 30303) a compliance

certification by a responsible official with all terms and conditions in the permit, including emissions limitations, standards, or work practices. 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 include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):

- A. the identification of each term or condition of the permit that is the basis of the certification;
- B. the status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the methods or means designated in 40 CFR 70.6(c)(5)(iii)(B). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred;
- C. whether compliance was continuous or intermittent
- D. the identification of the method(s) or other means used by the owner and operator for determining the compliance status with each term and condition during the certification period; these methods shall include the methods and means required under 40 CFR Part 70.6(a)(3); and
- E. such other facts as the Director may require to determine the compliance status of the source.

2.15 Retention of Records [Rule 3Q .0508(f)]

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.

2.16 NESHAP - Recordkeeping Requirement for Applicability Determinations <40 CFR 63.10(b)(3)> [Rule 3D .1111]

If the permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under 40 CFR Part 63, the permittee shall keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source. This record shall include all of the information required under 40 CFR 63.10(b)(3).

2.17 Duty to Provide Information [Rule 3Q .0508(i)(9)]

- A. The permittee shall furnish to this Office, 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.

- B. The permittee shall furnish this Office copies of records required to be kept by the permit when such copies are requested by the Director.

2.18 Duty to Supplement or Correct Application [Rule 3Q .0507(f)]

The permittee, upon becoming aware that any relevant facts were omitted from the application or that incorrect information was submitted with the application, shall promptly submit such supplementary facts or corrected information to this Office. The permittee shall also provide additional information necessary to address any requirements that become applicable to the source after the date a complete application was submitted but prior to release of the draft permit.

2.19 Certification by Responsible Official [Rule 3Q .0520]

A responsible official (as defined in 40 CFR 70.2) 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 statement and information in the document are true, accurate, and complete.

2.20 Inspection and Entry [Rule 3Q .0508(l)]

- A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of this Office to perform the following:
1. enter upon 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;
 2. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
 3. 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
 4. sample or monitor substances or parameters, at reasonable times and using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements.

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

- B. No person shall obstruct, hamper or interfere with any such authorized representative while in the process of carrying out his official duties.

2.21 Averaging Times <40 CFR 70.6(a)(3)> [Rule 3Q .0508(f)]

Unless otherwise specified in *Section 3* of this permit for a specific emission standard or limitation, the applicable averaging period for determining compliance with an emission standard or limitation during compliance testing shall be based on the applicable U.S. EPA reference test method.

2.22 Compliance Testing [Rule 3D .0501(b)]

When requested by this Office for determining compliance with emission control standards, means shall be provided by the owner to allow periodic sampling and measuring of emission rates, including necessary ports, scaffolding and power to operate sampling equipment; and upon the request of this Office, data on rates of emissions shall be supplied by the permittee.

2.23 General Emissions Testing and Reporting Requirements [Rule 3Q .0508(i)(16)]

When required to conduct emissions testing under the terms of the permit:

- A. The permittee shall submit a sampling protocol to this Office at least 30 days prior to the scheduled test date.
- B. The permittee shall notify this Office of the specific test dates at least 10 days prior to the scheduled test date in order to afford this Office the opportunity to have an observer on-site during the sampling program.
- C. During all sampling periods, the permittee shall operate the emission source(s) under operating conditions approved by the Director or his delegate.
- D. The permittee shall submit one copy of the test report to this Office. The test report shall contain at a minimum the following information:
 1. a certification of the test results by sampling team leader and facility representative;
 2. 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) as appropriate;
 3. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics as necessary;
 4. all field, analytical and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 5. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 6. 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.
- E. This Office will review emission test results with respect to the specified testing

objectives as proposed by the permittee and approved by this Office.

2.24 **Termination, Modification, and Revocation of the Permit** [Rule 3Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- A. the information contained in the application or presented in support thereof is determined to be incorrect;
- B. the conditions under which the permit or permit renewal was granted have changed;
- C. violations of conditions contained in the permit have occurred;
- D. the permit holder fails to pay fees required under Section 3Q .0200 within 30 days after being billed;
- E. the permittee refuses to allow the Director or his authorized representative upon presentation of credentials:
 - 1. to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;
 - 2. to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;
 - 3. to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or
 - 4. to sample, at reasonable times and using reasonable safety practices, any emission sources at the facility;
- F. the U.S. EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- G. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.

2.25 **Permit Reopenings, Modifications, Revocations and Reissuances, or Terminations** [Rule 3Q .0508(i)(5)]

The Director may reopen, modify, revoke and reissue, or terminate this permit for reasons specified in Rule 3Q .0517 or .0519. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition in this permit.

2.26 **Permit Renewal** [Rule 3Q .0508(e) and Rule 3Q .0513]

This permit is issued for a term not to exceed five years. Permits issued under Title IV of

the Clean Air Act shall be issued for a fixed period of five years. 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 Rule 3Q .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.

2.27 Reopening for Cause [Rules 3Q .0517 and .0508(g)]

This permit shall be reopened and revised in accordance with Rule 3Q .0517 prior to its expiration date, for any of the following reasons:

- A. Additional applicable requirements become applicable to the facility with remaining permit term of three or more years.
- B. Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Clean Air Act. Excess emissions offset plans for this source shall become part of this permit upon approval by the U.S. EPA.
- C. The Director or the U.S. EPA finds that a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- D. The Director or the U.S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2.28 Construction and Operation Permits [Sections 3Q .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 Sections 3Q .0100 and .0300.

2.29 Permit Modifications [Rules 3Q .0514, .0515, .0516, .0517, .0523 and .0524]

- A. Permit modifications may be subject to the requirements of Rules 3Q .0514, .0515, .0516 and .0524.
- B. Changes made pursuant to Rules 3Q .0523(a) and (b) do not require a permit modification.
- C. The permittee shall submit an application for reopening for cause in accordance with Rule 3Q .0517 if notified by this Office.
- D. To the extent that emissions trading is allowed under FCAQTC Subchapter 3D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to Rule 3Q .0523(c).

2.30 Insignificant Activities [Rules 3Q .0503 and .0508(i)(15)]

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 of this Office upon request, documentation, including calculations if necessary, to demonstrate that an emission source or activity is insignificant.

2.31 Standard Application Form and Required Information [Rules 3Q .0505 and .0507]

The permittee shall submit applications and required information in accordance with the provision of Rules 3Q .0505 and .0507.

2.32 Property Rights [Rule 3Q .0508(i)(8)]

This permit does not convey any property rights of any sort, or any exclusive privileges.

2.33 Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [Rule 3Q .0508(b)]

A. 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 82 Subpart A, Appendices A and B, the permittee shall service, repair, and maintain such equipment according to the work practices and personnel certification requirements, and the permittee shall use certified recycling and recovery equipment specified in 40 CFR 82 Subpart F.

B. 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 82 Subpart F.

C. The permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the U.S. EPA or its designee as required.

2.34 Prevention of Accidental Releases - Section 112(r) [Rule 3Q .0508(h)]

If the permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the federal Clean Air Act, then the permittee is required to register this plan in accordance with 40 CFR Part 68.

2.35 Title IV Allowances [Rule 3Q .0508(i)(1)]

The facility's emissions are prohibited from exceeding any allowances that the facility lawfully holds under Title IV of the Clean Air Act. This permit shall not limit the number of allowances held by the permittee, but the permittee may not use allowances as a defense

to noncompliance with any other applicable requirement.

2.36 Air Pollution Alert, Warning or Emergency [Section 3D .0300]

Should the Director of this Office declare an Air Pollution Alert, Warning or Emergency, 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 Section 3D .0300.

2.37 Registration of Air Pollution Sources [Rule 3D .0202]

The Director of this Office 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 shall be in accordance with Rule 3D .0202(b).

2.38 Ambient Air Quality Standards [Rule 3D .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 Rule 3D .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.

2.39 Odor [Rule 3D .0522] *Locally Enforceable Only*

The permittee shall not cause or permit the emission of odors beyond the facility's property lines which are harmful, irritating or which unreasonably interfere with the use and enjoyment of any person's properties or living conditions, or any public properties or facilities. Such odors are prohibited by Rule 3D .0522. No violation shall be cited, provided that the best practical treatment, maintenance, and control of odor(s) currently available is used. This requirement does not apply to normal agricultural practices, nor to accidental emissions of odors which are not normally produced during routine operations and activities as determined by the Director.

SECTION 3: SPECIFIC LIMITATIONS AND CONDITIONS

The emission source(s) and associated air pollution control device(s) listed below are subject to the following specific terms, conditions, and limitations, including the monitoring recordkeeping, and reporting requirements to which those requirements apply:

- 3.1 ANNEALING OVENS AO01 THROUGH AO08 AND AO14 THROUGH AO20 (ID Nos. ES200-001 through ES200-015):**
AO01-AO04 and AO06-AO08 natural gas/propane-fired (0.85 million Btu per hour heat input rate each, ES200-001, 002, 003, 004, 006, 007, and 008);
AO05 natural gas/propane-fired (3.4 million Btu per hour heat input rate, ES200-005);
AO14 electric (ES200-009);
AO15 natural gas/propane-fired (8.0 million Btu per hour heat input rate, ES200-010);
AO16 and AO17 natural gas/propane-fired (1.4 million Btu per hour heat input rate each, ES200-011 and 012);
AO18 and AO20 natural gas/propane-fired (2.8 million Btu per hour heat input rate each, ES200-013 and 015); and
AO19 natural gas/propane-fired (16.0 million Btu per hour heat input rate, ES200-014).

Table 3.1: Summary of Emission Limits, Standards and Other Applicable Requirements.

Regulated Pollutant	Applicable Standard		Applicable Regulation	
	Specific Limit	Specific Unit		
Particulate Matter	$E = 4.10 \times P^{0.67}$ for $P \leq 30.0$; $E = 55.0 \times P^{0.11} - 40.0$ for $P > 30.0$; Where: E = allowable emission rate in lbs per hr P = process weight in tons per hr		Rule 3D .0515	
*Sulfur Dioxide	2.3 lb SO ₂ /mmBtu		Rule 3D .0516	
Visible emissions	40 % opacity	ES200-001 through 012	Rule 3D.0521(c)	see condition 3.4(A) for requirements
	20 % opacity	ES200-013 through 015	Rule 3D.0521(d)	

*3D .0516 - *Sulfur Dioxide Emissions from Combustion Sources* applies to the direct-fired natural gas burners on these emission units. The use of only natural gas assures compliance with this standard. No monitoring, recordkeeping, or reporting is required to assure compliance. The emissions from natural gas combustion shall be included in emission inventories. This requirement does not apply to ES200-009.

A. Particulates from Miscellaneous Industrial Processes

1. Emission Limit [Rule 3D .0515]

When operating at process rates equal to or less than 30.0 tons per hour, emissions of particulate matter from the annealing ovens (ID Nos. ES200-001 through ES200-015) shall not exceed an allowable emission rate as calculated by the following equation:

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

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour.

When operating at process rates greater than 30.0 tons per hour, emissions of particulate matter from the annealing ovens AO15 and AO19 (ID Nos. ES200-010 and ES200-014) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 55.0 \times P^{0.11} - 40.0$$

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.

2. Emission Limit [Rules 3D .0515 and 3Q .0501]

Based on maximum production capacities and Rule 3D .0515, the particulate emission rate from this equipment shall at no times exceed the maximum hourly emission rates listed below:

Table 3.1.1: Allowable Emissions Rates at Maximum Process Rates.

Emissions Unit	Maximum Allowable Emission Rate
ES200-001 through 008, 013 and 015	22.3 lbs per hr per unit
ES200-009	7.78 lbs per hr per unit
ES200-010	45.6 lbs per hr
ES200-011 and 012	13.2 lbs per hr per unit
ES200-014	53.1 lbs per hr

3. **Testing** [Rule 3D .0501(b)]

If emissions testing is required by the Office or USEPA, or the Permittee submits emissions testing to the Office in support of a permit application or other submittal, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the EAD. The Permittee must request approval from the EAD for an alternate test method or procedure in writing. Details of the emissions testing and reporting requirements can be found in General Condition **2.22**.

4. **Monitoring/Recordkeeping/Reporting** [Rule 3D .0508(f)]

No monitoring, recordkeeping or reporting is required to demonstrate compliance with this requirement.

3.2 ALUMINUM ROLLING MILLS RM19, AND RM21 THROUGH RM26 (ID Nos. ES200-016 through ES200-022).

Table 3.2: Summary of Emission Limits, Standards and Other Applicable Requirements.

Regulated Pollutant	Applicable Standard	Applicable Regulation	
Particulate Matter	$E = 4.10 \times P^{0.67}$ for $P \leq 30.0$; $E = 55.0 \times P^{0.11} - 40.0$ for $P > 30.0$; Where: E = allowable emission rate in lbs per hr P = process weight in tons per hr	Rule 3D .0515	
Visible emissions	40 % opacity	Rule 3D.0521(c)	see condition 3.4(A) for requirements

A. Particulates from Miscellaneous Industrial Processes

1. Emission Limit [Rule 3D .0515]

When operating at process rates equal to or less than 30.0 tons per hour, emissions of particulate matter from the rolling mills (ID Nos. ES200-016 through ES200-022) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour.}$$

When operating at process rates greater than 30.0 tons per hour, emissions of particulate matter from the rolling mills RM19 and RM21 (ID Nos. ES200-016 and ES200-017) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 55.0 \times P^{0.11} - 40.0 \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour.}$$

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

2. Emission Limit [Rules 3D .0515 and 3Q .0501]

Based on maximum production capacities and Rule 3D .0515, the particulate emission rate from this equipment shall at no times exceed the maximum hourly emission rates listed below.

Table 3.2.1: Allowable Emissions Rates at Maximum Process Rates

Emissions Unit	Maximum Allowable Emission Rate
ES200-016	60.4 lbs per hr
ES200-017	45.9 lbs per hr
ES200-018	18.4 lbs per hr
ES200-019	10.7 lbs per hr
ES200-020, 021, 022	6.19 lbs per hr per unit

3. **Testing [Rule 3D .0501(b)]**

The permittee shall follow the testing requirements specified in permit condition 3.1 (A)(3) for these sources.

4. **Monitoring/Recordkeeping/Reporting [Rule 3Q .0508(f)]**

No monitoring, recordkeeping or reporting is required to demonstrate compliance with this requirement.

3.3 REVERBERATORY ALUMINUM MELTING FURNACES AND HOLDING HEARTHES:
RF-02 (16 million Btu per hour heat input rate, ID No. ES200-036);
RF-03 (36 million Btu per hour heat input rate, ID No. ES200-037); and
RF-04 (22 million Btu per hour heat input rate, ID No. ES200-081), with
SIDEWELL EMISSIONS EXHAUSTING TO AN AFTERBURNER (16
million Btu per hour heat input rate, ID No. CD200-004).

Table 3.3: Summary of Emission Limits, Standards and Other Applicable Requirements

Regulated Pollutant	Applicable Standard		Applicable Regulation	
	Specific Limit	Specific Unit		
Particulate Matter	$E = 4.10 \times P^{0.67}$ for P # 30.0; Where: E = allowable emission rate in lbs per hr P = process weight in tons per hr		Rule 3D .0515	
*Sulfur Dioxide	2.3 lb SO ₂ /mmBtu		Rule 3D .0516	
Visible emissions	40 % opacity	ES200-036 and ES200-037	Rule 3D.0521(c)	see condition 3.4(A) for requirements
	20 % opacity	ES200-081	Rule 3D.0521(d)	

*3D .0516 - *Sulfur Dioxide Emissions from Combustion Sources* applies to the direct-fired natural gas/propane/No. 2 fuel oil burners associated with these emission units. Use of these fuels assures compliance with this standard. No monitoring, recordkeeping, or reporting is required to assure compliance. The emissions from the fuel combustion shall be included in emission inventories.

A. Particulates from Miscellaneous Industrial Processes

1. Emission Limit [Rule 3D .0515]

Emissions of particulate matter from the furnaces and holding hearths (ID Nos. ES200-036, 037, and 081) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

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

weight.

2. **Emission Limit** [Rules 3D .0515 and 3Q .0501]

Based on maximum production capacities and Rule 3D .0515, the particulate emission rate from this equipment shall at no times exceed the maximum hourly emission rates listed below:

Table 3.3.1: Allowable Emissions Rates at Maximum Process Rates.

Emissions Unit	Maximum Allowable Emission Rate
ES200-036	8.6 lb/hr
ES200-037	10.4 lb/hr
ES200B081	12.3 lb/hr

3. **Testing** [Rule 3D .0501(b)]

The permittee shall follow the testing requirements specified in permit condition **3.1 (A)(3)** for these sources.

4. **Monitoring** [Rule 3Q .0508(f)]

In addition to the monitoring and recordkeeping required in permit condition **3.4(A)(4)**, the permittee shall ensure that particulate matter emissions from the sidewall on RF-04 (ID No. ES200-081) are controlled by the afterburner (ID No. CD200-004) during all periods of operation. To ensure that optimum control efficiency is maintained, the permittee shall perform inspections and preventative maintenance in a manner consistent with good practice for minimizing emissions. As a minimum, the inspection and maintenance requirement must include the following:

- a. an annual internal inspection of the afterburner's structural integrity; and
- b. a monthly visual inspection of the system ductwork.

5. **Recordkeeping requirement** [Rule 3Q .0508(f)(1)] - The results of all inspections and maintenance performed shall be recorded in a log (written or electronic form). The log shall be maintained on site and shall contain the following records:

- a. the date and time of actions recorded;
- b. the results of each inspection; and
- c. the results of any maintenance performed on the afterburner.

6. **Reporting requirement** [Rule 3Q .0508(f)(2)] - The permittee shall submit a summary report of the monitoring requirements specified in condition **3.3 (A)(4)** to the Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.

3.4 GENERAL FACILITY-WIDE EMISSION SOURCE CONDITIONS

A. Control of Visible Emissions [Rule 3D .0521] - This regulation applies to all emission sources at the facility unless specified otherwise.

1. **Standard Applicable to sources existing as of July 1, 1971 [Rule 3D .0521(c)]**
Visible emissions for sources existing as of July 1, 1971 shall not exceed 40% opacity when averaged over a six-minute period except that six-minute periods averaging not more than 90% opacity may occur not more than once in any hour nor more than four times in any 24-hour period.
2. **Standard Applicable to sources established after July 1, 1971 [Rule 3D .0521(d)]**
Visible emissions for sources established after July 1, 1971 shall not exceed 20% opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87% opacity may occur not more than once in any hour nor more than four times in any 24-hour period.

Table 3.5.1: Applicable Visible Emissions Standards

Emission Source ID #	Emission Source Description	Visible Emission Standard
ES200-001 through 012	Annealing Ovens AO01 through AO08 and AO14 through AO17	40% Opacity [3D .0521(c)] Sources Existing As Of July 1, 1971
ES200-016 through 022	Rolling Mills RM19 and RM21 through RM26	
ES200-036 and 037	Reverberatory Aluminum Melting Furnace and Holding Hearths RF-02 and RF-03	
ES200-013, 014, and 015	Annealing Ovens AO18, AO19, and AO20	20% Opacity [3D .0521(d)] Sources Established After July 1, 1971
ES200-081	Reverberatory Aluminum Melting Furnace RF-04	

*These sources are not required to comply with the monitoring, recordkeeping, or reporting requirements below to ensure compliance with this applicable requirement (see Section 3.4).

3. **Testing [Rule 3D .0501(b)]**
The permittee shall follow the testing requirements specified in permit condition 3.1(A)(3) for these sources.
4. **Monitoring/Recordkeeping [Rule 3Q .0508(f)]**
The permittee shall make a daily observation of the stacks/vents venting emissions from these sources. The permittee should attempt to make this observation during a period

when the plant is operating at an average or greater than average capacity. This observation shall be made on at least 90% of the operating days during each reporting period. The permittee shall keep a daily log of this daily visible emission stack observation. The log shall contain the following:

- a. the date and time of visual observation,
- b. the person(s) who performed visual observation,
- c. identification of stack(s) where visible emissions were occurring (note color, duration and density (heavy or light)) and whether the emissions are normal (otherwise, input a general overall statement or check that there were no problems noted on a plant-wide basis),
- d. where abnormal emissions are observed, the operating conditions under which the visual observation was conducted, and
- e. any actions taken to reduce the visible emissions.

This log shall be retained for at least 5 years from the event recorded and shall be made readily available upon request by an authorized representative of the Office or the U.S. EPA.

5. Reporting Deviations from Requirements [Rule 3D .0508(f)]

All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to the Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. The report shall also contain the number of operating days during the reporting period and the number of operating days that the required monitoring was not recorded. If no deviations have occurred, the permittee shall make this statement in the report.

B. Limitation to Avoid Being Major For Hazardous Air Pollutants [Rule 3D .1111 and Rule 3Q .0317(a)(5)] - These conditions apply to all emission sources at the facility unless specified otherwise.

1. In order to remain classified as an area source for hazardous air pollutants under Rule 3D .1111 and thereby avoid any of the regulatory requirements of any future NESHAP regulations, the facility-wide emissions shall be less than:
 - a. 10 tons per year of each hazardous air pollutant, and
 - b. 25 tons per year of all hazardous air pollutants combined.

This limit is met by demonstrating the chlorine emissions are less than 10 tons per year.

2. Monitoring/Recordkeeping [Rule 3Q .0508(f) and 3Q .0317(b)]

The permittee shall maintain monthly consumption records of chlorine as follows:

- a. the quantity of chlorine in pounds used by the plant each month and for each 12-month period ending on each month during the reporting period using a monthly rolling 12-month total method.

3. Reporting [Rule 3Q .0508(f) and 3Q .0317(b)]

The permittee shall submit a semiannual report to the Office containing the following

information:

- a. the quantity of chlorine in pounds used by the plant each month and for each 12-month period ending on each month during the reporting period using a monthly rolling 12-month total method.

The report shall be received by the Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.

SECTION 4: CONTROL OF TOXIC AIR POLLUTANTS LOCAL ENFORCEMENT ONLY

The facility is subject to Section 3D .1100 of the Forsyth County Air Quality Technical Code (FCAQTC). This section is locally enforceable only. The emission sources and associated air pollution control device(s) are subject to the following specific terms, conditions, and limitations, including the monitoring recordkeeping, and reporting requirements to which those requirements apply.

- A. Toxic Air Pollutants- General** - Specification of a listed toxic air pollutant (TAP) in this permit does not excuse the permittee from complying with the requirements of Sections 3D .1100 and 3Q .0700 of the FCAQTC with regard to any other listed TAP emitted from the regulated facility, nor does this permit exempt the permittee from compliance with any future air toxics regulations promulgated pursuant to the requirements of the Clean Air Act. **[Sections 3D .1100 and 3Q .0700]**
- B. De minimis Limits** - Total facility-wide emissions of the following pollutants shall not exceed their respective de minimis emissions limits as shown in Rule 3Q .0711 unless a modeling demonstration is first approved by this Office which shows that the emissions of the subject TAPs from the facility will not adversely affect human health. This demonstration shall be in accordance with the requirements set forth in Sections 3D .1100 and 3Q .0700 of the FCAQTC. This demonstration must be made with an up-to-date version of a U.S. EPA approved computer model or, upon approval by the Office, calculated using the results of a previous modeling analysis showing compliance with the acceptable ambient levels for the pollutants listed below. **[Section 3Q .0700]**

Pollutant (CAS Number)	De minimis level
ammonia (7664-41-7)	0.68 lb/hr
ethyl acetate (141-78-6)	36 lb/hr
manganese and compounds	0.63 lb/day
mercury, aryl and inorganic compounds	0.013 lb/day

methyl chloroform (71-55-6)	64 lb/hr and 250 lb/day
methyl ethyl ketone (78-93-3)	22.4 lb/hr and 78 lb/day
n-hexane (110-54-3)	23 lb/day
nickel, soluble compounds, as nickel	0.013 lb/day
soluble chromate compounds, as chromium (VI) equivalent	0.013 lb/day
sulfuric acid (7664-93-9)	0.025 lb/hr and 0.25 lb/day
toluene (108-88-3)	14.4 lb/hr and 98 lb/day
xylene (1330-20-7)	16.4 lb/hr and 57 lb/day

- C. Dispersion Modeling Emission Limits** - Combined emissions of the following TAPs from all sources not exempted by Rule 3Q .0702(a) and (b) at this facility shall not exceed the emission rates listed below. Dispersion modeling using ISCST3, performed in April 2005, and approved by the Office in July, 2005, demonstrated that the permitted emissions of the TAPs listed in the table below from this facility impacted the surrounding ambient air at levels below the acceptable ambient levels (AALs) specified in Rule 3D .1104 of the FCAQTC. The emission rates listed below shall be used as a basis for certifying that any future modifications or changes in the methods of operation will result in ambient impacts below these AALs. In no case shall actual emissions resulting from changes or modifications exceed any of the following emission rates without first applying for and receiving a permit: **[Section 3D .1100]**

Pollutant (CAS Number)	Maximum facility-wide emission rate
arsenic and inorganic arsenic compounds	1.473 lb/yr
benzene (71-43-2)	18.6 lb/yr
beryllium (7440-41-7)	2.35 lb/yr
cadmium (7440-43-9)	2.35 lb/yr
chlorine (7782-50-5)	1.20 lb/hr 28.80 lb/day
fluorides	0.0238 lb/hr 0.57 lb/day
formaldehyde (50-00-0)	0.0437 lb/hr
hydrogen chloride (7647-01-0)	1.2 lb/hr

D. Stack data - The permittee must obtain approval from this Office prior to the modification of any stack or vent identified in the June, 2005 modeling analysis which was used to calculate the TAP emission rates listed in permit condition **4.C**. The permittee must demonstrate that the modification will not cause or contribute to any significant ambient air concentration that may adversely affect human health as required in Section 3D .1100. Examples of what constitutes a modification in this condition include:

- (1) reduction in stack heights,
- (2) change in stack diameter,
- (3) reduction of the average stack exit velocity,
- (4) reduction in stack flow rate,
- (5) addition of stack obstructions (e.g. rain caps),
- (6) redirection or reorientation of stack emissions, or
- (7) reduction in average stack temperatures. **[Rule 3Q .0308(a)(1)]**

E. Toxic Air Pollutant Restrictions - The permittee shall meet the following operational restrictions to ensure compliance with the emissions limit for arsenic in permit condition **4(C)**:

1. the use of No. 2 fuel oil by RF-2 (ID No. ES200-036), RF-3 (ID No. ES200-037), RF-4 (ID No. ES200-081), and the afterburner on RF-4 (ID No. CD200-004) shall not exceed 2,630,541 gallons per monthly-rolling 12-month period. **[Rules 3D .0611, 3D .1105, and 3Q .0308(a)(1)]**

F. Toxic Air Pollutant Recordkeeping Requirements - The permittee shall maintain updated records of production rates, throughputs, material usage, and other process operational information as is necessary to determine compliance with the emission rates specified in permit conditions **4(B) and (C)**. At a minimum these records shall include data sufficient to calculate monthly averaged emission rates (in pounds per hour of emission source operation) for TAPs with 1-hour or 24-hour emission limits and yearly emission rates (in pounds per calendar year) for TAPs with annual emission limits.

To demonstrate compliance with the arsenic emission rate in permit condition **4(C)**, the permittee shall keep monthly records of No.2 fuel oil usage for RF-2 (ID No. ES200-036), RF-3 (ID No. ES200-037), RF-4 (ID No. ES200-081), and the afterburner on RF-4 (ID No. CD200-004). The permittee shall also calculate the monthly-rolling 12-month total No. 2 fuel oil usage for each month.

Copies of these records shall be retained by the permittee for a period of three years after the date on which the record was made.

If requested by an agent of this Office, the permittee shall readily supply copies of these records at the time of inspection. Likewise, the permittee shall submit copies of the records upon request by the Office. **[Rules 3D .0605, 3D .0611, and 3D .1105]**

G. Toxic Air Pollutant Reporting Requirements - No. 2 fuel oil usage by RF-2 (ID No. ES200-036), RF-3 (ID No. ES200-037), RF-4 (ID No. ES200-081), and the afterburner on RF-4 (ID No. CD200-004) shall be reported semi-annually to the Office. The report shall include the total No. 2 fuel oil usage for each month and the monthly-rolling 12-month total for each

month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. **[Rules 3D .0605 and 3D .1105]**

Attachment 1

Insignificant Activities List

As provided in Rule 3Q .0503(7) and (8), certain air emission sources are considered insignificant activities and are not listed on the permit. However, insignificant activities because of size or production rate [3Q .0503(8)] are required to be listed in the initial permit application and with each request for renewal. The following list summarizes the insignificant activities provided in the title V permit application. Insignificant activities are not exempted from any applicable requirement or from demonstrating compliance with any applicable requirement.

Emission Source I.D.	Emission Source Description	Insignificant Because of: Category or Size/Production Rate
ES200-070	Aluminum trim conveying	Size/Production Rate
ES200-063	Groundwater bioremediation system	Size/Production Rate
ES200-066	Caster tip machining & repair shop	Size/Production Rate
ES200-044	Dross house	Size/Production Rate
	Rolling Oil tanks	Size/Production Rate
	R&D Laboratory	Category