Facility ID: 0145010093 Issuance type: Title V Draft Permit

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In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0145010093 Issuance type: Title V Draft Permit

Part II - Specific Facility Terms and Conditions

a **State and Federally Enforceable Section**

1. The Secondary Aluminum Processing Unit (SAPU) at this facility is comprised of the individual Group 1 furnaces identified as emissions units P005, P006, P007 and P020. Emissions units P005, P006, P007 and P020 are subject to 40CFR63,Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.

   The permittee has requested to limit the facility-wide potential to emit (PTE) for Hazardous Air Pollutants (HAPs) to avoid the major source requirements specified in Subpart RRR. The facility-wide PTE for HAPs, with the restrictions in this permit*, is less than the major source threshold of 10 tons/year for a single HAP and 25 tons/year for the combination of all HAPs, as rolling, 12-month summations.

   *As described in Section A.1.a, HAP emissions of hydrogen chloride, hydrogen fluoride, and chlorine are limited by restricting annual chlorine usage (based on an emission factor for hydrogen chloride established through emission testing under worst-case conditions**). 40CFR63.1503 defines hydrogen chloride (HCl) to mean emissions of hydrogen chloride that serve as a surrogate measure of the total emissions of the HAPs hydrogen chloride, hydrogen fluoride, and chlorine. Particulate matter (PM) testing was also conducted under worst-case conditions**. 40CFR63.1503 defines PM as emissions of particulate matter that serve as a measure of total particulate emissions and as a surrogate for metal HAPs contained in the particulates, including but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium. Based on Table 1 of 65 FR15704, HAP metals represent 0.68% of the total PM emissions. The PM emission rate from emissions unit P005, based on the results of the July 27 and 28, 1999 emission tests, was 2.44 lbs/hr (10.69 tons PM at 8760 hrs/yr of operation).
   **Emissions unit P005 was operating at or near its maximum capacity during the emission tests witnessed by the Ohio EPA, Central District Office on July 27 and 28, 1999. This was necessary to establish the emission factor for hydrogen chloride under worst-case conditions. Emissions units P005, P006, P007 and P020 use identical feed/charge and flux materials in the same proportions, are subject to the same work practices, and are of the same design. Therefore, the emission factor for hydrogen chloride applies to emissions units P006, P007 and P020. The worst-case PM emission rate from emissions unit P005 (2.44 lbs/hr) also represent the worst-case PM emission rate from emissions units P006, P007 and P020.

   Potential HAP metals emissions are:
   (0.0068) X (10.69 tons/yr) X 4 = 0.28 ton HAP metals/yr.

   Therefore, facility-wide*** HAP emissions (hydrogen chloride, hydrogen fluoride, chlorine, and HAP metals) are limited to less than the major source threshold of 10 tons/year for each HAP and 25 tons/year for the combination of all HAPs.

   ***The HAP emissions from emissions units B019 and B020 (natural gas-fired boilers) and the insignificant emissions units located at this facility are expected to be minimal.

   a. HCl Emission Limitation and Chlorine Usage Limitation:

      i. The total HCl emissions from emissions units P005, P006, P007 and P020 combined shall not exceed 9.9 tons per rolling, 12-month period.

      ii. The maximum annual chlorine usage (as reactive flux) for emissions units P005, P006, P007 and P020 combined shall not exceed 12.86 tons*, based upon a rolling, 12-month summation of the monthly chlorine usage rates.

      To ensure enforceability during the first 12 calendar months of operation after the issuance of this permit, the permittee shall not exceed the chlorine usage levels (for emissions units P005, P006, P007 and P020 combined) specified in the following table:

      Months Monthly Cumulative Chlorine Usage (tons)

      1 1.07
      1-2 2.14
      1-3 3.21
      1-4 4.28
      1-5 5.35
      1-6 6.42

1-7 7.50
1-8 8.57
1-9 9.63
1-10 10.70
1-11 11.77
1-12 12.86

After the first 12 calendar months of operation after the issuance of this permit, compliance with annual usage limitation shall be based upon a rolling, 12-month summation of the monthly chlorine usage rates.

* The annual chlorine usage limitation of 12.86 tons for emissions units P005, P006, P007 and P020 combined was established as follows:

[9.9 tons HCl/yr]/[0.77] = 12.86 tons chlorine usage/yr;
where:
0.77 is the emission factor established based on the results of the July 27 and 28, 1999 emission tests in units of lb HCl/lb chlorine used.

b. The permittee must not discharge to the atmosphere any 3-day, 24-hour rolling average emissions of dioxans/furans (D/F) in excess of Equation 3 of 40CFR63.1505(k)(3); or the permittee may demonstrate compliance with the emission limitations of 40CFR63.1505(k)(3) by demonstrating that each emissions unit (P005, P006, P007 and P020) is in compliance with the emission limitation of 15.0 ug of D/F TEQ per Mg (2.1E-04 gr of D/F TEQ per ton) of feed/charge as specified in 40CFR63.1505(i)(3).

NOTE: In accordance with 40CFR63.1500(c)(4), emissions units P005, P006, P007 and P020 do not process clean charge, and, therefore, are subject to the operating, monitoring, record keeping, and reporting requirements of 40CFRPart 63,Subpart RRR pertaining to D/F emissions. Also, the PM and HCl emission limitations specified in 40CFR63.1505(i)(1) and 40CFR63.1505(i)(4), respectively, do not apply because emissions units P005, P006, P007 and P020 are not subject to the major source requirements specified in Subpart RRR.

D/F means dioxins and furans. Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans. TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.

c. Pursuant to 40CFR63.1506(a), on and after the date on which the initial performance test is conducted or required to be conducted, whichever date is earlier, the permittee must operate all new and existing affected sources and control equipment according to the requirements of 40CFR63.1506. The completion of the initial performance tests for SAPUs shall be considered to be the date of approval of the OM&M plan by the Director (the appropriate Ohio EPA District Office or local air agency).

2. Operation, Maintenance and Monitoring Plan (OM&M)

Pursuant to 40CFR63.1510(b), the permittee must prepare and implement for each new or existing affected source and emissions unit, a written operation, maintenance, and monitoring (OM&M) plan. The permittee must submit the plan to the Director (the appropriate Ohio EPA District Office or local air agency) for review and approval. Any subsequent changes to the plan must be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) for review and approval. Pending approval by the Director (the appropriate Ohio EPA District Office or local air agency) of an initial or amended plan, the permittee must comply with the provisions of the submitted plan.

a. For each new or existing affected source and emissions unit, the plan must contain the following information:

i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process.

ii. A monitoring schedule for each affected source and emissions unit.

iii. Procedures for the proper operation and maintenance of each process unit used to meet the applicable emission limitations or standards in 40CFR63.1505.

iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

(a) calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

(b) procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40CFR63.

v. Procedures for monitoring the process, including the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

vi. Corrective actions to be taken when process or operating parameters deviate from the value or range established in paragraph (b)(1) of 40CFR63.1510, including:

(a) procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and

a. (b) procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

vii. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

viii. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limitations and a site-specific monitoring plan as required in 40CFR63.1510(o) for emissions units P005, P006, P007 and P020.

b. Site-Specific Requirements for SAPUs (40CFR63.1510(s))

i. Within the OM&M plan prepared in accordance with 40CFR63.1510(b), the following information must be contained in the plan:

(a) the identification of each emissions unit in the SAPU (defined in 40CFR63.1503);

(b) the specific control technology or pollution prevention measure to be used for each emissions unit in the SAPU and the date of its installation or application;

(c) the emission limitation calculated for each SAPU and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limitation;

(d) information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of 40CFR63,Subpart RRR; and

(e) the monitoring requirements applicable to each emissions unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40CFR63.1510(t).

b. ii. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

(a) any averaging among emissions of differing pollutants;

(b) the inclusion of any affected sources other than emissions units in a SAPU;

(c) the inclusion of any emissions unit while it is shutdown; or

(d) the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Director (the appropriate Ohio EPA District Office or local air agency) containing the information required by 40CFR63.1510(s) and obtain approval of the Director (the appropriate Ohio EPA District Office or local air agency) prior to implementing any revisions.

3. Monitoring Requirements

i. Pursuant to 40CFR63.1510(t), the permittee must calculate and record the 3-day, 24-hour rolling average emissions of D/F for each SAPU on a daily basis. To calculate the 3-day, 24-hour rolling average, the permittee must:

(a) Calculate and record the total weight of material charged to each emissions unit in the SAPU for each 24-hour day of operation using the feed/charge weight information required in 40CFR63.1510 (e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emission results and all calculations must be conducted on the aluminum production weight basis.

(b) Multiply the total feed/charge weight to the emissions unit, or the weight of aluminum produced by the emissions unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emissions unit (as determined during the performance test) to provide emissions for each emissions unit for the 24-hour period, in pounds.

(c) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.

(d) Compute the 24-hour daily emission rate using Equation 4 of 40CFR63.1510(t).

(e) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.
ii. Pursuant to 40CFR63.1510(u), as an alternative to the procedures of 40CFR63.1510(t), an permittee may demonstrate, through performance tests, that each individual emissions unit within the SAPU is in compliance with the applicable emission limitations for the emissions unit.

iii. Pursuant to 40CFR63.1510(w), a permittee may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40CFR63.1510, subject to the following provisions:

(a) The Administrator will not approve averaging periods other than those specified in this section.

(b) The permittee must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.

(c) The permittee shall submit the application for approval of alternate monitoring methods no later than

the notification of the performance test. The application must contain the information specified below:

(i) data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) a description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limitation is to be calculated; and

(iii) data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).

(d) The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:

(i) notice of the information and findings upon which the intended disapproval is based; and

(ii) notice of opportunity for the permittee to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the permittee to provide additional supporting information.

(e) The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the permittee of the responsibility to comply with any provisions of 40CFR63,Subpart RRR.

(f) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limitations, or alternative approaches to establishing operating limitations, are necessary to demonstrate compliance with the emission standards of 40CFR63,Subpart RRR.

4. Site-Specific Test Plan (40CFR63.1511(a))

Prior to conducting a performance test required by 40CFR63,Subpart RRR, the permittee must prepare and submit a site-specific test plan meeting the requirements of 40CFR63.7(c).

5. Performance Test Requirements (40CFR63.1511)

a. Initial Performance Test

Following approval of the site-specific test plan, the permittee must demonstrate initial compliance with the D/F emission limitation and all equipment, work practice, or operational standard associated with this standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40CFR63.1515(b). The permittee must conduct each performance test according to the requirements of Subpart A of 40CFR63 and 40CFR63,Subpart RRR. Following are the applicable testing requirements of 40CFR63,Subpart RRR:

i. the permittee must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate;

ii. each performance test for a batch process must consist of 3 separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle; and

iii. initial compliance with the D/F emission limitation or standard is demonstrated if the average of 3 runs conducted during the performance test is less than or equal to the applicable emission limitation or standard.

b. Test Methods

The permittee must use the following methods in Appendix A of 40CFR60 to determine compliance with the D/F emission limitation or standard:

i. Method 1 for sample and velocity traverses;

ii. Method 2 for velocity and volumetric flow rate;

iii. Method 3 for gas analysis;

iv. Method 4 for moisture content of the stack gas; and

v. Method 23 for the concentration of D/F.

The permittee may use a alternative test methods, subject to approval by the Administrator.

c. Testing of Representative Emissions Units

With the approval of the Director (the appropriate Ohio EPA District Office or local air agency), a single representative or similar group 1 furnace may be tested to determine the emission rate of all like affected sources at a facility provided that:

i. the tested emissions unit must use identical feed/charge and flux materials in the same proportions as the emissions units that it represents;

ii. the tested emissions unit is subject to the same work practices and the emissions units that it represents;

iii. the tested emissions unit is of the same design as the emissions units that it represents;

iv. the tested emissions unit is tested under the highest load or capacity reasonably expected to occur for any of the emissions units that it represents; and

v. at least one of each different style of emissions unit at the facility is tested.

d. Establishment of Monitoring and Operating Parameter Values

The permittee of new or existing affected sources and emissions units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40CFR63.1510 that ensures compliance with the applicable emission limitation or standard. To establish the minimum or maximum value or range, the permittee must use the appropriate procedures in 40CFR63,Subpart RRR and submit the information required by 40CFR63.1515 (b)(4) in the notification of compliance status report. The permittee may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Director (the appropriate Ohio EPA District Office or local air agency):

i. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

ii. The same test methods and procedures as required by 40CFR63,Subpart RRR were used in the test.

iii. The permittee certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

iv. All process and control equipment operating parameters required to be monitored were monitored as required in 40CFR63,Subpart RRR and documented in the test report.

6. Initial Notification

The permittee must submit initial notifications to the Director (the appropriate Ohio EPA District Office or local air agency) as described in paragraphs (a)(1) through (a)(7) of 40CFR63.1515.

7. Records

a. Pursuant to 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40CFR63 and 40CFR63,Subpart RRR.

i. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche.

iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

b. In addition to the general records required by 40CFR63.10(b), the permittee of a new or existing affected source (including an emissions unit in a SAPU) must maintain records of:

i. For each group 1 furnace (emissions units P005, P006, P007 and P020), records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

ii. For each continuous monitoring system, records required by 40CFR 63.10(c).

iii. For each affected source and emissions unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.

iv. Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.

v. Records of monthly inspections for proper unit labeling for each affected source and emissions unit subject to labeling requirements.

vi. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

(a) startup, shutdown, and malfunction plan; and

(b) site-specific SAPU emission plan (if applicable).

vii. For each SAPU, records of total charge weight, or if the permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

c. The permittee shall maintain monthly records of the following information for emissions units P005, P006,

P007 and P020 combined:

i. The chlorine usage for each month, in tons.
ii. During the first 12 calendar months of operation following the issuance of this permit, the cumulative chlorine usage for each calendar month.
iii. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the chlorine usage rates.

8. Reporting

a. Startup, Shutdown, and Malfunction Plan/Reports

The permittee must develop and implement a written plan as described in 40CFR63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by 40CFR63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40CFR63.6(e)(3). In addition to the information required in 40CFR63.6(e)(3), the plan must include:

i. procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

ii. corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

b. Excess Emissions/Summary Report

Pursuant to 40CFR63.10(e)(3), the permittee must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40CFR63.10(c). When no deviations of parameters have occurred, the permittee must submit a report stating that no excess emissions occurred during the reporting period.

i. A report must be submitted if any of these conditions occur during a 6-month reporting period:

(a) An excursion of a compliant process or operating parameter value or range (e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter).

(b) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40CFR63.6(e)(3).

(c) An affected source (including an emissions unit in a SAPU) was not operated according to the requirements of 40CFR63,Subpart RRR.

(d) A deviation from the 3-day, 24-hour rolling average emission limitation for a SAPU.

ii. The permittee must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

c. Annual Compliance Certifications

For the purpose of annual certifications of compliance required by this permit, the permittee must certify continuing compliance based upon, but not limited to, the following conditions:

i. any period of excess emissions, as defined in 40CFR63.1516(b)(1), that occurred during the year were reported as required by 40CFR63.1516; and

ii. all monitoring, record keeping, and reporting requirements were met during the year.

9. MACT Equations for Determining Compliance

The permittee shall use the procedure in paragraphs (e)(3) or (e)(4) of 40CFR63.1513 to determine compliance with the D/F emission limitations for the SAPU.

10. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month chlorine usage limitation and, for the first 12 calendar months after the issuance of this permit, all exceedances of the maximum allowable cumulative chlorine usage levels. These reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c.ii of this permit.

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b **State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

B003 - (15) Natural Gas-Fired - Alcoa Soaking Furnaces;
B004 - 1.8 mmBtu/hr Natural Gas-Fired Sunbeam Inert Furnace;
B007 - (2) 4.3 mmBtu/hr Natural Gas-Fired, Swindell Furnaces for 10" Mill;
B008 - 2.4 mmBtu/hr Natural Gas-Fired Loftus Furnace;
B014 - 1.4 mmBtu/hr Natural Gas-Fired Dravd Lab Air Heater;

B015 - 1.5 mmBtu/hr Natural Gas-Fired Clad Line Steam Generator;
K001 - 10" Mill Rod Waxing - Coil Wax Coating Operation;
P011 - 10" Rolling Mill;
P015 - Grinding Room - Grinding;
P016 - Weld Shop - Welders;
P017 - Carpenter Shop;
P018 - Chemical Laboratory;
P023 - (2) 300 Amp, Clad Welders;
P024 - Die Shop Etch Tank - Extrusion Die Cleaning Tank;
P025 - Sawing Aluminum Extrusions (Endo Saw w/ Cyclone);
P026 - Sawing Aluminum Ingots (Oliver Saw w/ Cyclone and Filter);
R001 - Maintenance Paint Booth;
Z004 - Degreasing Station;
Z005 - Loma Saw;
Z006 - Gisholt Lathe;
Z007 - Extrusion Press - Scalper;
Z008 - 0.82 mmBtu/hr Natural Gas-Fired Belco Oven;
Z009 - C&B Saw;
Z010 - 30 HP Administration Room Emergency Generator;
Z011 - 30 HP Compressor Emergency Generator;
Z013 - (3) 30 HP 10" Mill Emergency Generators;
Z014 - (2) 25 HP Deep Well Emergency Generators;
Z015 - 300 HP Fire Water Emergency Generator;
Z016 - Facility Roadways;
Z019 - 560-Gallon Capacity Diesel Storage Tank;
Z020 - 1000-Gallon Capacity Gasoline Storage Tank;
Z021 - Betram Lathe;
Z022 - Cooling Tower I - Contact Cooling Tower;
Z023 - Cooling Tower II - Non-contact Cooling Tower;
Z024 - Dross Press - Dross Processing; and
Z302 - Z313 (12) 3.1 mmBtu/hr Natural Gas-Fired Alcoa Soaking Furnaces.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a permit to install for the emissions unit.

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0145010093 Emissions Unit ID: B019 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
24 mmBtu per hour natural gas-fired Thorpe #16 homogenization furnace	OAC rule 3745-31-05(A)(3) (PTI 01-05164)	Particulate emissions shall not exceed 0.5 pound per hour and 2.1 tons per year. Sulfur dioxide emissions shall not exceed 0.01 pound per hour and 0.06 ton per year. Nitrogen oxides emissions shall not exceed 2.4 pounds per hour and 10.5 tons per year. Volatile organic compound emissions shall not exceed 0.13 pound per hour and 0.6 ton per year. Carbon monoxide emissions shall not exceed 2.0 pounds per hour and 8.8 tons per year. Visible particulate emissions shall not exceed 10% opacity, as a 3-minute average.
	OAC rules 3745-17-07(B) and 3745-17-08(B)	This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

2. **Additional Terms and Conditions**

(a) None

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II. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

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III. **Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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IV. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation -
Visible particulate emissions shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method -
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation -
Particulate emissions shall not exceed 0.5 pound per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 particulate emission factor for natural gas (1.9 lbs filterable particulate matter/mmcf) from Section 1.4, Table 1.4-2, 7/98.

c. Emission Limitation -
Sulfur dioxide emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 sulfur dioxide emission factor for natural gas (0.6 lb of sulfur dioxide/mmcf) from Section 1.4,Table 1.4-2, 7/98.

d. Emission Limitation -
Volatile organic compound emissions shall not exceed 0.13 pound per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 volatile organic compound emission factor for natural gas (5.5 lbs of volatile organic compounds/mmcf) from Section 1.4, Table 1.4-2, 7/98.

e. Emission Limitation -
Carbon monoxide emissions shall not exceed 2.0 pounds per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 carbon monoxide emission factor for natural gas (84 lbs of carbon monoxide/mmcf) from Section 1.4, Table 1.4-1, 7/98.

f. Emission Limitation -
Nitrogen oxides emissions shall not exceed 2.4 pounds per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 nitrogen oxides emission factor for natural gas (100 lbs of nitrogen oxides/mmcf) from Section 1.4, Table 1.4-1, 7/98.

2. Emission Limitations -
Particulate emissions shall not exceed 2.1 tons per year, sulfur dioxide emissions shall not exceed 0.06 ton per year, volatile organic compound emissions shall not exceed 0.6 ton per year, nitrogen oxides emissions shall not exceed 10.5 tons per year and carbon monoxide emissions shall not exceed 8.8 tons per year.

Applicable Compliance Method -
These allowable emission limitations were established to reflect the potential to emit for particulate, sulfur dioxide, volatile organic compounds, nitrogen oxides and carbon monoxide emissions for this emissions unit. Compliance with the short-term emission limitations for particulates, sulfur dioxide, volatile organic compounds, nitrogen oxides and carbon monoxide will ensure compliance with these emission limitations.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0145010093 Emissions Unit ID: B019 Issuance type: Title V Draft Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0145010093 Emissions Unit ID: B020 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
24 mmBtu per hour natural gas-fired Thorpe #17 homogenization furnace	OAC rule 3745-31-05(A)(3) (PTI 01-05164)	Particulate emissions shall not exceed 0.5 pound per hour and 2.1 tons per year. Sulfur dioxide emissions shall not exceed 0.01 pound per hour and 0.06 ton per year. Nitrogen oxides emissions shall not exceed 2.4 pounds per hour and 10.5 tons per year. Volatile organic compound emissions shall not exceed 0.13 pound per hour and 0.6 ton per year. Carbon monoxide emissions shall not exceed 2.0 pounds per hour and 8.8 tons per year. Visible particulate emissions shall not exceed 10% opacity, as a 3-minute average.
	OAC rules 3745-17-07(B) and 3745-17-08(B)	This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

2. **Additional Terms and Conditions**

(a) None

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II. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

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III. **Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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IV. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation -
Visible particulate emissions shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method -

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation -
Particulate emissions shall not exceed 0.5 pound per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 particulate emission factor for natural gas (1.9 lbs filterable particulate matter/mmcf) from Section 1.4, Table 1.4-2, 7/98.

c. Emission Limitation -
Sulfur dioxide emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 sulfur dioxide emission factor for natural gas (0.6 lb of sulfur dioxide/mmcf) from Section 1.4,Table 1.4-2, 7/98.

d. Emission Limitation -
Volatile organic compound emissions shall not exceed 0.13 pound per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 volatile organic compound emission factor for natural gas (5.5 lbs of volatile organic compounds/mmcf) from Section 1.4, Table 1.4-2, 7/98.

e. Emission Limitation -
Carbon monoxide emissions shall not exceed 2.0 pounds per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 carbon monoxide emission factor for natural gas (84 lbs of carbon monoxide/mmcf) from Section 1.4, Table 1.4-1, 7/98.

f. Emission Limitation -
Nitrogen oxides emissions shall not exceed 2.4 pounds per hour.

Applicable Compliance Method -
Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.024 mmcf/hr) by the AP-42 nitrogen oxides emission factor for natural gas (100 lbs of nitrogen oxides/mmcf) from Section 1.4, Table 1.4-1, 7/98.

2. Emission Limitations -
Particulate emissions shall not exceed 2.1 tons per year, sulfur dioxide emissions shall not exceed 0.06 ton per year, volatile organic compound emissions shall not exceed 0.6 ton per year, nitrogen oxides emissions shall not exceed 10.5 tons per year and carbon monoxide emissions shall not exceed 8.8 tons per year.

Applicable Compliance Method -
These allowable emission limitations were established to reflect the potential to emit for particulate, sulfur dioxide, volatile organic compounds, nitrogen oxides and carbon monoxide emissions for this emissions unit. Compliance with the short-term emission limitations for particulates, sulfur dioxide, volatile organic compounds, nitrogen oxides and carbon monoxide will ensure compliance with these emission limitations.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0145010093 Emissions Unit ID: B020 Issuance type: Title V Draft Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0145010093 Emissions Unit ID: P005 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
remelt furnace #3 - 40 mmBtu per hour	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not

natural gas-fired aluminum melting and holding furnace		exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 18.31 pounds per hour.
	40 CFR Part 63.1505(i)(3)	Dioxan/furan (D/F) emissions shall not exceed 15.0 ug of D/F TEQ per Mg (2.1E-04 gr of D/F TEQ per ton) of feed/charge. See A.I.2.b below.
	OAC 3745-31-05(A)(3) (PTI 01-038)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

2. **Additional Terms and Conditions**

a. This emissions unit must comply with the requirements of 40CFR63,Subpart RRR by March 24, 2003.

b. D/F means dioxins and furans. Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans. TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.

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II. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

2. Pursuant to 40CFR63.1506(b), the permittee must provide and maintain easily visible labels posted at the emissions unit that identifies the applicable emission limitations and means of compliance, including the type of affected source or emissions unit (e.g. group 1 furnace), the applicable operational standard(s) and control method(s) such as the type of charge to be used for a furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

3. Pursuant to 40CFR63.1506(d), the permittee of this emissions unit must either:
a. install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan; or
b. measure and record the aluminum production weight from an affected source or emissions unit rather than feed/charge weight to an affected source or emissions unit, provided that:

i. the aluminum production weight, rather than feed/charge weight is measured and recorded for all emissions units (P005, P006, P007 and P020); and

ii. all calculations to demonstrate compliance with the emission limitations for all emissions units (P005, P006, P007 and P020) are based on aluminum production weight rather than feed/charge weight.

4. Pursuant to 40CFR63.1506(n)(1), the permittee must maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

5. Pursuant to 40CFR63.1506(n)(2), the permittee must operate this emissions unit in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

6. Pursuant to 40CFR63.1506(p), when a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee must initiate corrective action. Corrective action must restore operation of the emissions unit (including the process) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

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III. **Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. The permittee shall inspect the labels for this emissions unit at least once per calendar month to confirm that posted labels as required by the operational standard in 40CFR63.1506(c) are intact and legible.

3. Feed/Charge Weight (40CFR63.1510(e))

The permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, this emissions unit over the same operating cycle or time period used in the performance test; as an alternative to a measurement device, the permittee may use a procedure acceptable to the Director (the appropriate Ohio EPA District Office or local air agency) to

determine the total weight of feed/charge or aluminum production to this emissions unit. The weight measurement device or procedure must comply with the following:

a. The accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

4. Total Reactive Flux Injection Rate (40CFR63.1510(j))

The permittee shall:

a. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to this emissions unit. Under this requirement, the following parameters must be met:

i. The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

ii. The accuracy of the weight measurement device must be +/- 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of +/- 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.

iii. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

b. Calculate and record the gaseous or liquid reactive flux injection rate (lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

c. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

i. gaseous or liquid reactive flux other than chlorine; and
ii. solid reactive flux.
d. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

e. The permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard(s) on a continuous basis.

5. Site-Specific Monitoring Plan (40CFR63.1510(o))

a. The permittee shall develop, in consultation with the Director (the appropriate Ohio EPA District Office or local air agency), a written site-specific monitoring plan. The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for D/F emissions from this emissions unit. The permittee shall:

i. Submit the site-specific monitoring plan to the Director (the appropriate Ohio EPA District Office or local air agency) for review at least 6 months prior to the compliance date (i.e., at least 6 months prior to March 24, 2003).

ii. The Director (the appropriate Ohio EPA District Office or local air agency) will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limitations and demonstrates, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for the pollutant. Test data must establish the highest level of D/F that will be emitted from this emissions unit. Subject to the Director's (the appropriate Ohio EPA District Office or local air agency) approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging this emissions unit with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

b. The site-specific monitoring plan for this emissions unit must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
c. The site-specific monitoring plan for this emissions unit must include provisions for unit labeling as required in 40CFR63.1510(c), feed/charge weight measurement (or production weight measurement) as required in 40CFR63.1510(e) and flux weight measurement as required in 40CFR63.1510(j).

d. If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-

assured measurements in accordance with all applicable requirements of the general provisions in Subpart A of 40CFR63.

e. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(p).

f. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(q).

6. Scrap Inspection Program (40CFR63.1510(p))

A scrap inspection program must include:

a. a proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

b. a scrap inspector training program;

c. an established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

d. periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

e. a system for assuring that only acceptable scrap is charged to this emissions unit; and

f. record keeping requirements to document conformance with plan requirements.

7. Pursuant to 40CFR63.1510(q), if this emissions unit is dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented), the permittee may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

a. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

b. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

c. Operating, monitoring, record keeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

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IV. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation -
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -
Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation -
Particulate emissions shall not exceed 18.31 pounds per hour.

Applicable Compliance Method -
This emission limitation was established by converting the maximum process weight rate [18,667 pounds which is derived from dividing the maximum amount of aluminum that can be charged, 70,000 pounds, by the least amount of batch time*, 3.75 hours, to create a marketable product] to ton(s) per hour (P) and substituting this value for (P) into the appropriate equation given in OAC rule 3745-17-11, Table 1, to derive the particulate pounds per hour emission limitation (E). Based on emission tests conducted on July 27 and 28, 1999, and witnessed by the Ohio EPA, Central District Office, the tested particulate emission rate while emissions unit P005 was operating at or near its maximum capacity was 2.44

pounds per hour.

*Batch time is calculated as the time that the aluminum is placed in the melter and heating begins until the molten aluminum is poured from the holder.

If required, compliance with the particulate emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

2. Performance Test Requirements

a. In the site-specific monitoring plan required by 40CFR63.1510(o), the permittee of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices shall include data and information demonstrating compliance with the applicable emission limitations - if the group 1 furnace processes other than clean charge material, the permittee must conduct emission tests to measure emissions of D/F at the furnace exhaust outlet.

b. The permittee shall conduct performance tests as described in 40CFR63.1512(j)(2). The results of the performance tests are used to establish emission rates in micrograms TEQ/Mg of feed/charge for D/F emissions from this emissions unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40CFR63.1510(t).

c. During the emission test(s) conducted to determine compliance with emission limitations in a kg/Mg (lb/ton) format, the permittee of this emissions unit, subject to an emission limitation in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to this emissions unit for each of the 3 test runs and calculate and record the total weight. An permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emissions units instead of the feed/charge weight.

d. The permittee shall use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate:

i. continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15-minute period during the D/F test(s), determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

ii. record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

iii. determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 in 40CFR63.1512;

iv. divide the weight of total chlorine usage for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

v. if a solid reactive flux other than magnesium chloride is used, the permittee shall derive the appropriate proportion factor subject to approval by the Director (the appropriate Ohio EPA District Office or local air agency).

e. The permittee of each group 1 furnace shall submit the information described in 40CFR63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in 40CFR63.1506(b).

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VI. **Miscellaneous Requirements**

1. MACT Equations for Determining Compliance

a. Pursuant to 40CFR63.1513(b), compliance with the D/F standard shall be demonstrated using Equation 7 of 40CFR63.1513.

b. To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in ``Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update'' (EPA-625/3-89-016), incorporated by reference in 40CFR63.1502, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

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Facility ID: 0145010093 Emissions Unit ID: P005 Issuance type: Title V Draft Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0145010093 Emissions Unit ID: P006 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
remelt furnace #4 - 40 mmBtu per hour natural gas-fired aluminum melting and holding furnace	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 18.31 pounds per hour.
	40 CFR Part 63.1505(i)(3)	Dioxan/furan (D/F) emissions shall not exceed 15.0 ug of D/F TEQ per Mg (2.1E-04 gr of D/F TEQ per ton) of feed/charge. See A.I.2.b below.
	OAC 3745-31-05(A)(3) (PTI 01-038)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

2. **Additional Terms and Conditions**

a. This emissions unit must comply with the requirements of 40CFR63,Subpart RRR by March 24, 2003.

b. D/F means dioxins and furans. Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans. TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.

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II. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

2. Pursuant to 40CFR63.1506(b), the permittee must provide and maintain easily visible labels posted at the emissions unit that identifies the applicable emission limitations and means of compliance, including the type of affected source or emissions unit (e.g. group 1 furnace), the applicable operational standard(s) and control method(s) such as the type of charge to be used for a furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

3. Pursuant to 40CFR63.1506(d), the permittee of this emissions unit must either:
a. install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan; or
b. measure and record the aluminum production weight from an affected source or emissions unit rather than feed/charge weight to an affected source or emissions unit, provided that:

i. the aluminum production weight, rather than feed/charge weight is measured and recorded for all emissions units (P005, P006, P007 and P020); and

ii. all calculations to demonstrate compliance with the emission limitations for all emissions units (P005, P006, P007 and P020) are based on aluminum production weight rather than feed/charge weight.

4. Pursuant to 40CFR63.1506(n)(1), the permittee must maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

5. Pursuant to 40CFR63.1506(n)(2), the permittee must operate this emissions unit in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

6. Pursuant to 40CFR63.1506(p), when a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee must initiate corrective action. Corrective action must restore operation of the emissions unit (including the process) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

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III. **Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. The permittee shall inspect the labels for this emissions unit at least once per calendar month to confirm that

posted labels as required by the operational standard in 40CFR63.1506(c) are intact and legible.

3. Feed/Charge Weight (40CFR63.1510(e))

The permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, this emissions unit over the same operating cycle or time period used in the performance test; as an alternative to a measurement device, the permittee may use a procedure acceptable to the Director (the appropriate Ohio EPA District Office or local air agency) to determine the total weight of feed/charge or aluminum production to this emissions unit. The weight measurement device or procedure must comply with the following:

a. The accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

4. Total Reactive Flux Injection Rate (40CFR63.1510(j))

The permittee shall:

a. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to this emissions unit. Under this requirement, the following parameters must be met:

i. The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

ii. The accuracy of the weight measurement device must be +/- 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of +/- 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.

iii. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

b. Calculate and record the gaseous or liquid reactive flux injection rate (lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

c. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

i. gaseous or liquid reactive flux other than chlorine; and
ii. solid reactive flux.
d. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

e. The permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard(s) on a continuous basis.

5. Site-Specific Monitoring Plan (40CFR63.1510(o))

a. The permittee shall develop, in consultation with the Director (the appropriate Ohio EPA District Office or local air agency), a written site-specific monitoring plan. The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for D/F emissions from this emissions unit. The permittee shall:

i. Submit the site-specific monitoring plan to the Director (the appropriate Ohio EPA District Office or local air agency) for review at least 6 months prior to the compliance date (i.e., at least 6 months prior to March 24, 2003).

ii. The Director (the appropriate Ohio EPA District Office or local air agency) will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limitations and demonstrates, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for the pollutant. Test data must establish the highest level of D/F that will be emitted from this emissions unit. Subject to the Director's (the appropriate Ohio EPA District Office or local air agency) approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging this emissions unit with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

b. The site-specific monitoring plan for this emissions unit must document each work practice,

equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
c. The site-specific monitoring plan for this emissions unit must include provisions for unit labeling as required in 40CFR63.1510(c), feed/charge weight measurement (or production weight measurement) as required in 40CFR63.1510(e) and flux weight measurement as required in 40CFR63.1510(j).

d. If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in Subpart A of 40CFR63.

e. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(p).

f. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(q).

6. Scrap Inspection Program (40CFR63.1510(p))

A scrap inspection program must include:

a. a proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

b. a scrap inspector training program;

c. an established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

d. periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

e. a system for assuring that only acceptable scrap is charged to this emissions unit; and

f. record keeping requirements to document conformance with plan requirements.

7. Pursuant to 40CFR63.1510(q), if this emissions unit is dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented), the permittee may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

a. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

b. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

c. Operating, monitoring, record keeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

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IV. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation -
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -
Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation -
Particulate emissions shall not exceed 18.31 pounds per hour.

Applicable Compliance Method -

This emission limitation was established by converting the maximum process weight rate [18,667 pounds which is derived from dividing the maximum amount of aluminum that can be charged, 70,000 pounds, by the least amount of batch time*, 3.75 hours, to create a marketable product] to ton(s) per hour (P) and substituting this value for (P) into the appropriate equation given in OAC rule 3745-17-11, Table 1, to derive the particulate pounds per hour emission limitation (E). Based on emission tests conducted on July 27 and 28, 1999, and witnessed by the Ohio EPA, Central District Office, the tested particulate emission rate while emissions unit P005 was operating at or near its maximum capacity was 2.44 pounds per hour.

*Batch time is calculated as the time that the aluminum is placed in the melter and heating begins until the molten aluminum is poured from the holder.

If required, compliance with the particulate emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

2. Performance Test Requirements

a. In the site-specific monitoring plan required by 40CFR63.1510(o), the permittee of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices shall include data and information demonstrating compliance with the applicable emission limitations - if the group 1 furnace processes other than clean charge material, the permittee must conduct emission tests to measure emissions of D/F at the furnace exhaust outlet.

b. The permittee shall conduct performance tests as described in 40CFR63.1512(j)(2). The results of the performance tests are used to establish emission rates in micrograms TEQ/Mg of feed/charge for D/F emissions from this emissions unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40CFR63.1510(t).

c. During the emission test(s) conducted to determine compliance with emission limitations in a kg/Mg (lb/ton) format, the permittee of this emissions unit, subject to an emission limitation in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to this emissions unit for each of the 3 test runs and calculate and record the total weight. An permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emissions units instead of the feed/charge weight.

d. The permittee shall use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate:

i. continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15-minute period during the D/F test(s), determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

ii. record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

iii. determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 in 40CFR63.1512;

iv. divide the weight of total chlorine usage for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

v. if a solid reactive flux other than magnesium chloride is used, the permittee shall derive the appropriate proportion factor subject to approval by the Director (the appropriate Ohio EPA District Office or local air agency).

e. The permittee of each group 1 furnace shall submit the information described in 40CFR63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in 40CFR63.1506(b).

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VI. **Miscellaneous Requirements**

1. MACT Equations for Determining Compliance

a. Pursuant to 40CFR63.1513(b), compliance with the D/F standard shall be demonstrated using Equation 7 of 40CFR63.1513.

b. To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in ``Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update'' (EPA-625/3-89-016), incorporated by reference in 40CFR63.1502, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

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B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0145010093 Emissions Unit ID: P007 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
remelt furnace #5 - 40 mmBtu per hour natural gas-fired aluminum melting and holding furnace	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 18.31 pounds per hour.
	40 CFR Part 63.1505(i)(3)	Dioxan/furan (D/F) emissions shall not exceed 15.0 ug of D/F TEQ per Mg (2.1E-04 gr of D/F TEQ per ton) of feed/charge. See A.I.2.b below.
	OAC 3745-31-05(A)(3) (PTI 01-038)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

2. **Additional Terms and Conditions**

a. This emissions unit must comply with the requirements of 40CFR63,Subpart RRR by March 24, 2003.

b. D/F means dioxins and furans. Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans. TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.

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II. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

2. Pursuant to 40CFR63.1506(b), the permittee must provide and maintain easily visible labels posted at the emissions unit that identifies the applicable emission limitations and means of compliance, including the type of affected source or emissions unit (e.g. group 1 furnace), the applicable operational standard(s) and control method(s) such as the type of charge to be used for a furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

3. Pursuant to 40CFR63.1506(d), the permittee of this emissions unit must either:
a. install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan; or
b. measure and record the aluminum production weight from an affected source or emissions unit rather than feed/charge weight to an affected source or emissions unit, provided that:

i. the aluminum production weight, rather than feed/charge weight is measured and recorded for all emissions units (P005, P006, P007 and P020); and

ii. all calculations to demonstrate compliance with the emission limitations for all emissions units (P005, P006, P007 and P020) are based on aluminum production weight rather than feed/charge weight.

4. Pursuant to 40CFR63.1506(n)(1), the permittee must maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

5. Pursuant to 40CFR63.1506(n)(2), the permittee must operate this emissions unit in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

6. Pursuant to 40CFR63.1506(p), when a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee must initiate corrective action. Corrective action must restore operation of the emissions unit (including the process) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

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III. **Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. The permittee shall inspect the labels for this emissions unit at least once per calendar month to confirm that posted labels as required by the operational standard in 40CFR63.1506(c) are intact and legible.

3. Feed/Charge Weight (40CFR63.1510(e))

   The permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, this emissions unit over the same operating cycle or time period used in the performance test; as an alternative to a measurement device, the permittee may use a procedure acceptable to the Director (the appropriate Ohio EPA District Office or local air agency) to determine the total weight of feed/charge or aluminum production to this emissions unit. The weight measurement device or procedure must comply with the following:

   a. The accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

   b. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

4. Total Reactive Flux Injection Rate (40CFR63.1510(j))

   The permittee shall:

   a. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to this emissions unit. Under this requirement, the following parameters must be met:

      i. The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

      ii. The accuracy of the weight measurement device must be +/- 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of +/- 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.

      iii. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

   b. Calculate and record the gaseous or liquid reactive flux injection rate (lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

   c. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

      i. gaseous or liquid reactive flux other than chlorine; and
      ii. solid reactive flux.
      d. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

   e. The permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard(s) on a continuous basis.

5. Site-Specific Monitoring Plan (40CFR63.1510(o))

   a. The permittee shall develop, in consultation with the Director (the appropriate Ohio EPA District Office or local air agency), a written site-specific monitoring plan. The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for D/F emissions from this emissions unit. The permittee shall:

      i. Submit the site-specific monitoring plan to the Director (the appropriate Ohio EPA District Office or local air agency) for review at least 6 months prior to the compliance date (i.e., at least 6 months prior to March 24, 2003).

      ii. The Director (the appropriate Ohio EPA District Office or local air agency) will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limitations and demonstrates, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for the pollutant. Test data must establish the highest level of D/F

that will be emitted from this emissions unit. Subject to the Director's (the appropriate Ohio EPA District Office or local air agency) approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging this emissions unit with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

b. The site-specific monitoring plan for this emissions unit must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
c. The site-specific monitoring plan for this emissions unit must include provisions for unit labeling as required in 40CFR63.1510(c), feed/charge weight measurement (or production weight measurement) as required in 40CFR63.1510(e) and flux weight measurement as required in 40CFR63.1510(j).

d. If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in Subpart A of 40CFR63.

e. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(p).

f. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(q).

6. Scrap Inspection Program (40CFR63.1510(p))

A scrap inspection program must include:

a. a proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

b. a scrap inspector training program;

c. an established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

d. periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

e. a system for assuring that only acceptable scrap is charged to this emissions unit; and

f. record keeping requirements to document conformance with plan requirements.

7. Pursuant to 40CFR63.1510(q), if this emissions unit is dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented), the permittee may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

a. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

b. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

c. Operating, monitoring, record keeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

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IV. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation -
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation -
Particulate emissions shall not exceed 18.31 pounds per hour.

Applicable Compliance Method -
This emission limitation was established by converting the maximum process weight rate [18,667 pounds which is derived from dividing the maximum amount of aluminum that can be charged, 70,000 pounds, by the least amount of batch time*, 3.75 hours, to create a marketable product] to ton(s) per hour (P) and substituting this value for (P) into the appropriate equation given in OAC rule 3745-17-11, Table 1, to derive the particulate pounds per hour emission limitation (E). Based on emission tests conducted on July 27 and 28, 1999, and witnessed by the Ohio EPA, Central District Office, the tested particulate emission rate while emissions unit P005 was operating at or near its maximum capacity was 2.44 pounds per hour.

*Batch time is calculated as the time that the aluminum is placed in the melter and heating begins until the molten aluminum is poured from the holder.

If required, compliance with the particulate emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

2. Performance Test Requirements

a. In the site-specific monitoring plan required by 40CFR63.1510(o), the permittee of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices shall include data and information demonstrating compliance with the applicable emission limitations - if the group 1 furnace processes other than clean charge material, the permittee must conduct emission tests to measure emissions of D/F at the furnace exhaust outlet.

b. The permittee shall conduct performance tests as described in 40CFR63.1512(j)(2). The results of the performance tests are used to establish emission rates in micrograms TEQ/Mg of feed/charge for D/F emissions from this emissions unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40CFR63.1510(t).

c. During the emission test(s) conducted to determine compliance with emission limitations in a kg/Mg (lb/ton) format, the permittee of this emissions unit, subject to an emission limitation in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to this emissions unit for each of the 3 test runs and calculate and record the total weight. An permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emissions units instead of the feed/charge weight.

d. The permittee shall use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate:

i. continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15-minute period during the D/F test(s), determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

ii. record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

iii. determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 in 40CFR63.1512;

iv. divide the weight of total chlorine usage for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

v. if a solid reactive flux other than magnesium chloride is used, the permittee shall derive the appropriate proportion factor subject to approval by the Director (the appropriate Ohio EPA District Office or local air agency).

e. The permittee of each group 1 furnace shall submit the information described in 40CFR63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in 40CFR63.1506(b).

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VI. **Miscellaneous Requirements**

1. MACT Equations for Determining Compliance

a. Pursuant to 40CFR63.1513(b), compliance with the D/F standard shall be demonstrated using Equation 7 of 40CFR63.1513.

b. To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in ``Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-

p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), incorporated by reference in 40CFR63.1502, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

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Facility ID: 0145010093 Emissions Unit ID: P007 Issuance type: Title V Draft Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0145010093 Emissions Unit ID: P020 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
remelt furnace #6 - 40 mmBtu per hour natural gas-fired aluminum melting and holding furnace	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 18.31 pounds per hour.
	40 CFR Part 63.1505(i)(3)	Dioxan/furan (D/F) emissions shall not exceed 15.0 ug of D/F TEQ per Mg (2.1E-04 gr of D/F TEQ per ton) of feed/charge. See A.I.2.b below.
	OAC 3745-31-05(A)(3) (PTI 01-038)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

2. **Additional Terms and Conditions**

a. This emissions unit must comply with the requirements of 40CFR63,Subpart RRR by March 24, 2003.

b. D/F means dioxins and furans. Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans. TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.

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II. **Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

2. Pursuant to 40CFR63.1506(b), the permittee must provide and maintain easily visible labels posted at the emissions unit that identifies the applicable emission limitations and means of compliance, including the type of affected source or emissions unit (e.g. group 1 furnace), the applicable operational standard(s) and control method(s) such as the type of charge to be used for a furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

3. Pursuant to 40CFR63.1506(d), the permittee of this emissions unit must either:
a. install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan; or
b. measure and record the aluminum production weight from an affected source or emissions unit rather than feed/charge weight to an affected source or emissions unit, provided that:

i. the aluminum production weight, rather than feed/charge weight is measured and recorded for all emissions units (P005, P006, P007 and P020); and

ii. all calculations to demonstrate compliance with the emission limitations for all emissions units (P005, P006, P007 and P020) are based on aluminum production weight rather than feed/charge weight.

4. Pursuant to 40CFR63.1506(n)(1), the permittee must maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

5. Pursuant to 40CFR63.1506(n)(2), the permittee must operate this emissions unit in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

6. Pursuant to 40CFR63.1506(p), when a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee must initiate corrective

action. Corrective action must restore operation of the emissions unit (including the process) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

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III. **Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. The permittee shall inspect the labels for this emissions unit at least once per calendar month to confirm that posted labels as required by the operational standard in 40CFR63.1506(c) are intact and legible.

3. Feed/Charge Weight (40CFR63.1510(e))

   The permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, this emissions unit over the same operating cycle or time period used in the performance test; as an alternative to a measurement device, the permittee may use a procedure acceptable to the Director (the appropriate Ohio EPA District Office or local air agency) to determine the total weight of feed/charge or aluminum production to this emissions unit. The weight measurement device or procedure must comply with the following:

   a. The accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

   b. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

4. Total Reactive Flux Injection Rate (40CFR63.1510(j))

   The permittee shall:

   a. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to this emissions unit. Under this requirement, the following parameters must be met:

      i. The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

      ii. The accuracy of the weight measurement device must be +/- 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Director (the appropriate Ohio EPA District Office or local air agency) for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of +/- 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.

      iii. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

   b. Calculate and record the gaseous or liquid reactive flux injection rate (lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

   c. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

      i. gaseous or liquid reactive flux other than chlorine; and
      ii. solid reactive flux.
      d. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40CFR63.1512(o).

   e. The permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard(s) on a continuous basis.

5. Site-Specific Monitoring Plan (40CFR63.1510(o))

   a. The permittee shall develop, in consultation with the Director (the appropriate Ohio EPA District Office or local air agency), a written site-specific monitoring plan. The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for D/F emissions from this emissions unit. The permittee shall:

i. Submit the site-specific monitoring plan to the Director (the appropriate Ohio EPA District Office or local air agency) for review at least 6 months prior to the compliance date (i.e., at least 6 months prior to March 24, 2003).

ii. The Director (the appropriate Ohio EPA District Office or local air agency) will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limitations and demonstrates, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for the pollutant. Test data must establish the highest level of D/F that will be emitted from this emissions unit. Subject to the Director's (the appropriate Ohio EPA District Office or local air agency) approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging this emissions unit with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

b. The site-specific monitoring plan for this emissions unit must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
c. The site-specific monitoring plan for this emissions unit must include provisions for unit labeling as required in 40CFR63.1510(c), feed/charge weight measurement (or production weight measurement) as required in 40CFR63.1510(e) and flux weight measurement as required in 40CFR63.1510(j).

d. If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in Subpart A of 40CFR63.

e. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(p).

f. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40CFR63.1510(q).

6. Scrap Inspection Program (40CFR63.1510(p))

A scrap inspection program must include:

a. a proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

b. a scrap inspector training program;

c. an established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

d. periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

e. a system for assuring that only acceptable scrap is charged to this emissions unit; and

f. record keeping requirements to document conformance with plan requirements.

7. Pursuant to 40CFR63.1510(q), if this emissions unit is dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented), the permittee may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

a. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

b. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

c. Operating, monitoring, record keeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

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IV. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation -
   Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

   Applicable Compliance Method -
   Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitation -
   Particulate emissions shall not exceed 18.31 pounds per hour.

   Applicable Compliance Method -
   This emission limitation was established by converting the maximum process weight rate [18,667 pounds which is derived from dividing the maximum amount of aluminum that can be charged, 70,000 pounds, by the least amount of batch time*, 3.75 hours, to create a marketable product] to ton(s) per hour (P) and substituting this value for (P) into the appropriate equation given in OAC rule 3745-17-11, Table 1, to derive the particulate pounds per hour emission limitation (E). Based on emission tests conducted on July 27 and 28, 1999, and witnessed by the Ohio EPA, Central District Office, the tested particulate emission rate while emissions unit P005 was operating at or near its maximum capacity was 2.44 pounds per hour.

   *Batch time is calculated as the time that the aluminum is placed in the melter and heating begins until the molten aluminum is poured from the holder.

   If required, compliance with the particulate emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

2. Performance Test Requirements

   a. In the site-specific monitoring plan required by 40CFR63.1510(o), the permittee of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices shall include data and information demonstrating compliance with the applicable emission limitations - if the group 1 furnace processes other than clean charge material, the permittee must conduct emission tests to measure emissions of D/F at the furnace exhaust outlet.

   b. The permittee shall conduct performance tests as described in 40CFR63.1512(j)(2). The results of the performance tests are used to establish emission rates in micrograms TEQ/Mg of feed/charge for D/F emissions from this emissions unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40CFR63.1510(t).

   c. During the emission test(s) conducted to determine compliance with emission limitations in a kg/Mg (lb/ton) format, the permittee of this emissions unit, subject to an emission limitation in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to this emissions unit for each of the 3 test runs and calculate and record the total weight. An permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emissions units instead of the feed/charge weight.

   d. The permittee shall use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate:

      i. continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15-minute period during the D/F test(s), determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

      ii. record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

      iii. determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 in 40CFR63.1512;

      iv. divide the weight of total chlorine usage for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

      v. if a solid reactive flux other than magnesium chloride is used, the permittee shall derive the appropriate proportion factor subject to approval by the Director (the appropriate Ohio EPA District Office or local air agency).

   e. The permittee of each group 1 furnace shall submit the information described in 40CFR63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in 40CFR63.1506(b).

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VI. **Miscellaneous Requirements**

1. MACT Equations for Determining Compliance

a. Pursuant to 40CFR63.1513(b), compliance with the D/F standard shall be demonstrated using Equation 7 of 40CFR63.1513.

b. To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in ``Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update'' (EPA-625/3-89-016), incorporated by reference in 40CFR63.1502, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

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Facility ID: 0145010093 Emissions Unit ID: P020 Issuance type: Title V Draft Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None