



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 6-4058-00003/00380
Effective Date: 10/10/2012 Expiration Date: No expiration date

Permit Issued To:ALCOA INC
201 ISABELLA ST
PITTSBURGH, PA 15212-5858

Contact: ROBERT J LENNEY
ALCOA INC
PO BOX 150
MASSENA, NY 13662-0150
(315) 764-4161

Facility: ALCOA MASSENA OPERATIONS (WEST PLANT)
PARK AVE E
MASSENA, NY 13662

Contact: ROBERT J LENNEY
ALCOA INC
PO BOX 150
MASSENA, NY 13662-0150
(315) 764-4161

Description:
This project involves a rebuild of #14 furnace (to the same design specs as #15 furnace) that will result in a larger combustion train as well as a larger physical holding capacity for the furnace. The furnace currently has a 27,900,000 Btu/hr rating with and uncontrolled, two burner configuration (south side and north side). The new burner system will be comprised of a 45,000,000 Btu/hr, four low-NOx burner configuration (north side, south side & two east side) with an expected reduction in NOx of 40% over uncontrolled burners of the same size. The furnace today has a physical holding capacity of 140,000 lbs. The new design will increase capacity to 180,000 lbs (40,000 lb increase). A redesigned furnace door, upgraded pressure controls and upgraded programmable logic controllers are all included in the scope of this project. A new exhaust stack will be added, changing the stack from the current lined version to an unlined type. The area of the stack will increase from its current area of 855 sq. in. to 4899 sq. in. The project will also include the installation of five 2.5 MMBtu/hr space heaters (exempt emission sources) throughout the areas of the Casthouse (Bldg. 220 and a portion of Bldg. 221). These heaters would replace the heating load that the central boilerhouse currently provides.

New York State Department of Environmental Conservation
Facility DEC ID: 6405800003



By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: LAWRENCE R AMBEAU
 NYSDEC - STATE OFFICE BLDG
 317 WASHINGTON ST
 WATERTOWN, NY 13601

Authorized Signature: _____ Date: ___ / ___ / ____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
- Applications for permit renewals, modifications and transfers
- Permit modifications, suspensions or revocations by the Department

Facility Level

- Submission of application for permit modification or renewal-REGION 6 HEADQUARTERS



DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations

Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.



Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal-REGION 6 HEADQUARTERS

Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 6 Headquarters
Division of Environmental Permits
State Office Building, 317 Washington Street
Watertown, NY 13601-3787
(315) 785-2245

New York State Department of Environmental Conservation

Permit ID: 6-4058-00003/00380

Facility DEC ID: 6405800003



Permit Under the Environmental Conservation Law (ECL)

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY
PERMIT**

IDENTIFICATION INFORMATION

Permit Issued To:ALCOA INC
201 ISABELLA ST
PITTSBURGH, PA 15212-5858

Facility: ALCOA MASSENA OPERATIONS (WEST PLANT)
PARK AVE E
MASSENA, NY 13662

Authorized Activity By Standard Industrial Classification Code:
3334 - PRIMARY ALUMINUM
3354 - ALUMINUM EXTRUDED PRODUCTS

Permit Effective Date: 10/10/2012
date.

Permit Expiration Date: No expiration
date.



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 202-1.1: Required Emissions Tests
- 2 6 NYCRR 211.1: Air pollution prohibited
- 3 6 NYCRR 212.4 (a): Compliance Demonstration
- 4 6 NYCRR 212.4 (a): Compliance Demonstration
- 5 6 NYCRR 212.5 (d): Compliance Demonstration
- 6 40CFR 63.1506(b), Subpart RRR: Operating requirements - Labeling
- 7 40CFR 63.1506(p), Subpart RRR: Operating requirements - Corrective Action
- 8 40CFR 63.1510(s), Subpart RRR: Site-specific requirements for secondary aluminum processing units
- 9 40CFR 63.1512(j), Subpart RRR: Compliance Demonstration
- 10 40CFR 63.1515, Subpart RRR: Secondary Aluminum Notifications
- 11 40CFR 63.1517, Subpart RRR: Secondary Aluminum MACT Recordkeeping

Emission Unit Level

EU=M-00001,Proc=MHS

- 12 40CFR 63.1506(d), Subpart RRR: Weight Measuring Device Operating Requirements
- 13 40CFR 63.1510(e), Subpart RRR: Compliance Demonstration
- 14 40CFR 63.1510(t), Subpart RRR: Calculation of secondary aluminum processing unit emissions
- 15 40CFR 63.1511(c), Subpart RRR: Test Methods
- 16 40CFR 63.1511(e), Subpart RRR: Compliance Demonstration
- 17 40CFR 63.1511(f), Subpart RRR: Testing of representative emission units
- 18 40CFR 63.1511(g), Subpart RRR: Establishment of Monitoring and Operating Parameter Values
- 19 40CFR 63.1512(k), Subpart RRR: Performance Test/Compliance Demonstration Requirements and Procedures - Feed/Charge Weight Measurement.
- 20 40CFR 63.1513(b), Subpart RRR: Equations for determining compliance - PM, HCl and D/F emission limits.
- 39 40CFR 63.1513(e), Subpart RRR: Equation to Calculate SAPU HCl emissions
- 40 40CFR 63.1513(e), Subpart RRR: Equation to show compliance with SAPU particulate emission limit

EU=M-00001,Proc=MHS,ES=M0031

- 21 6 NYCRR 212.10 (c) (3): Compliance Demonstration
- 22 6 NYCRR 231-11.2 (b): Compliance Demonstration
- 23 40CFR 63, Subpart A: NESHAP General Provisions
- 24 40CFR 63.1501(b), Subpart RRR: Compliance dates for new/reconstructed sources
- 25 40CFR 63.1505(i), Subpart RRR: Compliance Demonstration
- 26 40CFR 63.1505(i), Subpart RRR: Compliance Demonstration
- 27 40CFR 63.1505(i), Subpart RRR: Compliance Demonstration
- 28 40CFR 63.1505(k)(4), Subpart RRR: SAPU emission limits for individual emission units



- 29 40CFR 63.1510(b), Subpart RRR: Compliance Demonstration
- 30 40CFR 63.1510(c), Subpart RRR: Compliance Demonstration
- 31 40CFR 63.1510(o), Subpart RRR: Compliance Demonstration
- 32 40CFR 63.1510(p), Subpart RRR: Compliance Demonstration
- 33 40CFR 63.1510(w), Subpart RRR: Alternative Monitoring
- 34 40CFR 63.1511(a), Subpart RRR: Site-specific test plan
- 35 40CFR 63.1511(b), Subpart RRR: Initial Performance Test
- 36 40CFR 63.1512(e), Subpart RRR: Compliance demonstration requirements
for Group 1 Furnaces without add on control devices
- 37 40CFR 63.1513(d), Subpart RRR: Conversion of D/F measurements to TEQ
units
- 38 40CFR 63.1516, Subpart RRR: Compliance Demonstration

EU=M-00001,EP=I0031,Proc=MHS,ES=M0031

- 41 6 NYCRR 212.6 (a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 42 ECL 19-0301: Contaminant List
- 43 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 44 6 NYCRR Subpart 201-5: Emission Unit Definition
- 45 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

- 46 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 47 6 NYCRR Subpart 201-5: Process Definition By Emission Unit



FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: Maintenance of Equipment - 6 NYCRR 200.7

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,



required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.



(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item F: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item J: Required Emission Tests - 6 NYCRR 202-1.1



An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item K: Open Fires Prohibitions - 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item L: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: Federally Enforceable Requirements - 40 CFR 70.6 (b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Required Emissions Tests



Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 1.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 2: Air pollution prohibited

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:6 NYCRR 211.1

Item 2.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 3: Compliance Demonstration

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 3.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: M-00001 Process: MHS	Emission Source: M001A
Emission Unit: M-00001 Process: MHS	Emission Source: M001B
Emission Unit: M-00001 Process: MHS	Emission Source: M001C
Emission Unit: M-00001 Process: MHS	Emission Source: M001D
Emission Unit: M-00001 Process: MHS	Emission Source: M0034
Emission Unit: M-00001 Process: MHS	Emission Source: M0035
Emission Unit: M-00001	



Process: MHS	Emission Source: M003A
Emission Unit: M-00001 Process: MHS	Emission Source: M003C
Emission Unit: M-00001 Process: MHS	Emission Source: M024D
Emission Unit: M-00001 Process: MHS	Emission Source: M024F
Regulated Contaminant(s): CAS No: 007782-50-5	CHLORINE

Item 3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

As required by 6 NYCRR Part 212.4(a) chlorine has been issued an environmental rating of B. The emission rate potential of chlorine from each emission source listed above shall remain less than 10 pounds per hour. Compliance testing shall be conducted upon request from the Department.

Upper Permit Limit: 10.0 pounds per hour

Reference Test Method: EPA RM 18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 4: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR 212.4 (a)

Item 4.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: M-00001 Process: MHS	Emission Source: M001A
Emission Unit: M-00001 Process: MHS	Emission Source: M001B
Emission Unit: M-00001 Process: MHS	Emission Source: M001C
Emission Unit: M-00001	

New York State Department of Environmental Conservation

Permit ID: 6-4058-00003/00380

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Process: MHS Emission Source: M001D

Emission Unit: M-00001
Process: MHS Emission Source: M0034

Emission Unit: M-00001
Process: MHS Emission Source: M0035

Emission Unit: M-00001
Process: MHS Emission Source: M003A

Emission Unit: M-00001
Process: MHS Emission Source: M003C

Emission Unit: M-00001
Process: MHS Emission Source: M024D

Emission Unit: M-00001
Process: MHS Emission Source: M024F

Regulated Contaminant(s):
CAS No: 007647-01-0 HYDROGEN CHLORIDE

Item 4.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

As required by 6 NYCRR Part 212.4(a) hydrogen chloride (HCl) has been issued an environmental rating of B. The emission rate potential of hydrogen chloride from each emission source listed above shall remain less than 10 pounds per hour. Compliance testing shall be conducted upon request from the Department.

Upper Permit Limit: 10.0 pounds per hour

Reference Test Method: EPA RM 26

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 5: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR 212.5 (d)

Item 5.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: M-00001



Process: MHS	Emission Source: M001A
Emission Unit: M-00001 Process: MHS	Emission Source: M001B
Emission Unit: M-00001 Process: MHS	Emission Source: M001C
Emission Unit: M-00001 Process: MHS	Emission Source: M001D
Emission Unit: M-00001 Process: MHS	Emission Source: M0034
Emission Unit: M-00001 Process: MHS	Emission Source: M0035
Emission Unit: M-00001 Process: MHS	Emission Source: M003A
Emission Unit: M-00001 Process: MHS	Emission Source: M003C
Emission Unit: M-00001 Process: MHS	Emission Source: M024D
Emission Unit: M-00001 Process: MHS	Emission Source: M024F

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The particulate matter (PM) emissions from the emission sources listed above, are subject to the Federal National Emission Standards for Hazardous Air Pollutants in 40 CFR part 63 Subpart RRR, which satisfy the requirements of Part 212.5(d) for PM emissions as long as the source owner continues to demonstrate that the emission unit is in compliance with the respective Federal requirements contained in this permit. Compliance testing shall be conducted upon request from the department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 6: Operating requirements - Labeling



Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1506(b), Subpart RRR

Item 6.1:

This Condition applies to:

Emission Unit: M00001

Process: MHS

Item 6.2:

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

(1) The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).

(2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

Condition 7: Operating requirements - Corrective Action

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1506(p), Subpart RRR

Item 7.1:

This Condition applies to:

Emission Unit: M00001

Process: MHS

Item 7.2:

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) 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 or control device parameter level(s) 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.

Condition 8: Site-specific requirements for secondary aluminum processing units

Effective between the dates of 10/10/2012 and Permit Expiration Date



Applicable Federal Requirement:40CFR 63.1510(s), Subpart RRR

Item 8.1:

(1) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR Part 63.1510(b), the following information:

- (i) The identification of each emission unit in the secondary aluminum processing unit;
- (ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
- (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
- (iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
- (v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR Part 63.1510(t).

(2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

- (i) Any averaging among emissions of differing pollutants;
- (ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
- (iii) The inclusion of any emission unit while it is shutdown; or
- (iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

(3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (1) of this condition and obtain approval of the applicable permitting authority prior to implementing any revisions.

Condition 9: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1512(j), Subpart RRR

Item 9.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:



Emission Unit: M-00001 Process: MHS	Emission Source: M001A
Emission Unit: M-00001 Process: MHS	Emission Source: M001B
Emission Unit: M-00001 Process: MHS	Emission Source: M001C
Emission Unit: M-00001 Process: MHS	Emission Source: M001D
Emission Unit: M-00001 Process: MHS	Emission Source: M0034
Emission Unit: M-00001 Process: MHS	Emission Source: M0035
Emission Unit: M-00001 Process: MHS	Emission Source: M003A
Emission Unit: M-00001 Process: MHS	Emission Source: M003C
Emission Unit: M-00001 Process: MHS	Emission Source: M024D
Emission Unit: M-00001 Process: MHS	Emission Source: M024F
Regulated Contaminant(s): CAS No: 0NY075-00-0	PARTICULATES

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator must conduct emission tests as described below. The results of the emission tests are used to establish emission rates in lb/ton of feed/charge for PM from each emission 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 40 CFR Part 63.1510(t). An emissions test is required for:

- (1) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM.
- (2) Each in-line fluxer to measure emissions of PM.



Monitoring Frequency: Once every five years

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 10: Secondary Aluminum Notifications
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1515, Subpart RRR

Item 10.1:

(1) As required by 40 CFR §63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

(2) As required by §63.9(b)(5), an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by §63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

(3) As required by §63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

(4) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in §63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (b)(1) through (b)(10) of 40CFR §63.1515. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted.

Condition 11: Secondary Aluminum MACT Recordkeeping
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1517, Subpart RRR

Item 11.1:

This Condition applies to:

Emission Unit: M00001

Process: MHS

Item 11.2:



(a) As required by §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions (40 CFR 63 Subpart A) and 40 CFR 63 Subpart RRR.

(1) The owner or operator 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.

(2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

(3) The owner or operator 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 §63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain additional records listed in 40 CFR §63.1517(b)(1) through (b)(17) as applicable.

****** Emission Unit Level ******

**Condition 12: Weight Measuring Device Operating Requirements
Effective between the dates of 10/10/2012 and Permit Expiration Date**

Applicable Federal Requirement: 40CFR 63.1506(d), Subpart RRR

Item 12.1:

This Condition applies to Emission Unit: M-00001
Process: MHS

Item 12.2:

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must:

(1) Except as provided in paragraph (3) of this condition, install, calibrate, operate and maintain a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

(2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

(3) The owner or operator may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

(i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

(ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

**Condition 13: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date**



Applicable Federal Requirement: 40CFR 63.1510(e), Subpart RRR

Item 13.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS

Item 13.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or $\mu\text{g}/\text{Mg}$ (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

(1) The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured. The owner or operator may apply to the permitting 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

(2) The owner or operator 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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 3/1/2013.

Subsequent reports are due every 6 calendar month(s).



Condition 14: Calculation of secondary aluminum processing unit emissions
Effective between the dates of 10/10/2012 and Permit Expiration Date
Applicable Federal Requirement:40CFR 63.1510(t), Subpart RRR

Item 14.1:

This Condition applies to:

Emission Unit: M00001 Process: MHS	Emission Source: M001A
Emission Unit: M00001 Process: MHS	Emission Source: M001B
Emission Unit: M00001 Process: MHS	Emission Source: M001C
Emission Unit: M00001 Process: MHS	Emission Source: M001D
Emission Unit: M00001 Process: MHS	Emission Source: M0034
Emission Unit: M00001 Process: MHS	Emission Source: M0035
Emission Unit: M00001 Process: MHS	Emission Source: M003A
Emission Unit: M00001 Process: MHS	Emission Source: M003C
Emission Unit: M00001 Process: MHS	Emission Source: M024D
Emission Unit: M00001 Process: MHS	Emission Source: M024F

Item 14.1:

This Condition applies to Emission Unit: M-00001
Process: MHS

Item 14.2.3:

Except as provided in paragraph 40 CFR Part 63.1510(u), the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F as applicable for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

- (1) Calculate and record the total weight of material charged to each emission unit in the



secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in paragraph (e) of this section. If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

(3) 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.

(4) Compute the 24-hour daily emission rate using the equation below:

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i}$$

Where,

E_{day} = The daily PM, HCl, and/or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons);

ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton or $\mu\text{g}/\text{Mg}$ of feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

(5) Calculate and record the 3-day, 24-hour rolling average of each pollutant as applicable each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

Condition 15: Test Methods

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1511(c), Subpart RRR

Item 15.1:

This Condition applies to Emission Unit: M-00001

Process: MHS



Item 15.2:

The owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:

- (1) Method 1 for sample and velocity traverses.
- (2) Method 2 for velocity and volumetric flow rate.
- (3) Method 3 for gas analysis.
- (4) Method 4 for moisture content of the stack gas.
- (5) Method 5 for the concentration of PM.
- (6) Method 9 for visible emission observations.
- (7) Method 23 for the concentration of D/F.
- (8) Method 25A for the concentration of THC, as propane.
- (9) Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the owner or operator must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

Condition 16: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1511(e), Subpart RRR

Item 16.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS

Item 16.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of new or existing affected sources and emission units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

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Facility DEC ID: 6405800003



Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 17: Testing of representative emission units
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1511(f), Subpart RRR

Item 17.1:

This Condition applies to:

Emission Unit: M00001 Process: MHS	Emission Source: M001A
Emission Unit: M00001 Process: MHS	Emission Source: M001B
Emission Unit: M00001 Process: MHS	Emission Source: M001C
Emission Unit: M00001 Process: MHS	Emission Source: M001D
Emission Unit: M00001 Process: MHS	Emission Source: M0034
Emission Unit: M00001 Process: MHS	Emission Source: M0035
Emission Unit: M00001 Process: MHS	Emission Source: M003A
Emission Unit: M00001 Process: MHS	Emission Source: M003C
Emission Unit: M00001 Process: MHS	Emission Source: M024D
Emission Unit: M00001 Process: MHS	Emission Source: M024F

Item 17.1:

This Condition applies to Emission Unit: M-00001
Process: MHS

Item 17.2.3:

With the approval of the permitting authority, a single representative or similar group 1 furnace or in-line fluxer which is not controlled by an add-on control device may be tested to determine the emission rate of all like affected sources at a facility provided that:

(1) The tested emission unit must use identical feed/charge and flux materials in the same proportions as the emission units that it represents;



(2) The tested emission unit is subject to the same work practices and the emission units that it represents;

(3) The tested emission unit is of the same design as the emission units that it represents;

(4) The tested emission unit is tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents;

(5) At least one of each different style of emission unit at the facility is tested; and

(6) All add-on control devices are tested.

**Condition 18: Establishment of Monitoring and Operating Parameter Values
Effective between the dates of 10/10/2012 and Permit Expiration Date**

Applicable Federal Requirement: 40CFR 63.1511(g), Subpart RRR

Item 18.1:

This Condition applies to Emission Unit: M-00001

Process: MHS

Item 18.2:

Establishment of monitoring and operating parameter values. The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR Part 63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must use the appropriate procedures in this section and submit the information required by 40 CFR Part 63.1515(b)(4) in the notification of compliance status report. The owner or operator 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 applicable permitting authority:

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

(2) The same test methods and procedures as required by this subpart were used in the test.

(3) The owner or operator 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.

(4) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.



Condition 19: Performance Test/Compliance Demonstration Requirements and Procedures - Feed/Charge Weight Measurement.
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1512(k), Subpart RRR

Item 19.1:

This Condition applies to Emission Unit: M-00001
Process: MHS

Item 19.2:

Feed/charge weight measurement. During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

Condition 20: Equations for determining compliance - PM, HCl and D/F emission limits.
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1513(b), Subpart RRR

Item 20.1:

This Condition applies to Emission Unit: M-00001
Process: MHS

Item 20.2:

(1) Use equation 7 to determine compliance with an emission limit for PM or HCl:

$$E = \frac{C \times Q \times K_1}{P} \quad (\text{Eq. 7})$$

Where,

- E = Emission rate of PM or HCl, kg/Mg (lb/ton) of feed;
- C = Concentration of PM or HCl, g/dscm (gr/dscf);
- Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
- K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
- P = Production rate, Mg/hr (ton/hr).

(2) Use equations 7A of this section to determine compliance with an emission limit for D/F:



$$E = \frac{C \times Q}{P} \quad (\text{Eq. 7A})$$

Where,

E = Emission rate of D/F, ug/Mg (gr/ton) of feed;

C = Concentration of D/F, ug/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

P = Production rate, Mg/hr (ton/hr).

Condition 39: Equation to Calculate SAPU HCl emissions
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1513(e), Subpart RRR

Item 39.1:

This Condition applies to:

Emission Unit: M00001	
Process: MHS	Emission Source: M001A
Emission Unit: M00001	
Process: MHS	Emission Source: M001B
Emission Unit: M00001	
Process: MHS	Emission Source: M001C
Emission Unit: M00001	
Process: MHS	Emission Source: M001D
Emission Unit: M00001	
Process: MHS	Emission Source: M0034
Emission Unit: M00001	
Process: MHS	Emission Source: M0035
Emission Unit: M00001	
Process: MHS	Emission Source: M003A
Emission Unit: M00001	
Process: MHS	Emission Source: M003C
Emission Unit: M00001	
Process: MHS	Emission Source: M024D
Emission Unit: M00001	
Process: MHS	Emission Source: M024F



Item 39.1:

This Condition applies to Emission Unit: M-00001
 Process: MHS

Item 39.2.3:

Use the equation below to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass weighted emissions for the secondary aluminum processing unit (E_{cHCl}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cHCl}) calculated using equation 2 in §63.1505(k).

$$E_{cHCl} = \frac{\sum_{i=1}^n (E_{iHCl} \times T_{ii})}{\sum_{i=1}^n T_{ii}}$$

Where,

E_{cHCl} = The mass weighted HCl emissions for the secondary aluminum processing unit;
 and

E_{iHCl} = Measured HCl emissions for the individual emissions unit i.

T_{ii} = The average feed rate (production rate) for individual emission unit i during the operating cycle or performance test period; and

n = The number of emission units in the secondary aluminum processing unit.

Condition 40: Equation to show compliance with SAPU particulate emission limit
Effective between the dates of 10/10/2012 and Permit Expiration Date
Applicable Federal Requirement: 40CFR 63.1513(e), Subpart RRR

Item 40.1:

This Condition applies to:

- Emission Unit: M00001
 Process: MHS Emission Source: M001A
- Emission Unit: M00001
 Process: MHS Emission Source: M001B
- Emission Unit: M00001
 Process: MHS Emission Source: M001C



Emission Unit: M00001
 Process: MHS Emission Source: M001D

Emission Unit: M00001
 Process: MHS Emission Source: M0034

Emission Unit: M00001
 Process: MHS Emission Source: M0035

Emission Unit: M00001
 Process: MHS Emission Source: M003A

Emission Unit: M00001
 Process: MHS Emission Source: M003C

Emission Unit: M00001
 Process: MHS Emission Source: M024D

Emission Unit: M00001
 Process: MHS Emission Source: M024F

Item 40.1:

This Condition applies to Emission Unit: M-00001
 Process: MHS

Item 40.2.3:

Use the procedure below to determine compliance with emission limits for a secondary aluminum processing unit.

(1) Use the equation below to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit E_{CPM} is less than or equal to the emission limit for the secondary aluminum processing unit L_{CPM} calculated using Equation 1 in 40 CFR Part 63.1505(k).

$$E_{CPM} = \frac{\sum_{i=1}^n (E_{tiPM} \times T_{ti})}{\sum_{i=1}^n (T_{ti})}$$

Where,

E_{CPM} = The mass-weighted PM emissions for the secondary aluminum processing unit;
 E_{tiPM} = Measured PM emissions for individual emission unit i;
 T_{ti} = The average feed rate (production rate) for individual emission unit i during the operating cycle or performance test period; and
 n=The number of emission units in the secondary aluminum processing unit.



Condition 21: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR 212.10 (c) (3)

Item 21.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS Emission Source: M0031

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Low NOx burners will be installed in #31 furnace. Low NOx burners have been determined to meet the NOx RACT requirements of 6 NYCRR Part 212.

Facility will perform an annual tune-up on each of the three burners that make up the #31 furnace combustion train. Records of all tune-ups shall be maintained at the facility for a period of 5 years.

Monitoring Frequency: ANNUALLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
The initial report is due 3/1/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 22: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR 231-11.2 (b)

Item 22.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS Emission Source: M0031

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE
CAS No: 0NY075-00-5 PM-10
CAS No: 0NY998-00-0 VOC
CAS No: 0NY075-02-5 PM 2.5
CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS



CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

As a result of the construction of the new #31 ingot furnace (Emission Source: M0031), the owner or operator must determine whether a significant net emissions increase has occurred as a result of the installation of the new furnace. Such determination must present the actual emissions after the furnace begins operation.

Emissions of NO_x, PM-10, PM-2.5, VOC, CO, and CO₂(e) must be computed for each 12 month rolling period commencing the 12th month after startup of the #31 ingot furnace and ending with the completion of the fifth annual period after startup of the #31 ingot furnace.

On an annual basis, the owner or operator shall submit to the Department a statement whether the owner or operator has completed the analysis. If the analysis shows that the new furnace has resulted in a significant net emissions increase for either NO_x, PM-10, PM-2.5, VOC, CO, or CO₂(e), the owner or operator must submit to the Department, within 30 days of such showing, a report of such calculation.

The facility owner or operator, in addition to complying with the requirements above and any requirements under Part 201 of this Title, must maintain the following information for a minimum of five years:

- (1) a description of the #31 furnace project;
- (2) an identification of each new or modified emission source(s) including the associated processes and emission units and including any exempt emission sources that were part of the project;
- (3) the calculation of the project emission potential for each new or modified emission source(s) (including exempt emission sources) including supporting documentation; and
- (4) the date that the #31 furnace commenced operation.

These recordkeeping requirements apply to exempt and trivial activities but do not affect their exempt or

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trivial permitting status under Subpart 201-3 of this Title.

Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
The initial report is due 3/1/2013.
Subsequent reports are due every 12 calendar month(s).

Condition 23: NESHAP General Provisions
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63, Subpart A

Item 23.1:

This Condition applies to Emission Unit: M-00001
Process: MHS Emission
Source: M0031

Item 23.2:

This emission source is subject to the applicable provisions of 40 CFR 63 Subpart A. The facility owner is responsible for complying with all applicable technical, administrative and reporting requirements.

Condition 24: Compliance dates for new/reconstructed sources
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1501(b), Subpart RRR

Item 24.1:

This Condition applies to Emission Unit: M-00001
Process: MHS Emission
Source: M0031

Item 24.2:

Each new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of 40CFR63, Subpart RRR by March 23, 2000 or upon startup, whichever is later.

Condition 25: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1505(i), Subpart RRR

Item 25.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS Emission Source: M0031



Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 25.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This group 1 furnace is considered a new secondary aluminum processing unit (SAPU) and will demonstrate compliance with the particulate matter (PM) emission limit of 0.4 pounds of PM per ton of feed/charge.

Owner will conduct an initial performance test of PM emissions from #31 ingot furnace within 180 days of completion of furnace modifications. Subsequent performance tests of PM emissions will be performed once every five years.

Compliance with this PM emission limit shall be deemed compliance with the PM emission limit contained in 6 NYCRR Part 212.4(c) since the PM emission limit in 6 NYCRR Part 212.4(c) is less restrictive than the PM emission limit contained in 40 CFR 63.1505(i).

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.40 pounds per ton
Reference Test Method: EPA RM 5
Monitoring Frequency: Once every five years
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 26: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1505(i), Subpart RRR

Item 26.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS Emission Source: M0031

Regulated Contaminant(s):
CAS No: 051207-31-9 2,3,7,8-TETRACHLORODIBENZOFURAN
CAS No: 001746-01-6 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

Item 26.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

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Facility DEC ID: 6405800003



Monitoring Description:

This group 1 furnace is considered a new secondary aluminum processing unit (SAPU) and will demonstrate compliance with the dioxins and furans (D/F) emission limit of 15 micrograms of D/F TEQ per megagram of feed/charge.

Owner will conduct an initial performance test of D/F emissions from #31 ingot furnace within 180 days of completion of furnace modifications. Subsequent performance tests of D/F emissions will be performed once every five years.

Parameter Monitored: 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

Upper Permit Limit: 15 micrograms of D/F TEQ per Mg

Reference Test Method: EPA RM 23

Monitoring Frequency: Once every five years

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 27: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1505(i), Subpart RRR

Item 27.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001

Process: MHS

Emission Source: M0031

Regulated Contaminant(s):

CAS No: 007647-01-0

HYDROGEN CHLORIDE

Item 27.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This group 1 furnace is considered a new secondary aluminum processing unit (SAPU) and will demonstrate compliance with the hydrogen chloride (HCl) emission limit of 0.4 pounds of HCl per ton of feed/charge.

Owner will conduct an initial performance test of HCl emissions from #31 ingot furnace within 180 days of completion of furnace modifications. Subsequent performance tests of HCl emissions will be performed once every five years.

Parameter Monitored: HYDROGEN CHLORIDE

New York State Department of Environmental Conservation

Permit ID: 6-4058-00003/00380

Facility DEC ID: 6405800003



Upper Permit Limit: 0.40 pounds per ton
Reference Test Method: EPA RM 26A
Monitoring Frequency: Once every five years
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 28: SAPU emission limits for individual emission units
Effective between the dates of 10/10/2012 and Permit Expiration Date**

Applicable Federal Requirement:40CFR 63.1505(k)(4), Subpart RRR

Item 28.1:

This Condition applies to Emission Unit: M-00001
Process: MHS Emission
Source: M0031

Item 28.2:

The owner/operator of a secondary aluminum processing unit (SAPU) at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limits of §63.1505(k)(1)-(3) by demonstrating that each emission unit with the SAPU is in compliance with the applicable emission limits of §63.1505(i) and 1505(j).

**Condition 29: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date**

Applicable Federal Requirement:40CFR 63.1510(b), Subpart RRR

Item 29.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS Emission Source: M0031

Item 29.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the NYSDEC for review and approval. Pending approval by the NYSDEC of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. The plan must be accompanied by a written certification by the owner or operator that the OM&M Plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all the



provisions of the OM&M Plan as submitted to the NYSDEC, unless and until the plan is revised in accordance with the following procedures. If the NYSDEC determines at any time after receipt of the OM&M Plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M Plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the NYSDEC. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

(2) A monitoring schedule for each affected source and emission unit.

(3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR Part 63.1505.

(4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

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

(ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR Part 63 Subpart A.

(5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of 40 CFR §63.1510, including:

(i) Procedures to determine and record the cause of an



deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

(7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR §63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 30: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1510(c), Subpart RRR

Item 30.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001

Process: MHS

Emission Source: M0031

Item 30.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR Part 63.1506(b) are intact and legible.

Monitoring Frequency: MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 3/1/2013.

Subsequent reports are due every 6 calendar month(s).



Condition 31: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1510(o), Subpart RRR

Item 31.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001

Process: MHS

Emission Source: M0031

Item 31.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(1) The owner or operator must develop, in consultation with the applicable permitting authority, 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 PM, HCl, and, in some cases, D/F emissions.

(i) The owner or operator of an existing affected source must submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.

(ii) The permitting authority 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 limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

(2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.

(3) Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph



(e) of this section and flux weight measurement as required in paragraph (j) of this section.

(4) 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 paragraph (p) of this section.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 3/1/2013.

Subsequent reports are due every 6 calendar month(s).

Condition 32: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1510(p), Subpart RRR

Item 32.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001

Process: MHS

Emission Source: M0031

Item 32.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility must develop and implement a scrap inspection program. The program must include:

- (1) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;
- (2) A scrap inspector training program;
- (3) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;
- (4) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;
- (5) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and
- (6) Recordkeeping requirements to document conformance with plan requirements.



Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 3/1/2013.

Subsequent reports are due every 6 calendar month(s).

Condition 33: Alternative Monitoring
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1510(w), Subpart RRR

Item 33.1:

This Condition applies to Emission Unit: M-00001

Process: MHS

Emission

Source: M0031

Item 33.2:

If an owner or operator wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in this subpart, other than those alternative monitoring methods which may be authorized pursuant to Sec. 63.1510(j)(5) and Sec. 63.1510(v), the owner or operator may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in paragraphs (w)(1) through (6) of this section.

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

(2) The owner or operator must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.

(3) The owner or operator 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 in paragraphs (w)(3) (i) through (iii) of this section:

(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 limit 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).

(4) 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 owner or operator 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 owner or operator to provide additional supporting



information.

(5) The owner or operator 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 owner or operator of the responsibility to comply with any provisions of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

Condition 34: Site-specific test plan
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1511(a), Subpart RRR

Item 34.1:

This Condition applies to Emission Unit: M-00001

Process: MHS

Emission

Source: M0031

Item 34.2:

Prior to conducting a performance test required by 40 CFR Part 63 Subpart RRR, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR Part 63.7(c).

Condition 35: Initial Performance Test
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1511(b), Subpart RRR

Item 35.1:

This Condition applies to Emission Unit: M-00001

Process: MHS

Emission

Source: M0031

Item 35.2:

Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in 40 CFR Part 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in subpart A of this part and this subpart. Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of 40 CFR Part 63.1505(f)(1) are not required to conduct a performance test.

(1) The owner or operator must conduct each test while the affected source or emission 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.



(2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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

(4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

(5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

Condition 36: Compliance demonstration requirements for Group 1 Furnaces without add on control devices
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1512(e), Subpart RRR

Item 36.1:

This Condition applies to Emission Unit: M-00001

Process: MHS

Emission

Source: M0031

Item 36.2:

(e) *Group 1 furnace (including melting holding furnaces) without add-on air pollution control devices.* In the site-specific monitoring plan required by Sec. 63.1510(o), the owner or operator of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices must include data and information demonstrating compliance with the applicable emission limits.

(1) If the group 1 furnace processes other than clean charge material, the owner or operator must conduct emission tests to measure emissions of PM, HCl, and D/F at the furnace exhaust outlet.

(2) If the group 1 furnace processes only clean charge, the owner or operator must conduct emission tests to simultaneously measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge.

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

Condition 37: Conversion of D/F measurements to TEQ units
Effective between the dates of 10/10/2012 and Permit Expiration Date



Applicable Federal Requirement:40CFR 63.1513(d), Subpart RRR

Item 37.1:

This Condition applies to Emission Unit: M-00001

Process: MHS

Emission

Source: M0031

Item 37.2:

To convert D/F measurements to TEQ units, the owner/operator 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 §63.1502 of Subpart RRR, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA, NTIS no. PB 90-145756.

Condition 38: Compliance Demonstration

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1516, Subpart RRR

Item 38.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001

Process: MHS

Emission Source: M0031

Item 38.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Startup, shutdown, and malfunction plan/reports: The owner or operator must develop a written plan as described in 40 CFR §63.6(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 owner or operator shall also keep records of each event as required by §63.10(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 §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:

- (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
- (2) 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.

Excess emissions/summary report. As required by §63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period. A report must be submitted if any of the conditions listed in 40 CFR §63.1516(b)(1) occur during a 6-month reporting period.

The owner or operator 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.

Annual compliance certifications: For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

- (1) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and
- (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 41: Compliance Demonstration
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR 212.6 (a)

Item 41.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: M-00001
Process: MHS

Emission Point: I0031
Emission Source: M0031

Item 41.2:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00003/00380

Facility DEC ID: 6405800003



Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will immediately investigate any instance where there is cause to believe that visible emissions above those that are normal and in compliance are occurring or have occurred from this process source. If visible emissions above those that are normal (this may be zero percent opacity for many or all emission sources) and in compliance with section 212.6(a) are detected, the permittee shall determine the cause, make the necessary correction, and verify that the excess visible emissions problem has been corrected.

If visible emissions above those that are normal and in compliance continue to be present after corrections are made, the permittee will immediately notify the Department and conduct a Method 9 assessment within 24 hours to determine the degree of opacity.

Records of these observations, investigations and corrective actions will be kept on-site in a format acceptable to the Department and the semiannual progress report and annual compliance certifications required of all permittees subject to Title V must include a summary of these instances.

Parameter Monitored: OPACITY

Upper Permit Limit: 20.0 percent

Reference Test Method: EPA RM 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 3/1/2013.

Subsequent reports are due every 6 calendar month(s).



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.



Condition 42: Contaminant List

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable State Requirement:ECL 19-0301

Item 42.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0

Name: CARBON MONOXIDE

CAS No: 001746-01-6

Name: 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

CAS No: 007647-01-0

Name: HYDROGEN CHLORIDE

CAS No: 007782-50-5

Name: CHLORINE

CAS No: 051207-31-9

Name: 2,3,7,8-TETRACHLORODIBENZOFURAN

CAS No: 0NY075-00-0

Name: PARTICULATES

CAS No: 0NY075-00-5

Name: PM-10

CAS No: 0NY075-02-5

Name: PM 2.5

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY750-00-0

Name: CARBON DIOXIDE EQUIVALENTS

CAS No: 0NY998-00-0

Name: VOC

Condition 43: Unavoidable noncompliance and violations

Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable State Requirement:6 NYCRR 201-1.4

Item 43.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or



upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

Condition 44: Emission Unit Definition
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 44.1:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00003/00380

Facility DEC ID: 6405800003



The facility is authorized to perform regulated processes under this permit for:

Emission Unit: M-00001

Emission Unit Description:

Aluminum melting and holding furnaces. All furnaces are reverberatory, center charged. Furnaces charge molten aluminum; uniform, non-uniform and clean scrap; alloying ingredients and salt. No gas fluxing is done in any furnace.

Building(s): 221

Condition 45: Visible Emissions Limited
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable State Requirement:6 NYCRR 211.2

Item 45.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

****** Emission Unit Level ******

Condition 46: Emission Point Definition By Emission Unit
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 46.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: M-00001

Emission Point: I001A

Height (ft.): 67 Diameter (in.): 32
NYTMN (km.): 4977.645 NYTME (km.): 508.314 Building: 221

Emission Point: I001B

Height (ft.): 67 Diameter (in.): 32
NYTMN (km.): 4977.604 NYTME (km.): 508.318 Building: 221

Emission Point: I001C

Height (ft.): 68 Diameter (in.): 20
NYTMN (km.): 4977.641 NYTME (km.): 508.316 Building: 221

Emission Point: I001D

Height (ft.): 68 Diameter (in.): 20
NYTMN (km.): 4977.626 NYTME (km.): 508.316 Building: 221



Emission Point: I0031
Height (ft.): 74 Diameter (in.): 50
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Emission Point: I0034
Height (ft.): 74 Diameter (in.): 32
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Emission Point: I0035
Height (ft.): 74 Diameter (in.): 32
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Emission Point: I003A
Height (ft.): 67 Diameter (in.): 33
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Emission Point: I003C
Height (ft.): 67 Diameter (in.): 79
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Emission Point: I024D
Height (ft.): 74 Diameter (in.): 50
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Emission Point: I024F
Height (ft.): 82 Diameter (in.): 71
NYTMN (km.): 4976.66 NYTME (km.): 509.387 Building: 221

Condition 47: Process Definition By Emission Unit
Effective between the dates of 10/10/2012 and Permit Expiration Date

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 47.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: M-00001
Process: MHS Source Classification Code: 3-04-001-99
Process Description:
Molten aluminum melting and holding furnaces which are permitted to use salt flux. All furnaces are reverberatory, center charged. No gas fluxing is done in any furnace.

Emission Source/Control: M001A - Process

Emission Source/Control: M001B - Process

Emission Source/Control: M001C - Process

Emission Source/Control: M001D - Process

New York State Department of Environmental Conservation

Permit ID: 6-4058-00003/00380

Facility DEC ID: 6405800003



Emission Source/Control: M0031 - Process
Design Capacity: 180,000 pounds

Emission Source/Control: M0034 - Process

Emission Source/Control: M0035 - Process

Emission Source/Control: M003A - Process

Emission Source/Control: M003C - Process

Emission Source/Control: M024D - Process

Emission Source/Control: M024F - Process

