



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 6-4058-00024/00077
Effective Date:

Expiration Date:

Permit Issued To: REYNOLDS METALS CO
201 ISABELLA ST
PITTSBURGH, PA 15212-5858

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

Facility: REYNOLDS METALS ST LAWRENCE REDUCTION PLANT
194 CO RTE 45
MASSENA, NY 13662

Description:

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 ******

For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.

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 to the Department at least 30 days before the expiration of the permit.



Condition 4: Permit modifications, suspensions or revocations by the Department
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: 6-4058-00024/00077

Facility DEC ID: 6405800024



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

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201 ISABELLA ST
PITTSBURGH, PA 15212-5858

Facility: REYNOLDS METALS ST LAWRENCE REDUCTION PLANT
194 CO RTE 45
MASSENA, NY 13662

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

Permit Effective Date:

Permit Expiration Date:



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6 NYCRR 201-6.5 (a) (7): Fees
- 3 6 NYCRR 201-6.5 (c): Recordkeeping and reporting of compliance monitoring
- 4 6 NYCRR 201-6.5 (c) (2): Monitoring, Related Recordkeeping, and Reporting Requirements.
- 5 6 NYCRR 201-6.5 (c) (3) (ii): Compliance Certification
- 6 6 NYCRR 202-2.1: Compliance Certification
- 7 6 NYCRR 202-2.5: Recordkeeping requirements
- 8 6 NYCRR 215.2: Open Fires - Prohibitions
- 9 6 NYCRR 200.7: Maintenance of Equipment
- 10 6 NYCRR 201-1.7: Recycling and Salvage
- 11 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 12 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 13 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 14 6 NYCRR 201-6.5 (a) (4): Standard Requirement - Provide Information
- 15 6 NYCRR 201-6.5 (a) (8): General Condition - Right to Inspect
- 16 6 NYCRR 201-6.5 (d) (5): Standard Requirements - Progress Reports
- 17 6 NYCRR 201-6.5 (f) (6): Off Permit Changes
- 18 6 NYCRR 202-1.1: Required Emissions Tests
- 19 40 CFR Part 68: Accidental release provisions.
- 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 21 6 NYCRR Subpart 201-6: Emission Unit Definition
- 22 6 NYCRR 201-6.5 (e): Compliance Certification
- 23 6 NYCRR 201-6.5 (f): Compliance Certification
- 24 6 NYCRR 211.1: Air pollution prohibited
- 25 6 NYCRR 212.4 (a): Compliance Certification
- 26 6 NYCRR 212.4 (a): Compliance Certification
- 27 6 NYCRR 212.4 (c): Compliance Certification
- 28 6 NYCRR 212.4 (c): Compliance Certification
- 29 6 NYCRR 212.6 (a): Compliance Certification
- 30 6 NYCRR Part 226: Compliance Certification
- 31 6 NYCRR 227-1.3 (a): Compliance Certification
- 32 6 NYCRR 228-1.2 (b) (35): Compliance Certification
- 33 6 NYCRR Subpart 257-3: Compliance Certification
- 34 6 NYCRR Subpart 257-8: Compliance Certification
- 35 40CFR 52.21, Subpart A: Compliance Certification
- 36 40CFR 52.21, Subpart A: Compliance Certification
- 37 40CFR 63, Subpart A: General Provisions
- 38 40CFR 63.841, Subpart LL: Incorporation by Reference
- 39 40CFR 63.847(b), Subpart LL: Compliance Provisions - Test Plan
- 40 40CFR 63.849(a), Subpart LL: Reference test methods for TF and POM emissions
- 41 40CFR 63.849(e), Subpart LL: Alternative test methods for TF or POM emissions



- 42 40CFR 63, Subpart ZZZZ: Applicability
- 43 40 CFR Part 64: Compliance Certification
- 44 40 CFR Part 98: Mandatory greenhouse gas reporting

Emission Unit Level

- 45 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 46 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 47 6 NYCRR Subpart 201-7: Process Permissible Emissions

EU=B-OIL01

- 48 6 NYCRR 227-1.6 (a): Corrective Action
- 49 6 NYCRR 227-1.6 (b): Corrective Action
- 50 6 NYCRR 227-1.6 (c): Corrective Action
- 51 6 NYCRR 227-1.6 (d): Corrective Action
- 52 6 NYCRR 227-1.7: General Provisions

EU=B-OIL01,Proc=I01,ES=0222H

- *53 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=B-OIL01,Proc=I01,ES=0322H

- *54 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=E-WCST1,Proc=CR1,ES=CR101

- 55 6 NYCRR 231-11.2 (b): Compliance Certification

EU=P-AINO1,Proc=Q01

- 56 6 NYCRR 228-1.1 (d): Will remain subject to Part 228.

EU=P-DIG01,Proc=E02,ES=E4685

- *57 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *58 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 59 40CFR 63.846(b)(2), Subpart LL: Compliance Certification

EU=P-OT001

- 60 40CFR 63.847(d)(3), Subpart LL: Performance Test Requirements - Previous Control Device Tests
- 61 40CFR 63.847(e)(1), Subpart LL: Potline TF emission rate calculation
- 62 40CFR 63.847(e)(5), Subpart LL: Procedure to determine weights
- 63 40CFR 63.847(e)(6), Subpart LL: Compliance Certification
- 64 40CFR 63.847(h)(3), Subpart LL: Selection of monitoring parameters - redetermining operating limits
- 65 40CFR 63.848(e)(1), Subpart LL: Reduced sampling frequency - contents of request letter
- 66 40CFR 63.848(e)(2), Subpart LL: Reduced sampling frequency request - contents of the approved alternative requirement
- 67 40CFR 63.848(f), Subpart LL: Monitoring parameters for emission control devices
- 68 40CFR 63.848(g), Subpart LL: Compliance Certification

EU=P-OT001

- 69 40CFR 63.848(h), Subpart LL: Corrective action procedures
- 70 40CFR 63.848(i), Subpart LL: Exceedances
- 71 40CFR 63.848(j), Subpart LL: Compliance Certification



- 72 40CFR 63.848(k), Subpart LL: Accuracy and calibration requirements
- 73 40CFR 63.848(l), Subpart LL: Alternative operating parameters
- 74 40CFR 63.849(c), Subpart LL: Definition of potline in Method 14
- 75 40CFR 63.849(d), Subpart LL: Installation of manifolds for potlines subject to Method 14
- 76 40CFR 63.850(c)(1), Subpart LL: Startup, shutdown, and malfunction plan and reports
- 77 40CFR 63.850(c)(2), Subpart LL: Startup, shutdown, and malfunction plan and reports
- 78 40CFR 63.850(d), Subpart LL: Compliance Certification
- 79 40CFR 63.850(e)(1), Subpart LL: Compliance Certification
- 80 40CFR 63.850(e)(2), Subpart LL: Compliance Certification
- 81 40CFR 63.850(e)(3), Subpart LL: Compliance Certification
- 82 40CFR 63.850(e)(4), Subpart LL: Compliance Certification

EU=P-OT001,Proc=A02

- 83 6 NYCRR 212.5 (d): Compliance Certification
- 84 6 NYCRR 212.5 (d): Compliance Certification
- 85 6 NYCRR 212.5 (d): Compliance Certification
- 86 6 NYCRR 212.5 (d): Compliance Certification
- 87 6 NYCRR 212.5 (d): Compliance Certification
- 88 40CFR 63.846, Subpart LL: Compliance Certification
- 89 40CFR 63.846, Subpart LL: Compliance Certification
- 90 40CFR 63.846, Subpart LL: Compliance Certification
- 91 40CFR 63.846(b)(2), Subpart LL: Compliance Certification
- 92 40CFR 63.847(d), Subpart LL: Compliance Certification
- 93 40CFR 63.847(d), Subpart LL: Compliance Certification
- 94 40CFR 63.847(h)(1), Subpart LL: Compliance Certification
- 95 40CFR 63.848(a), Subpart LL: Compliance Certification
- 96 40CFR 63.848(b), Subpart LL: Compliance Certification

EU=P-OT001,Proc=A02,ES=E5152

- 97 40CFR 63.847(h)(1), Subpart LL: Compliance Certification

EU=P-OT001,Proc=A02,ES=E5354

- 98 40CFR 63.847(h)(1), Subpart LL: Compliance Certification

EU=P-OT001,Proc=A02,ES=E5556

- 99 40CFR 63.847(h)(1), Subpart LL: Compliance Certification

EU=P-OT001,Proc=B01

- *100 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 101 6 NYCRR 212.5 (d): Compliance Certification
- 102 6 NYCRR 212.5 (d): Compliance Certification
- 103 6 NYCRR 212.5 (d): Compliance Certification
- 104 40CFR 60.190(c), NSPS Subpart S: Compliance Certification
- 105 40CFR 63.844(a)(1), NESHAP Subpart LL: Compliance Certification
- 106 40CFR 63.847(c), Subpart LL: Compliance Certification
- 107 40CFR 63.847(c)(2)(i), NESHAP Subpart LL: Compliance Certification
- 108 40CFR 63.847(d)(1), Subpart LL: Compliance Certification
- 109 40CFR 63.847(h)(1), Subpart LL: Selection of monitoring parameters
- potlines and anode bake furnaces



- 110 40CFR 63.847(h)(1), Subpart LL: Compliance Certification
- 111 40CFR 63.847(h)(1), Subpart LL: Compliance Certification
- 112 40CFR 63.848(a), Subpart LL: Compliance Certification
- 113 40CFR 63.850(a)(5), Subpart LL: Notification of initial performance test
- 114 40CFR 63.850(a)(6), Subpart LL: Notification of initial compliance status
- 115 40CFR 63.850(b), Subpart LL: Performance test reports

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 116 ECL 19-0301: Contaminant List
- 117 6 NYCRR 201-1.4: Unavoidable noncompliance and violations

Emission Unit Level

EU=P-OT001

- 118 6 NYCRR Part 209: Compliance Demonstration

NOTE: * preceding the condition number indicates capping.



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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

Item A: 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 B: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10 (b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.



Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR 201-6.3 (a) (4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item D: Certification by a Responsible Official - 6 NYCRR 201-6.3 (d) (12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item E: Requirement to Comply With All Conditions - 6 NYCRR 201-6.5 (a) (2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR 201-6.5 (a) (3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.5 (a) (5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR 201-6.5 (a) (6)

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



Item I: Severability - 6 NYCRR 201-6.5 (a) (9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item J: Permit Shield - 6 NYCRR 201-6.5 (g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR 201-6.5 (i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is



three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

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.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

**Condition 1: Acceptable Ambient Air Quality
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 200.6

Item 1.1:

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.

**Condition 2: Fees
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (7)

Item 2.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

**Condition 3: Recordkeeping and reporting of compliance monitoring
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-6.5 (c)

Item 3.1:



The following information must be included in any required compliance monitoring records and reports:

- (i) The date, place, and time of sampling or measurements;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.3 of this Part 201.

Condition 4: Monitoring, Related Recordkeeping, and Reporting Requirements.
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (2)

Item 4.1:

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

Condition 5: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

Submit reports of any required monitoring at a minimum



frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 60 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.
- (4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A



written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.3(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks to have a violation excused unless otherwise limited by regulation. 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. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.5(e), contained elsewhere in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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



Condition 6: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due by April 15th for previous calendar year

Condition 7: Recordkeeping requirements
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 7.1:

(a) The following records shall be maintained for at least five years:

- (1) a copy of each emission statement submitted to the department; and
- (2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

Condition 8: Open Fires - Prohibitions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 215.2

Item 8.1:

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

Item 8.2

Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

(a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter



and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.

- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
- (h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
- (i) Prescribed burns performed according to Part 194 of this Title.
- (j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
- (k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
- (l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period.

[NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

**Condition 9: Maintenance of Equipment
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 200.7



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 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.

**Condition 14: Standard Requirement - Provide Information
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (4)

Item 14.1:

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

**Condition 15: General Condition - Right to Inspect
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (8)

Item 15.1:

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

(i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and

(iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**Condition 16: Standard Requirements - Progress Reports
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-6.5 (d) (5)

Item 16.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



apply:

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
- b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:
 - 1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,
 - 2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

**Condition 20: Recycling and Emissions Reduction
 Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 82, Subpart F

Item 20.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

The following conditions are subject to annual compliance certification requirements for Title V permits only.

**Condition 21: Emission Unit Definition
 Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 21.1:

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

Emission Unit: 0-CRUC

Emission Unit Description:

This emission unit consists of the cruce augering and lid cleaning and controls. There is one process associated with this emission unit, process A03.

Item 21.2:

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

Emission Unit: A-NOD01

Emission Unit Description:

This emission unit consists of emission sources located



adjacent to the Anode Pin Room (on occasion this may also occur in other areas of the facility). There is one process identified within this emission unit, process G01. This emission unit results in fugitive emissions and is not associated with a ventilation system.

Building(s): 35

Item 21.3:

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

Emission Unit: B-OIL01

Emission Unit Description:

This emission unit consists of emissions sources and emission points located in the Boiler Room, Facility 22H. There is one process identified within this emission unit, process I01.

Building(s): 22H

Item 21.4:

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

Emission Unit: C-ARB01

Emission Unit Description:

This emissions unit consists of petroleum coke and/or paste briquette handling and storage. There is one process identified within this emissions unit, process N04. This emissions unit also includes miscellaneous fugitive emissions generated from this process.

Building(s): 22K

Item 21.5:

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

Emission Unit: D-ROS01

Emission Unit Description:

This emission unit consists of emissions sources associated with dross cooling processes and storage, Facility 20 and 20C. This emission unit includes miscellaneous fugitive emissions from the processes. There is one process associated with this emission unit, process Z01.

Building(s): 20
20C
20G

Item 21.6:

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

Emission Unit: D-ROS02

Emission Unit Description:

This emission unit consists of emission sources associated with dross cooling in process Z02.



Building(s): 20
20G

Item 21.7:

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

Emission Unit: E-WCST1

Emission Unit Description:

This emission unit consists of two emission sources and two processes in what was formerly the East and West casthouses. There are two processes identified with the emission unit; process HMO - a natural gas homogenizing furnace; and process CR1 - adding reactive flux to molten metal crucibles. The gas homogenizing furnace and the addition of reactive flux to molten metal crucibles are not subject to the Secondary Aluminum Processing NESHAP (40 CFR Part 63, Subpart RRR).

Item 21.8:

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

Emission Unit: P-AINO1

Emission Unit Description:

This emission unit consists of emission sources associated with the paint shop, Facility 31. There is one process associated with this emission unit, process Q01. This emission unit consists of fugitive emissions generated from the process.

Building(s): 31

Item 21.9:

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

Emission Unit: P-ARTW1

Emission Unit Description:

This emission unit consists of parts washers located throughout the facility. There is one process associated with this emission unit, process PW1.

Item 21.10:

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

Emission Unit: P-DIG01

Emission Unit Description:

This emission unit consists of emission sources, control devices, and emission points associated with the Cathode Digging Area, Facility 85. There is one process associated with this emission unit, process E02.

Building(s): 85

Item 21.11:

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

Emission Unit: P-OT001



Emission Unit Description:

This emission unit consists of three existing Soderberg style potlines with cathode baking and pot cut-out support processes and one new Prebake style potline supported by anode cooling.

Building(s): 51
52
53
54
55
56
803
804

Item 21.12:

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

Emission Unit: U-LDG01

Emission Unit Description:

This emission unit consists of emission sources, control devices and emission points associated with the Unloading Shed, Facility 25. There are two (2) processes associated with this emission unit, process P01 and P03. There are four silos located in the courtyard, which are inactive; however, they provide structural support to the ore gallery and will not be removed. These are not air contamination sources, as they are not used and contain no product. Therefore these four silos, 25A, 25B, 25C, and 25D, are not identified as emission sources within this permit.

Building(s): 25
25A
25B

Item 21.13:

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

Emission Unit: W-WTR01

Emission Unit Description:

This emission unit consists of emission sources and emission points associated with the wastewater treatment operations, Facility 63, 63A- 63J, 65, 65A, 65B, and 66. There is one process associated with this emission unit, process WW1. This emission unit includes miscellaneous fugitive emission sources.

Building(s): 63
63A
63B
63C
63D
63E



63F
63G
63H
63J
65
65A
66

Condition 22: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 201-6.5 (e)

Item 22.1:

The Compliance Certification activity will be performed for the Facility.

Item 22.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

- i. Compliance certifications shall contain:
 - the identification of each term or condition of the permit that is the basis of the certification;
 - the compliance status;
 - whether compliance was continuous or intermittent;
 - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
 - such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
 - such additional requirements as may be specified elsewhere in this permit related to compliance certification.

- ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.

- iii. Compliance certifications shall be submitted



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Operational Flexibility Plan

I. Protocol Objective

The objective of this condition is to maximize operational flexibility at the facility by building into the Title V permit the capability to make certain changes using a protocol. As provided under 6 NYCRR Part 201-6.5(f)(2), changes made under an approved protocol are not subject to the Title V permit modification provisions under 6 NYCRR Part 201-6.7.

II. Protocol

A. Criteria

1. Changes reviewed under this protocol shall be evaluated in accordance with the following criteria:

a. All underlying federal and state requirements with which the new or changed emission source must comply must exist in the Title V permit. Existing permit conditions may be amended to reference or include the new or changed emission source and any related information, and/or subject to DEC approval, new conditions proposed, to provide the appropriate monitoring parameters.

b. Any new or changed emission source shall not be part of a source project that results in a significant net emissions increase that exceeds the New Source Review (NSR) thresholds identified in 6 NYCRR Part 231-2 or 40 CFR 52.21.

c. The facility shall not use the protocol to make physical changes or changes in the method of operation of existing emissions sources that would require a new or modified federally enforceable cap either to avoid major NSR requirements or to address and comply with other Clean Air Act requirements, such as RACT. Such changes must be addressed via the significant permit modification provisions.

B. Notification Requirements for Changes Reviewed under the Protocol

1. The facility shall notify the Department in writing of the proposed change.

2. Notifications made in accordance with this protocol



will include the following documentation:

- a. Identification of the Title V permit emission unit, process(es), emission sources and emission points affected by the proposed change with applicable revisions to the Emission Unit structure;
- b. Description of the proposed change, including operating parameters;
- c. Identification and description of emissions control technology;
- d. Documentation of the project's, or emission source's, compliance with respect to all state and/or federally applicable requirements, including the following steps:
 - i. Calculate the emission rate potential and maximum projected actual annual emission rates for all contaminants affected by the change.
 - ii. Submit documentation of major NSR program non-applicability for NYSDEC review and approval.
 - iii. Identify and evaluate the applicability of all regulations likely to be triggered by the new or changed emission source.
 - iv. Propose any operating and record keeping procedures necessary to ensure compliance.
- e. Any other relevant information used for the evaluation of the proposed project or emission source under the Protocol.

C. Review and Approval of Changes

1. The Department shall respond to the permittee in writing with a determination within 15 days of receipt of the notification of the permittee.
2. The Department may require a permit modification, in order to impose new applicable requirements or additional permit conditions if it determines that changes proposed pursuant to notification do not meet the criteria under II. A above or that the changes may have a significant air quality impact or be otherwise potentially significant under SEQRA (6 NYCRR Part 617).
3. The Department may require that the permittee not



undertake the proposed change until it completes a more detailed review of the proposed change, which may include potential air quality impacts and/or applicable requirements. The Department's determination shall include a listing of information required for further review, if necessary.

D. Additional Compliance Obligations for Changes Made Under this Protocol

1. Upon commencement of the change, the facility shall comply with all applicable requirements and permit conditions, including any amended or proposed in accordance with II.A.1.a above.
2. The facility shall provide with the semi-annual monitoring report, a summary of the changes made in accordance with this protocol and a statement of the compliance status of each. Changes reported should include all those made during the corresponding period and any earlier changes that have not yet been incorporated into the permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 24: Air pollution prohibited
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 211.1

Item 24.1:

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 25: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 25.1:

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

Emission Unit: P-OT001

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Process: A02 Emission Source: B5156

Emission Unit: P-OT001
Process: A02 Emission Source: C5156

Emission Unit: P-OT001
Process: B01 Emission Source: B5156

Emission Unit: P-OT001
Process: B01 Emission Source: C5156

Regulated Contaminant(s):
CAS No: 000463-58-1 CARBONYL SULFIDE
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 25.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

To ensure proper control of Sulfur Dioxide (SO2) and Carbonyl Sulfide (COS), the North and South wet scrubbers shall operate with a liquor level between 73% and 95% of the total capacity for optimum acid gas removal. A PLC computer shall continuously track the liquor level and a 24 hour average will be generated to compare to the operating limits. If the average falls outside the range, corrective action shall be taken and the excursion will be logged. A report of the number of times and the amount of time the average was outside the range and the corrective action taken shall be submitted semi-annually on a calendar year basis.

This Continuous Monitoring System (CMS) will be operated and maintained according to a CMS Operation and Maintenance Plan (CMS O&M) that will be submitted to the Department for review and approval. The CMS O&M plan will be updated as necessary and any changes shall also be submitted to the Department for approval.

Parameter Monitored: LIQUOR
Lower Permit Limit: 73 percent
Upper Permit Limit: 95 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 26: Compliance Certification
Effective for entire length of Permit



Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 26.1:

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

Emission Unit: P-OT001
Process: A02 Emission Source: B5156

Emission Unit: P-OT001
Process: A02 Emission Source: C5156

Emission Unit: P-OT001
Process: B01 Emission Source: B5156

Emission Unit: P-OT001
Process: B01 Emission Source: C5156

Regulated Contaminant(s):
CAS No: 000463-58-1 CARBONYL SULFIDE
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 26.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

To ensure proper control of Sulfur Dioxide (SO₂) and Carbonyl Sulfide (COS), the North and South wet scrubbers shall operate with a pH within the range specified below for optimum acid gas removal. A PLC computer shall continuously track the pH and a 24 hour average will be generated to compare to the operating limits. If the average falls outside the range, corrective action shall be taken and the excursion will be logged. A report of the number of times and the amount of time the average was outside the range and the corrective action taken shall be submitted semi-annually on a calendar year basis.

This Continuous Monitoring System (CMS) will be operated and maintained according to a CMS Operation and Maintenance Plan (CMS O&M) that will be submitted to the Department for review and approval. The CMS O&M plan will be updated as necessary and any changes shall also be submitted to the Department for approval.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 7.0 pH (STANDARD) units
Upper Permit Limit: 8.0 pH (STANDARD) units
Monitoring Frequency: CONTINUOUS



Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 27: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212.4 (c)

Item 27.1:

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

Emission Unit: 0-CRUCE Process: A03	Emission Source: 0142B
Emission Unit: 0-CRUCE Process: A03	Emission Source: E5685
Emission Unit: P-DIG01 Process: E02	Emission Source: E4685
Emission Unit: P-OT001 Process: ANO	Emission Source: P0188
Emission Unit: U-LDG01 Process: P01	Emission Source: P0133
Emission Unit: U-LDG01 Process: P01	Emission Source: P0225
Emission Unit: U-LDG01 Process: P03	Emission Source: B0525
Emission Unit: U-LDG01 Process: P03	Emission Source: B0625
Emission Unit: U-LDG01 Process: P03	Emission Source: P0126
Emission Unit: U-LDG01 Process: P03	Emission Source: P0127
Emission Unit: U-LDG01 Process: P03	Emission Source: P0128
Emission Unit: U-LDG01 Process: P03	Emission Source: P0129
Emission Unit: U-LDG01 Process: P03	Emission Source: P0130



Emission Unit: U-LDG01
Process: P03 Emission Source: P0131

Emission Unit: U-LDG01
Process: P03 Emission Source: P0132

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

Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

All emission sources (other than exempt and trivial activities) that employ control devices to limit particulate emissions, shall be monitored and maintained according to the Operation and Maintenance (O & M) plan approved by the Department in order to ensure proper operation and control. The O & M plan shall be considered a "living" document and will be changed and improved over time. Each change shall be submitted to the department for approval. Monitoring parameter measurements made outside normal operating ranges will trigger additional reporting according to the O&M Plan. Records shall be maintained for a minimum of five years.

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 28: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212.4 (c)

Item 28.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: 0-CRUC Emission Point: 20B00

Emission Unit: 0-CRUC Emission Point: 85003

Emission Unit: C-ARB01 Emission Point: 22D01

Emission Unit: C-ARB01 Emission Point: 22E01

Emission Unit: E-WCST1 Emission Point: 20013



Emission Unit: E-WCST1 Process: CR1	Emission Source: CR101
Emission Unit: P-DIG01	Emission Point: 85002
Emission Unit: P-OT001	Emission Point: 88001
Emission Unit: U-LDG01	Emission Point: 25A01
Emission Unit: U-LDG01	Emission Point: 26A01
Emission Unit: U-LDG01	Emission Point: 27A01
Emission Unit: U-LDG01	Emission Point: 28A01
Emission Unit: U-LDG01	Emission Point: 29A01
Emission Unit: U-LDG01	Emission Point: 30A01
Emission Unit: U-LDG01	Emission Point: 31A01
Emission Unit: U-LDG01	Emission Point: 32A01
Emission Unit: U-LDG01	Emission Point: 33A01

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

Item 28.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

No person will cause or allow emissions of solid particulates, with an environmental rating of B or C, that exceed 0.050 grains per dry standard cubic foot of exhaust gas. Stack testing will be conducted on these or similar sources to determine compliance upon the request of the Department.

Upper Permit Limit: 0.050 grains per dscf

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 29: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212.6 (a)



Item 29.1:

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

Emission Unit: 0-CRUC Process: A03	Emission Source: 01420
Emission Unit: 0-CRUC Process: A03	Emission Source: 01620
Emission Unit: C-ARB01 Process: N04	Emission Source: 00522
Emission Unit: C-ARB01 Process: N04	Emission Source: 00622
Emission Unit: D-ROS01 Process: Z01	Emission Source: 01520
Emission Unit: D-ROS02 Process: Z02	Emission Source: 01720
Emission Unit: E-WCST1 Process: CR1	Emission Source: CR101
Emission Unit: E-WCST1 Process: HMO	Emission Source: 0520G
Emission Unit: P-DIG01 Process: E02	Emission Source: 46185
Emission Unit: P-OT001 Process: ANO	Emission Source: AC002
Emission Unit: U-LDG01 Process: P01	Emission Source: 00133
Emission Unit: U-LDG01 Process: P01	Emission Source: 0125A
Emission Unit: U-LDG01 Process: P01	Emission Source: 0125B
Emission Unit: U-LDG01 Process: P01	Emission Source: 0125C
Emission Unit: U-LDG01 Process: P03	Emission Source: 00125
Emission Unit: U-LDG01 Process: P03	Emission Source: 00126



Emission Unit: U-LDG01 Process: P03	Emission Source: 00127
Emission Unit: U-LDG01 Process: P03	Emission Source: 00128
Emission Unit: U-LDG01 Process: P03	Emission Source: 00129
Emission Unit: U-LDG01 Process: P03	Emission Source: 00130
Emission Unit: U-LDG01 Process: P03	Emission Source: 00131
Emission Unit: U-LDG01 Process: P03	Emission Source: 00132
Emission Unit: U-LDG01 Process: P03	Emission Source: 00225
Emission Unit: U-LDG01 Process: P03	Emission Source: 00325
Emission Unit: U-LDG01 Process: P03	Emission Source: 0125A
Emission Unit: U-LDG01 Process: P03	Emission Source: 0125B
Emission Unit: U-LDG01 Process: P03	Emission Source: 0125C

Item 29.2:

Compliance Certification 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. A Method 9 opacity evaluation on these emission sources shall be performed at the request of the Department.

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: 6 MINUTE AVERAGE



Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 30: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Part 226

Item 30.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

6NYCRR 226. Requirements for Cold Cleaning Degreasers
(For Title V after 12/31/2003)

A. Equipment Specifications

The following types of control equipment must be used when conducting cold cleaning degreasing, solvent metal cleaning:

- (1) A cover which can be operated easily.
- (2) An internal drainage facility (under cover), if practical.
- (3) A control system that limits VOC emissions to those achievable with equipment having a freeboard ratio greater than or equal to 0.5, or a water cover when the solvent is insoluble in and heavier than water. This does not apply to remote reservoir degreasers.
- (4) Solvent with a vapor pressure of 1.0 mm Hg, or less, at 20 C.

B. Operating Requirements:

When cold cleaning, the clean parts must be drained at least 15 seconds or until dripping ceases.

C. General Requirements:

A Person conducting solvent metal cleaning must:



- (1) Store solvent in covered containers and transfer or dispose of waste solvent in such a manner that less than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere.
- (2) Maintain equipment to minimize leaks and fugitive emissions.
- (3) Display at the equipment location a conspicuous summary of proper operating procedures consistent with minimizing emissions of VOCs.
- (4) Keep the degreaser cover closed except when:
 - (a) parts are being placed into or being removed from the degreaser;
 - (b) adding or removing solvent from the degreaser;
 - (c) no solvent is in the degreaser; or
 - (d) when manually cleaning metal parts in the cold cleaning degreaser.
- (5) Create and retain a record of solvent consumption for five years. This record must be made available to the Department upon request.
- (6) Not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser.
- (7) If using a cold cleaning degreaser that is subject to paragraph 226.3(a)(4), retain a record of the following three items for five years and provide these records to the Department upon request. An invoice, a bill of sale, a certificate covering multiple sales, a Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this requirement.
 - (a) the name and address of the solvent supplier;
 - (b) the type of solvent including the product or vendor identification number; and
 - (c) the vapor pressure of the solvent measured in mm Hg at 20 °C (68 °F).
- (8) Include in the semiannual monitoring report and annual compliance certifications the solvent consumption required under (5) above, as well as a statement that the permittee's obligations under items (1) through (7) above have been met for the period of the report or certification. This statement must be based on the permittees observations on a weekly basis that the operation of the solvent metal cleaning process has met the above criteria. The permittee must maintain a log of instances when the above have not been met, and such



statement must summarize these instances.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 31: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.3 (a)

Item 31.1:

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

Emission Unit: B-OIL01	Emission Point: 00C1B
Emission Unit: B-OIL01	Emission Point: 00C3B

Item 31.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

No owner or operator of a combustion installation shall operate the installation in such a way to emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average in reference test Method 9 in Appendix A of 40 CFR 60. Facility shall perform Method 9 visible emissions observations, on either of the emission points listed above, upon the request of the Department.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: EPA RM 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 32: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 228-1.2 (b) (35)

Item 32.1:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



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

Emission Unit: P-AINO1
Process: Q01

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For all surface coatings subject to 6NYCRR Part 228, the VOC content (as applied, minus water and exempt VOC), must be less than or equal to the limit specified in Table 1 or Table 2 for the respective surface that is coated.

The VOC content of a coating, as applied, shall be calculated as follows:

$$(VOC)_a = [(Wv)_a - (Ww)_a - (We)_a] / [1 - \{ (Vw)_a + (Ve)_a \}]$$

Where:

(VOC)_a = VOC content of a coating, as applied, expressed as pounds of VOC per gallon of coating minus water and excluded VOC

(Wv)_a = The pounds of total volatiles per gallon of an as applied coating

(Ww)_a = The pounds of water per gallon of an as applied coating

(We)_a = The pounds of excluded VOC per gallon of an as applied coating

(Vw)_a = The gallons of water per gallon of an as applied coating

(Ve)_a = The gallons of excluded VOC per gallon of an as applied coating

Reference Test Method: EPA Method 24

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 33: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 257-3



Item 33.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 33.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: AMBIENT AIR MONITORING

Monitoring Description:

Standard for suspended particulates. (a) 24-hour standard. For any 24-hour period, the average concentration shall not exceed 250 $\mu\text{g}/\text{m}^3$ more than once a year. (Applicable in all levels.)

(b) Annual standard.. During any 12 consecutive months, the geometric mean of the 24-hour average concentrations shall not exceed:

Level III 65 $\mu\text{g}/\text{m}^3$

(c) 30-day standard. During any 30 consecutive days, the arithmetic mean of the 24-hour average concentrations, at any location, shall not exceed:

Level III 115 $\mu\text{g}/\text{m}^3$

(d) 60-day standard. During any 60 consecutive days, the arithmetic mean of the 24-hour average concentrations, at any location, shall not exceed:

Level III 95 $\mu\text{g}/\text{m}^3$

(e) 90-day standard. During any 90 consecutive days, the arithmetic mean of the 24-hour average concentrations, at any location, shall not exceed:

Level III 90 $\mu\text{g}/\text{m}^3$

(f) The standards in subdivisions (c), (d) and (e) of this section are intended for enforcement purposes, and monitoring will be performed only as required in a particular area. For prediction purposes, prediction of conformity with the annual geometric mean standard shall be sufficient to demonstrate predicted conformity with these standards.

Upper Permit Limit: 250 micrograms per cubic meter
Reference Test Method: High volume sampling

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Monitoring Frequency: QUARTERLY
Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 34: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 257-8

Item 34.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 068188-85-2 FLUORIDES

Item 34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Standard: Total Fluorides, part per million (ppm), dry weight basis (as F) in and on forage for consumption for grazing ruminants. Average concentration shall be less than the following in all levels:

- (1) For growing season (not to exceed six consecutive months) - 40 ppm
- (2) For any 60 day period - 60 ppm
- (3) For any 30 day period - 80 ppm

Measurement: Total Fluorides in and on forage is determined by fusion of a representative sample by the Schoniger flash oxygen combustion method and analysis by specific ion electrode or other methods acceptable to all signatories of the Sampling Plan noted below.

The facility shall continue to monitor total fluoride forage levels as set forth in the Work/Quality Assurance Project Plan - Sampling and Analysis for Fluoride in Vegetation dated May 5, 1999, and its amendments.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 35: Compliance Certification
Effective for entire length of Permit



Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 35.1:

The Compliance Certification activity will be performed for the Facility.

Item 35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

All records required by this permit shall be kept on-site at the facility for the five most recent years, and upon request, must be made available for review by a NYSDEC representative.

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 36: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 36.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: A-NOD01 Process: G01	Emission Source: 01580
Emission Unit: P-DIG01 Process: E02	Emission Source: 46185
Emission Unit: P-OT001 Process: A02	Emission Source: 05152
Emission Unit: P-OT001 Process: A02	Emission Source: 05354
Emission Unit: P-OT001 Process: A02	Emission Source: 05556
Emission Unit: P-OT001 Process: A05	Emission Source: 05152
Emission Unit: P-OT001 Process: A05	Emission Source: 05354
Emission Unit: P-OT001 Process: A05	Emission Source: 05556
Emission Unit: P-OT001	



Process: A06	Emission Source: 05152
Emission Unit: P-OT001 Process: A06	Emission Source: 05354
Emission Unit: P-OT001 Process: A06	Emission Source: 05556
Emission Unit: U-LDG01 Process: P01	Emission Source: 0125C
Emission Unit: U-LDG01 Process: P03	Emission Source: 0125C

Item 36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The list of emission sources and emission control systems contained above will begin permanent shut down upon start-up of the new prebake potline (Emission Unit P-OT001, Process B01, Emission Source PS001) which is part of the East Plant modernization project. The start-up and shutdown of emission sources will occur over a period of months as portions of the prebake potline are energized and put in service. Facility will provide the Department with a detailed start-up and shutdown schedule at least 30 days prior to the energization of the first pot in the new prebake potline.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 37: General Provisions
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63, Subpart A

Item 37.1:

This Condition applies to:

Emission Unit: POT001
Process: A02

Emission Unit: POT001
Process: A06

Emission Unit: POT001
Process: B01

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Item 37.2:

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 38: Incorporation by Reference
Effective for entire length of Permit**

Applicable Federal Requirement: 40 CFR 63.841, Subpart LL

Item 38.1:

This Condition applies to:

Emission Unit: POT001
Process: A02

Emission Unit: POT001
Process: A06

Emission Unit: POT001
Process: B01

Item 38.2:

(a) The following material is incorporated by reference in the corresponding sections noted. This incorporation by reference was approved by the Director of the Federal Register on October 7, 1997, in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. These materials are incorporated as they exist on the date of approval, and notice of any change in the materials will be published in the Federal Register. Revisions to "Industrial Ventilation: A Manual of Recommended Practice" (22nd ed.) are applicable only after publication of a document in the Federal Register to amend subpart LL to require use of the new information.

(1) Chapter 3, "Local Exhaust Hoods" and Chapter 5, "Exhaust System Design Procedure" of "Industrial Ventilation: A Manual of Recommended Practice," American Conference of Governmental Industrial Hygienists, 22nd edition, 1995, IBR approved for 40 CFR Part 63.843(b) and 40 CFR Part 63.844(b); and

(2) ASTM D 2986-95A, Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for section 7.1.1 of Method 315 in appendix A to 40 CFR Part 63.

(b) The materials incorporated by reference are available for inspection at the Office of the Federal Register, 800 North Capitol Street NW., Suite 700, 7th Floor, Washington, DC, and at the Air and Radiation Docket Center, U.S. EPA, 401 M Street, SW., Washington, DC. The materials also are available for purchase from one of the following addresses:

Industrial telephone (1) Customer Service Department, American Conference of Governmental Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, Ohio 45240, number (513) 742-2020; or



(2) American Society for Testing and Materials, 100 Bar Harbour Drive, West Conshohocken, Pennsylvania 19428, telephone number (610) 832-9500.

**Condition 39: Compliance Provisions - Test Plan
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.847(b), Subpart LL

Item 39.1:

This Condition applies to:

Emission Unit: POT001
Process: A02

Emission Unit: POT001
Process: B01

Item 39.2:

The owner or operator shall prepare a site-specific test plan prior to the initial performance test according to the requirements of 40 CFR Part 63.7(c). The test plan must include procedures for conducting the initial performance test and for subsequent performance tests required in 40 CFR Part 63.848 for emission monitoring. In addition to the information required by 40 CFR Part 63.7, the test plan shall include:

(1) Procedures to ensure a minimum of three runs are performed annually for the primary control system for each source;

(2) For a source with a single control device exhausted through multiple stacks, procedures to ensure that at least three runs are performed annually by a representative sample of the stacks satisfactory to the applicable regulatory authority;

(3) For multiple control devices on a single source, procedures to ensure that at least one run is performed annually for each control device by a representative sample of the stacks satisfactory to the applicable regulatory authority;

(4) Procedures for sampling single stacks associated with multiple anode bake furnaces;

(8) Procedures for establishing the frequency of testing to ensure that at least one run is performed before the 15th of the month, at least one run is performed after the 15th of the month, and that there are at least 6 days between two of the runs during the month, or that secondary emissions are measured according to an alternate schedule satisfactory to the applicable regulatory authority.

**Condition 40: Reference test methods for TF and POM emissions
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.849(a), Subpart LL

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



according to the CAM Plan. Records shall be maintained for a minimum of five years.

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 44: Mandatory greenhouse gas reporting
Effective for entire length of Permit**

Applicable Federal Requirement:40 CFR Part 98

Item 44.1:

40 CFR Part 98 establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of certain facilities that directly emit GHG as well as for certain fossil fuel suppliers and industrial GHG suppliers. For suppliers, the GHGs reported are the quantity that would be emitted from combustion or use of the products supplied.

Owners and operators of facilities and suppliers that are subject to 40 CFR Part 98 must follow the requirements of subpart A and all applicable subparts of 40 CFR Part 98. If a conflict exists between a provision in subpart A and any other applicable subpart, the requirements of the applicable subpart shall take precedence.

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

**Condition 45: Emission Point Definition By Emission Unit
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 45.1:

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

Emission Unit: 0-CRUC

Emission Point: 20B00

Height (ft.): 13 Length (in.): 33 Width (in.): 30
NYTMN (km.): 4981.026 NYTME (km.): 519.726 Building: 20

Emission Point: 85003

Height (ft.): 13 Length (in.): 33 Width (in.): 30
NYTMN (km.): 4981.029 NYTME (km.): 519.589 Building: 20

Item 45.2:

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

Emission Unit: B-OIL01



Emission Point: 00C1B
Height (ft.): 52 Diameter (in.): 38
NYTMN (km.): 4981.032 NYTME (km.): 519.717

Emission Point: 00C3B
Height (ft.): 50 Diameter (in.): 42
NYTMN (km.): 4981.015 NYTME (km.): 519.719

Item 45.3:

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

Emission Unit: C-ARB01

Emission Point: 22D01
Height (ft.): 64 Diameter (in.): 4
NYTMN (km.): 4981.265 NYTME (km.): 519.593 Building: 22D

Emission Point: 22E01
Height (ft.): 64 Diameter (in.): 4
NYTMN (km.): 4981.264 NYTME (km.): 519.572 Building: 22E

Item 45.4:

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

Emission Unit: E-WCST1

Emission Point: 20013
Height (ft.): 46 Diameter (in.): 0
NYTMN (km.): 4981.161 NYTME (km.): 519.815 Building: 20G

Item 45.5:

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

Emission Unit: P-DIG01

Emission Point: 85002
Height (ft.): 245 Length (in.): 48 Width (in.): 43
NYTMN (km.): 4981.072 NYTME (km.): 519.405

Item 45.6:

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

Emission Unit: P-OT001

Emission Point: 77A01
Height (ft.): 146 Diameter (in.): 237
NYTMN (km.): 4980.906 NYTME (km.): 519.404 Building: 77

Emission Point: 77A02
Height (ft.): 146 Diameter (in.): 237
NYTMN (km.): 4980.821 NYTME (km.): 519.424 Building: 77



Emission Point: 88001
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: PRV02
Height (ft.): 80 Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589 Building: NP

Emission Point: PRV51
Height (ft.): 48 Diameter (in.): 0
NYTMN (km.): 4980.842 NYTME (km.): 519.698 Building: 51

Emission Point: PRV52
Height (ft.): 48 Diameter (in.): 0
NYTMN (km.): 4980.83 NYTME (km.): 519.662 Building: 52

Emission Point: PRV53
Height (ft.): 48 Diameter (in.): 0
NYTMN (km.): 4980.826 NYTME (km.): 519.627 Building: 53

Emission Point: PRV54
Height (ft.): 48 Diameter (in.): 0
NYTMN (km.): 4980.819 NYTME (km.): 519.591 Building: 54

Emission Point: PRV55
Height (ft.): 48 Diameter (in.): 0
NYTMN (km.): 4980.81 NYTME (km.): 519.555 Building: 55

Emission Point: PRV56
Height (ft.): 48 Diameter (in.): 0
NYTMN (km.): 4980.802 NYTME (km.): 519.519 Building: 56

Item 45.7:

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

Emission Unit: U-LDG01

Emission Point: 25A01
Height (ft.): 44 Diameter (in.): 19
NYTMN (km.): 4981.277 NYTME (km.): 519.591

Emission Point: 26A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: 27A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: 28A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589



Emission Point: 29A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: 30A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: 31A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: 32A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

Emission Point: 33A01
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4981.029 NYTME (km.): 519.589

**Condition 46: Process Definition By Emission Unit
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 46.1:

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

Emission Unit: 0-CRUCR
Process: A03 Source Classification Code: 3-03-001-99
Process Description:
This process consists of cruce augering and cleaning and
cruce lid cleaning.

Emission Source/Control: 0142B - Control
Control Type: FABRIC FILTER

Emission Source/Control: E5685 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 01420 - Process

Emission Source/Control: 01620 - Process

Item 46.2:

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

Emission Unit: A-NOD01
Process: G01 Source Classification Code: 3-03-003-99
Process Description:
This process is for the channel cooling area. As the



channels are removed from the pots, they are placed on a portable rack and allowed to cool prior to reforming in the channel press. Currently, this process is adjacent to the Anode Pin Room, but on occasion it may be done in other areas of the facility.

Emission Source/Control: 01580 - Process

Item 46.3:

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

Emission Unit: B-OIL01

Process: I01

Source Classification Code: 1-02-006-02

Process Description:

This process is for the combustion of natural gas to produce steam for heating and cooling purposes throughout the plant. Each of the plant's two boilers has the capability to fire natural gas.

Emission Source/Control: 0222H - Combustion

Emission Source/Control: 0322H - Combustion

Item 46.4:

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

Emission Unit: C-ARB01

Process: N04

Source Classification Code: 3-03-003-12

Process Description:

This process is the storage of petroleum coke and/or paste briquettes in two 2,000 ton petroleum coke storage silos.

Emission Source/Control: 00522 - Process

Design Capacity: 2,000 tons

Emission Source/Control: 00622 - Process

Design Capacity: 2,000 tons

Item 46.5:

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

Emission Unit: D-ROS01

Process: Z01

Source Classification Code: 3-03-001-99

Process Description:

This process is for the dross storage room. Dross, a mixture of various metal oxides, is generated from furnace skimmings. Dross is stored in a room prior to shipment to an outside vendor for reclamation.

Emission Source/Control: 01520 - Process



Item 46.6:

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

Emission Unit: D-ROS02
Process: Z02 Source Classification Code: 3-04-001-07
Process Description:
This process is for the dross cooling areas. After dross is removed from the furnace, it is allowed to cool prior to being placed into the dross storage room.

Emission Source/Control: 01720 - Process

Item 46.7:

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

Emission Unit: E-WCST1
Process: CR1 Source Classification Code: 3-03-001-99
Process Description:
This process consists of fugitive emissions from the practice of adding reactive flux to molten metal crucibles.

Emission Source/Control: CR101 - Process

Item 46.8:

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

Emission Unit: E-WCST1
Process: HMO Source Classification Code: 3-04-001-12
Process Description:
This process includes the gas homogenizer furnace. The gas homogenizer is not subject to the secondary aluminum production NESHAP.

Emission Source/Control: 0520G - Process

Item 46.9:

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

Emission Unit: P-AINO1
Process: Q01 Source Classification Code: 4-02-001-01
Process Description:
This process is for the facility paint shop. The paint shop is used primarily for maintenance painting, including plant vehicle (not defined as mobile equipment) touch-up and repair, furnace refinishing, storage tank refinishing, etc. Paint is applied manually.

Emission Source/Control: 00134 - Process

Item 46.10:

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



Emission Unit: P-ARTW1
Process: PW1 Source Classification Code: 4-01-003-36
Process Description:
This process consists of batch cold cleaning degreasers
in use plant wide.

Emission Source/Control: PART1 - Process

Item 46.11:

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

Emission Unit: P-DIG01
Process: E02 Source Classification Code: 3-03-001-99
Process Description:
This process represents the cathode digging process. The
cathode digging process involves several digging and
skimming operations to remove the spent potliner from the
cathode shell. Spent potliner is then placed in proper
containers for shipment.

Emission Source/Control: E4685 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 46185 - Process

Item 46.12:

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

Emission Unit: P-OT001
Process: A02 Source Classification Code: 3-03-001-02
Process Description:
This process is primary aluminum reduction in three
Soderberg potlines.

Emission Source/Control: B5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: C5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: E5152 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5354 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5556 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: 00051 - Process

Emission Source/Control: 00152 - Process



Emission Source/Control: 00153 - Process

Emission Source/Control: 00154 - Process

Emission Source/Control: 00155 - Process

Emission Source/Control: 00156 - Process

Emission Source/Control: 05152 - Process

Emission Source/Control: 05354 - Process

Emission Source/Control: 05556 - Process

Item 46.13:

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

Emission Unit: P-OT001

Process: A05

Source Classification Code: 3-03-001-01

Process Description:

This process consists of cathode baking in support of the Soderberg potline.

Emission Source/Control: B5156 - Control

Control Type: WET SCRUBBER

Emission Source/Control: C5156 - Control

Control Type: WET SCRUBBER

Emission Source/Control: E5152 - Control

Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5354 - Control

Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5556 - Control

Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: 05152 - Process

Emission Source/Control: 05354 - Process

Emission Source/Control: 05556 - Process

Item 46.14:

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

Emission Unit: P-OT001

Process: A06

Source Classification Code: 3-03-001-99

Process Description:

This process consists of pot cut-out in support of the



Soderberg potline.

Emission Source/Control: B5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: C5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: E5152 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5354 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5556 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: 05152 - Process

Emission Source/Control: 05354 - Process

Emission Source/Control: 05556 - Process

Item 46.15:

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

Emission Unit: P-OT001

Process: ANO

Source Classification Code: 3-03-001-99

Process Description:

This process consists of anode cooling in support of the pre-bake potline. Fugitive hydrogen fluoride emissions from transport of anodes from the potline and hydrogen fluoride emissions from passive anode cooling.

Emission Source/Control: B5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: C5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: E5152 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5354 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5556 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: P0188 - Control
Control Type: FABRIC FILTER



Emission Source/Control: AC001 - Process

Emission Source/Control: AC002 - Process

Item 46.16:

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

Emission Unit: P-OT001

Process: B01

Source Classification Code: 3-03-001-01

Process Description:

This process consists of the pre-bake potline routed to the fume control system.

Emission Source/Control: B5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: C5156 - Control
Control Type: WET SCRUBBER

Emission Source/Control: E5152 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5354 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: E5556 - Control
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: PS001 - Process

Emission Source/Control: PS002 - Process

Item 46.17:

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

Emission Unit: U-LDG01

Process: P01

Source Classification Code: 3-03-001-04

Process Description:

This process includes unloading and transfer operations for alumina ore, paste briquettes, and aluminum fluoride. The alumina hopper, elevator, and transfer point in the ore gallery are vented to a baghouse as is the paste briquette operation.

Emission Source/Control: P0133 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0225 - Control
Control Type: FABRIC FILTER

Emission Source/Control: 00133 - Process



Emission Source/Control: 0125A - Process

Emission Source/Control: 0125B - Process

Emission Source/Control: 0125C - Process

Item 46.18:

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

Emission Unit: U-LDG01

Process: P03

Source Classification Code: 3-03-001-04

Process Description:

This process includes the alumina and paste briquette conveyance systems and the associated transfer points to their storage silos. Baghouses are employed to control particulate emissions from this process.

Emission Source/Control: B0125 - Control
Control Type: FABRIC FILTER

Emission Source/Control: B0225 - Control
Control Type: FABRIC FILTER

Emission Source/Control: B0325 - Control
Control Type: FABRIC FILTER

Emission Source/Control: B0425 - Control
Control Type: FABRIC FILTER

Emission Source/Control: B0525 - Control
Control Type: FABRIC FILTER

Emission Source/Control: B0625 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0126 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0127 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0128 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0129 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0130 - Control
Control Type: FABRIC FILTER

Emission Source/Control: P0131 - Control
Control Type: FABRIC FILTER



Emission Unit: P-DIG01 Process: E02
CAS No: 0NY075-00-0
Name: PARTICULATES
PTE(s): 5.7 pounds per hour 49,800 pounds per year
CAS No: 0NY075-00-5
Name: PM-10
PTE(s): 3.4 pounds per hour 29,800 pounds per year

Condition 48: Corrective Action
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.6 (a)

Item 48.1:
This Condition applies to Emission Unit: B-OIL01

Item 48.2:
Any facility found in violation of the provisions of this Part shall not cause, permit, or allow the operation of the affected stationary combustion installation unless:

- (1) it is equipped with approved emission control equipment;
- (2) it is rehabilitated or upgraded in an approved manner; or
- (3) the fuel is changed to an acceptable type.

Condition 49: Corrective Action
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.6 (b)

Item 49.1:
This Condition applies to Emission Unit: B-OIL01

Item 49.2:
The commissioner may seal such stationary combustion installation so as to prevent any operation if the conditions of paragraphs 6 NYCRR Part 227-1.6(a)(1)-(3) are not met within the time provided by the order of final determination issued in the case of the violation.

Condition 50: Corrective Action
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.6 (c)



Item 50.1:

This Condition applies to Emission Unit: B-OIL01

Item 50.2:

No person shall cause, permit, or allow the operation of any affected stationary combustion installation sealed by the commissioner in accordance with 6 NYCRR Part 227-1.6.

Condition 51: Corrective Action
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.6 (d)

Item 51.1:

This Condition applies to Emission Unit: B-OIL01

Item 51.2:

No person except the commissioner or his representatives shall remove, tamper with or destroy any seal affixed to any stationary combustion installation in accordance with 6 NYCRR Part 227-1.6.

Condition 52: General Provisions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.7

Item 52.1:

This Condition applies to Emission Unit: B-OIL01

Item 52.2:

(a) Emission data. Any person who owns or operates a stationary combustion installation described in 6 NYCRR Part 227-1 shall provide pertinent data concerning emissions when so requested by the commissioner.

(b) Test methods. Sampling, compositing and analysis of fuel samples shall be carried out in accordance with the most recent ASTM standard methods or equivalent methods acceptable to the commissioner.

Condition 53: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 53.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 227-2

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



amounts shall then be inserted in the equation below to generate an annual NO_x emission value. This annual NO_x emission value shall not exceed 21.3 tons.

$$\text{Tons of oxides of nitrogen} = (\text{NG} \times 100) / 2000$$

where:

NG = millions of standard cubic feet of natural gas burned in Boiler #1 (Emission source: 0222H)
100 = lb NO_x/MMscf NG

When sufficient new evidence becomes available to substantiate changing the emission factor used in the above equation the Department will discuss modifying this condition with the applicant prior to making any changes to this condition.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 21.3 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 54: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 54.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 227-2

Item 54.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 54.3:

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

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



other state and federal air pollution control requirements, regulations or law.

Item 54.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 54.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 54.6:

The Compliance Certification activity will be performed for:

Emission Unit: B-OIL01

Process: I01

Emission Source: 0322H

Regulated Contaminant(s):

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

Item 54.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Facility shall limit emissions of oxides of nitrogen (NOx) from Boiler #3 (Emission source 0322H) to no more than 20.0 tons during any consecutive 12 month period. To demonstrate compliance with this limit the facility shall perform the following:

Facility shall maintain records of the amount of natural gas (NG) burned, in Boiler #3, on a monthly basis. At the end of each month the NG usage shall be added to the previous 11 month total to give a total quantity of NG burned during the most recent consecutive 12 month period. The most recent consecutive 12 month period NG usage amounts shall then be inserted in the equation below to generate an annual NOx emission value. This annual NOx emission value shall not exceed 20.0 tons.

Tons of oxides of nitrogen = (NG x
100)/2000



where:

NG = millions of standard cubic feet of natural gas burned
in Boiler #3 (Emission source: 0322H)
100 = lb NO_x/MMscf NG

When sufficient new evidence becomes available to substantiate changing the emission factor used in the above equation the Department will discuss modifying this condition with the applicant prior to making any changes to this condition.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 20.0 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 55: Compliance Certification
Effective for entire length of Permit

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

Item 55.1:

The Compliance Certification activity will be performed for:

Emission Unit: E-WCST1
Process: CR1 Emission Source: CR101

Regulated Contaminant(s):
CAS No: 0NY075-02-5 PM 2.5
CAS No: 0NY075-00-5 PM-10

Item 55.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

As a result of the start of operation of the new Novelis cruce salting process (Emission Source: CR101), the owner or operator must determine whether a significant net emissions increase has occurred as a result of the new emission source. Such determination must present the actual emissions after operation of the Novelis cruce salting process has commenced.

Emissions of PM-10 and PM-2.5 must be computed for each 12 month rolling period commencing the 12th month after first operation of the Novelis cruce salting process and ending



with the completion of the fifth annual period after first operation of the Novelis cruce salting process.

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 emission source has resulted in a significant net emissions increase for either PM-10 or PM-2.5, 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 new emission source;
- (2) an identification of the new emission source including the associated process and emission unit and including any exempt emission sources that were part of the project;
- (3) the calculation of the project emission potential for the new emission source (including exempt emission sources) including supporting documentation; and
- (4) the date the new emission source commenced operation.

These recordkeeping requirements apply to exempt and trivial activities but do not affect their exempt or trivial permitting status under Subpart 201-3 of this Title.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 56: Will remain subject to Part 228.
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 228-1.1 (d)

Item 56.1:

This Condition applies to Emission Unit: P-AINO1
Process: Q01

Item 56.2:

Any coating line that is or becomes subject to the provisions of 6 NYCRR Part 228-1 will remain subject to these provisions even if the annual potential to emit VOCs for the facility later falls below the thresholds set forth in 228-1.1(b).



**Condition 57: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 57.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

40 CFR 52.21

Item 57.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 57.3:

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.

Item 57.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 57.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 57.6:

The Compliance Certification activity will be performed for:

Emission Unit: P-DIG01

Process: E02

Emission Source: E4685

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 57.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Monitoring Description:

In order to cap below PSD applicability thresholds, the source owner shall emit less than 5.7 pounds per hour of total particulates from the baghouse listed above. The baghouse shall be operated in accordance with the plant wide particulate control operation and maintenance plan. Compliance testing of the baghouse listed above shall be conducted upon the request of the Department.

Upper Permit Limit: 5.7 pounds per hour

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 58: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 58.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

40 CFR 52.21

Item 58.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 58.3:

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.

Item 58.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 58.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



the Act.

Item 58.6:

The Compliance Certification activity will be performed for:

Emission Unit: P-DIG01

Process: E02

Emission Source: E4685

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 58.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

In order to cap below PSD applicability thresholds, the source owner shall emit less than 3.4 pounds per hour of PM-10 from the baghouse listed above. The baghouse shall be operated in accordance with the plant wide particulate control operation and maintenance plan. Compliance testing of the baghouse listed above shall be conducted upon the request of the Department.

Upper Permit Limit: 3.4 pounds per hour

Reference Test Method: EPA Method 201A&202

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 59: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.846(b)(2), Subpart LL

Item 59.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: P-OT001

Process: A02

Emission Point: 77A01

Emission Source: B5156

Emission Unit: P-OT001

Process: A02

Emission Point: 77A02

Emission Source: C5156

Regulated Contaminant(s):

CAS No: 068188-85-2 FLUORIDES

Item 59.2:



Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Annual emission testing for Total Fluorides shall be conducted on the primary control device and the results shall be used to show compliance with 40 CFR 63.846 for emissions averaging.

Parameter Monitored: FLUORIDES

Upper Permit Limit: 2.4 pounds per ton

Reference Test Method: EPA Method 13A

Monitoring Frequency: ANNUALLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 60: Performance Test Requirements - Previous Control Device Tests

Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(d)(3), Subpart LL

Item 60.1:

This Condition applies to Emission Unit: P-OT001

Item 60.2:

If the owner or operator has performed more than one test of total fluoride (TF) and polycyclic organic compound (POM) primary emissions from a potline or bake furnace control device(s) during the previous consecutive 12 months, the average of all runs performed in the previous 12-month period shall be used to determine the contribution from the primary emission control system.

Condition 61: Potline TF emission rate calculation
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(e)(1), Subpart LL

Item 61.1:

This Condition applies to Emission Unit: P-OT001

Item 61.2:

The owner/operator shall determine compliance with the applicable TF emission limits by computing the emission rate (E_p) of TF from each potline using the following equation

(Equation 1):

$$E_p = [(C_{s1} \times Q_{sd})_1 + (C_{s2} \times Q_{sd})_2] / (P \times K)$$

Where:



E_p =emission rate of TF from a potline, kg/Mg (lb/ton);

C_{s1} =concentration of TF from the primary control system, mg/dscm (mg/dscf);

Q_{sd} =volumetric flowrate of effluent gas corresponding to the appropriate subscript location, dscm/hr (dscf/min);

C_{s2} =concentration of TF as measured for roof monitor emissions, mg/dscm (mg/dscf);

P =aluminum production rate Mg/hr (ton/hr);

K =conversion factor, 106 mg/kg (453,600 mg/lb);

1 = subscript for primary control system effluent gas; and

2 =subscript for secondary control system or roof monitor effluent gas

**Condition 62: Procedure to determine weights
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.847(e)(5), Subpart LL

Item 62.1:

This Condition applies to Emission Unit: P-OT001

Item 62.2:

The owner/operator shall determine compliance with the applicable TF and POM emission limits by determining the weight of the aluminum tapped from the potline and the weight of the green anode material placed in the anode bake furnace using the monitoring devices required in §63.848(j).

**Condition 63: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.847(e)(6), Subpart LL

Item 63.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Item 63.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator shall determine compliance with the applicable total fluoride (TF) and polycyclic organic compound (POM) emission limits by determining the aluminum production rate (P). This shall be done by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a performance test.

Monitoring Frequency: MONTHLY



Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 64: Selection of monitoring parameters - redetermining operating limits
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.847(h)(3), Subpart LL

Item 64.1:

This Condition applies to Emission Unit: P-OT001

Item 64.2:

The owner/operator shall determine the operating limits and monitoring frequency for each control device that is to be monitored as required in §63.848(f). The owner/operator may redetermine the upper and/or lower operating limits, as appropriate, based on historical data or other information and submit an application to the New York State DEC to change the applicable limit(s). The redetermined limits shall become effective upon approval by the New York State DEC.

**Condition 65: Reduced sampling frequency - contents of request letter
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(e)(1), Subpart LL

Item 65.1:

This Condition applies to Emission Unit: P-OT001

Item 65.2:

The owner/operator may submit a written request to the New York State DEC to establish an alternative testing requirement to reduce the sampling of secondary TF emissions from potlines from monthly to quarterly. In the request, the owner/operator shall provide information and data demonstrating, to the satisfaction of the New York State DEC, that secondary emissions of TF from potlines have low variability during normal operations using the following procedures:

- 1) Submit data from 24 consecutive months of sampling that show the average TF emissions are less than 60 percent of the applicable limit and that no monthly performance test in the 24 months of sampling exceeds 75% of the applicable limit; or
- 2) Submit data and a statistical analysis that the New York State DEC may evaluate based on the approach used in "Primary Aluminum: Statistical Analysis of Potline Fluoride Emissions and Alternative Sampling Frequency" (EPA-450-86-012, October 1986).

**Condition 66: Reduced sampling frequency request - contents of the approved alternative requirement
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(e)(2), Subpart LL



Item 66.1:

This Condition applies to Emission Unit: P-OT001

Item 66.2:

The owner/operator may submit a written request to the New York State DEC to establish an alternative testing requirement to reduce the sampling of secondary TF emissions from potlines from monthly to quarterly.

An approved alternative requirement must include a test schedule and the method to be used to measure emissions for performance tests.

**Condition 67: Monitoring parameters for emission control devices
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(f), Subpart LL

Item 67.1:

This Condition applies to Emission Unit: P-OT001

Item 67.2:

(f) Monitoring parameters for emission control devices. The owner or operator shall install, operate, calibrate, and maintain a continuous parameter monitoring system for each emission control device. The owner or operator shall submit for approval by the regulatory authority a description of the parameter(s) to be monitored, the operating limits, and the monitoring frequency to ensure that the control device is being properly operated and maintained. An explanation of the criteria used for selection of the parameter(s), the operating limits, and the monitoring frequency, including how these relate to emission control also shall be submitted to the regulatory authority. Except as provided in paragraph (l) of this section, the following monitoring devices shall be installed:

- (1) For dry alumina scrubbers, devices for the measurement of alumina flow and air flow;
- (2) For dry coke scrubbers, devices for the measurement of coke flow and air flow;
- (3) For wet scrubbers as the primary control system, devices for the measurement of water flow and air flow;
- (4) For electrostatic precipitators, devices for the measurement of voltage and secondary current; and
- (5) For wet roof scrubbers for secondary emission control:
 - (i) A device for the measurement of total water flow; and
 - (ii) The owner or operator shall inspect each control device at least once each operating day to ensure the control device is operating properly and record the results of each inspection.

**Condition 68: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(g), Subpart LL

Item 68.1:

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



Emission Unit: P-OT001
Process: A02 Emission Source: B5156

Emission Unit: P-OT001
Process: A02 Emission Source: C5156

Emission Unit: P-OT001
Process: B01 Emission Source: B5156

Emission Unit: P-OT001
Process: B01 Emission Source: C5156

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

Item 68.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner/operator shall visually inspect the exhaust stack(s) of each control device on a daily basis for evidence of any visible emissions indicating abnormal operation.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

**Condition 69: Corrective action procedures
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(h), Subpart LL

Item 69.1:

This Condition applies to Emission Unit: P-OT001

Item 69.2:

If a monitoring device for a primary control device measures an operating parameter outside the limit(s) established pursuant to §63.847(h), or if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection, the owner/operator shall initiate the corrective action procedures identified in the startup, shutdown, and malfunction plan within 1 hour. Failure to initiate the corrective action procedures within 1 hour or to take the necessary corrective actions to remedy the problem is a violation.

**Condition 70: Exceedances
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(i), Subpart LL

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Item 70.1:

This Condition applies to Emission Unit: P-OT001

Item 70.2:

If the limit for a given operating parameter associated with monitoring a specific control device is exceeded six times in any semiannual reporting period, then any subsequent exceedance in that reporting period is a violation. For the purpose of determining the number of exceedances, no more than one exceedance shall be attributed in any given 24-hour period.

**Condition 71: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(j), Subpart LL

Item 71.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

Item 71.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner/operator of a new or existing potline or anode bake furnace shall install, operate, and maintain a monitoring device to determine the daily weight of aluminum produced and the weight of green anode material placed in the anode bake furnace. The weight of green anode material may be determined by monitoring the weight of all anodes or by monitoring the number of anodes placed in the furnace and determining an average weight from measurements of a representative sample of anodes.

Monitoring Frequency: DAILY

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

**Condition 72: Accuracy and calibration requirements
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(k), Subpart LL

Item 72.1:

This Condition applies to Emission Unit: P-OT001



Item 72.2:

The owner/operator shall submit recommended accuracy requirement to the New York State DEC for review and approval. All monitoring devices required by §63.848 must be certified by the owner/operator to meet the accuracy requirements and must be calibrated in accordance with the manufacturer's instructions.

**Condition 73: Alternative operating parameters
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.848(l), Subpart LL

Item 73.1:

This Condition applies to Emission Unit: P-OT001

Item 73.2:

The owner/operator may monitor alternative control device operating parameters subject to prior written approval by the New York State DEC.

**Condition 74: Definition of potline in Method 14
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.849(c), Subpart LL

Item 74.1:

This Condition applies to Emission Unit: P-OT001

Item 74.2:

Except as provided in §63.845(g)(1), references to "potroom" or "potroom group" in Method 14 in appendix A to part 60 shall be interpreted as "potline" for the purposes of subpart LL.

**Condition 75: Installation of manifolds for potlines subject to Method
14
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.849(d), Subpart LL

Item 75.1:

This Condition applies to Emission Unit: P-OT001

Item 75.2:

For sampling using Method 14 in Appendix A to part 60, the owner/operator shall install one Method 14 manifold per potline in a potroom that is representative of the entire potline, and this manifold shall meet the installation requirements specified in section 2.2.1 of Method 14 in appendix A to part 60.

**Condition 76: Startup, shutdown, and malfunction plan and reports
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.850(c)(1), Subpart LL



Item 76.1:

This Condition applies to Emission Unit: P-OT001

Item 76.2:

The owner/operator shall develop a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the standard. The plan does not have to be submitted with the permit application or included in the operating permit. The New York State DEC may review the plan upon request. In addition to the information required in §63.6(e)(3), the plan shall include procedures, including corrective actions, to be followed if a monitoring device measures an operating parameter outside the limit(s) established under §63.847(h), or if visible emissions from an exhaust stack indicating abnormal operation of a control device are observed by the owner/operator during the daily inspection required in §63.848(g).

Condition 77: Startup, shutdown, and malfunction plan and reports
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.850(c)(2), Subpart LL

Item 77.1:

This Condition applies to Emission Unit: P-OT001

Item 77.2:

The owner/operator shall develop a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the standard. The plan does not have to be submitted with the permit application or included in the operating permit. The New York State DEC may review the plan upon request. In addition to the information required in §63.6(e)(3), the plan shall include records of each event as required by §63.10(b) and the owner/operator shall 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)(iv).

Condition 78: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.850(d), Subpart LL

Item 78.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

Item 78.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

As required in §63.10(e)(3), the owner/operator shall submit a report (or a summary report) if measured emissions are in excess of the applicable standard. The report shall contain the information specified in §63.10(e)(3)(v) and be submitted semiannually unless quarterly reports are required as a result of excess emissions.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 79: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.850(e)(1), Subpart LL

Item 79.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

Item 79.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner/operator shall maintain files of all information (including all reports and notifications) required by §63.10(b) and by Subpart LL. Records must be retained 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 offsite.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 80: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.850(e)(2), Subpart LL

Item 80.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001



Regulated Contaminant(s):
CAS No: ONY100-00-0 HAP

Item 80.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner/operator may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 81: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.850(e)(3), Subpart LL

Item 81.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Regulated Contaminant(s):
CAS No: ONY100-00-0 HAP

Item 81.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner/operator may report required information on paper or on a labeled computer disc using commonly available and compatible computer software.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 82: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.850(e)(4), Subpart LL

Item 82.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Item 82.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In addition to the general records required by §63.10(b), the owner/operator shall maintain records of the following information:

- 1) Daily production rate of aluminum;
- 2) A copy of the startup, shutdown, and malfunction plan;
- 3) Records supporting a request for reduced sampling of potlines;
- 4) Records, such as a checklist or the equivalent, demonstrating that the daily visual inspection of the exhaust stack for each control device has been performed as required in §63.848(g), including the results of each inspection;
- 5) Records documenting the corrective actions taken when the limit(s) for an operating parameter established under §63.847(h) were exceeded, or when visible emissions indicating abnormal operation were observed from a control device stack during a daily inspection required under §63.848(g);
- 6) Records documenting the portion of TF that is measured as particulate matter and the portion that is measured as gaseous when the particulate and gaseous fractions are quantified separately using an approved test method.

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 83: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212.5 (d)

Item 83.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Regulated Contaminant(s):

CAS No: 000463-58-1 CARBONYL SULFIDE

Item 83.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

Soderberg Potline (Process A02) must not exceed 3.9 pounds of Carbonyl Sulfide per ton of aluminum produced. For the purposes of 6 NYCRR Part 212, carbonyl sulfide emissions from the facility are given an environmental rating of B. Testing shall be conducted once during the term of the permit to show compliance.

Upper Permit Limit: 3.9 pounds per ton

Reference Test Method: EPA RM 15

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 84: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212.5 (d)

Item 84.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 84.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be



achieved through the application of best available control technology.

The plant is required to use the brickettes as the anode raw material rather than the paste used in the past. Use of brickettes has resulted in a reduction in emissions of particulates. Total particulate emissions shall not exceed 27.0 lbs/TAP.

Quarterly average emissions of particulate matter (PM) shall not exceed 27.0 pounds per ton of aluminum produced (TAP) for the 3 Horizontal Stud Soderberg potlines. The emission rate shall be calculated based on the total emissions from all potlines over the period divided by the quantity of aluminum produced during the period from all potlines comprising the averaging group.

To determine compliance with the emission limit for PM, the owner or operator shall determine the quarterly average emissions (in lb/ton) of secondary PM, from each potline, from at least one run each month (24 hours per run) per potline. The owner or operator shall combine the result of secondary PM quarterly average with the PM results for the primary control system and divide total emissions by total aluminum production.

During a restart of a potline or potlines, the facility will demonstrate compliance with the 27.0 lb PM/TAP limit within 180 days from the date that the first pot is bath cut-in in the last potline to be energized.

Upper Permit Limit: 27.0 pounds per ton
Reference Test Method: EPA RM 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 85: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212.5 (d)

Item 85.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE



Item 85.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

For the purposes of 6 NYCRR Part 212, carbon monoxide (CO) emissions from the potline are given an environmental rating of C. Soderberg Potline (Process A02) CO emissions must not exceed 404 pounds of Carbon monoxide per ton of aluminum produced (lb CO/TAP). Compliance shall be demonstrated as an annual average emission rate calculated by the method outlined below:

Carbon monoxide (CO) emissions are calculated differently from the other pollutants. CO generation is dependent upon the "current efficiency" of the reduction operations.

Current efficiency (CE) is defined as the ratio of actual aluminum production to theoretical production:

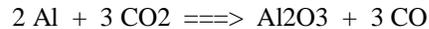
$$CE = \frac{\text{Actual Production}}{\text{Theoretical Production}}$$

Theoretical production for a Soderberg facility is defined according to the following equation:

$$\text{Theoretical Production} = (17.752 \text{ lb/pot-day})(\text{Amperage, kA})$$

Thus, increases in aluminum production are driven by increases in current efficiency and operating amperage.

CO generation can be represented by the following chemical equation, which is referred to as the "back reaction":



The back reaction is the major mechanism for the loss of aluminum production in reduction cells and it decreases the current efficiency of the reduction operations. Based on molecular weight ratios, 1.555 pounds of CO is produced per pound of Al involved in the back reaction.

The above information can be used to calculate CO emissions from actual production operations given the operating amperage in kiloamps, the production rate in pounds per pot-day, and the number of pots in operation.

Input Data:

Average Operating Amperage - (kA)
 Average Production (lb/pot-day) - (Avg. Prod.)
 Average Production - (TAP)
 Average # Pots in Operation - (pots)

CO Emission Calculations:

Theoretical Production (lb/pot-day) - (17.752 lb/pot-day)
 x (kA)
 Aluminum Lost in Back Reaction (lb/pot-day) - (Theoretical Production - Avg. Prod.)
 CO Generation (lb/pot-day) - (1.555 x Aluminum Lost in Back Reaction)
 CO Emissions (lb/TAP) - [CO Generation/(Avg. Prod./2000)]

During a restart of a potline or potlines, the facility will demonstrate compliance with the 404 lb CO/TAP limit within 180 days from the date that the first pot is bath cut-in in the last potline to be energized.

Upper Permit Limit: 404 pounds per ton
 Reference Test Method: EPA RM 10
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
 Reporting Requirements: ANNUALLY (CALENDAR)
 Reports due 60 days after the reporting period.
 Subsequent reports are due every 12 calendar month(s).



Condition 86: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212.5 (d)

Item 86.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):

CAS No: 000463-58-1	CARBONYL SULFIDE
CAS No: 007446-09-5	SULFUR DIOXIDE

Item 86.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

For the purposes of 6 NYCRR Part 212, sulfur dioxide (SO₂) and carbonyl sulfide (COS) emissions from the facility are given an environmental rating of B. Soderberg Potline (Process A02) SO₂ and COS emissions are controlled by limiting the sulfur content of incoming coke used for anodes. The % sulfur by weight in the coke used at the plant shall not exceed 3.0% by weight on an annual average basis rolled monthly. The sulfur content shall be determined from vendor test data for each lot of coke received for processing to manufacture briquettes. The current annual average and any excursions above the limit shall be reported semiannually on a calendar year basis.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: COKE

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 3.0 percent by weight

Monitoring Frequency: MONTHLY

Averaging Method: AVERAGING METHOD - SEE MONITORING

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 87: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212.5 (d)

Item 87.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 000071-43-2 BENZENE

Item 87.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

For the purposes of 6 NYCRR Part 212, benzene emissions from the potline are given an environmental rating of A. Facility shall submit a proposed test program, that will determine the benzene emission rate from the Soderberg Potlines (Process A02), to the Department within 60 days of permit issuance. Facility must perform the benzene test program within 180 days of program approval by the Department. Following completion and Department approval of the test program results the facility shall submit a BACT determination for benzene emissions from the Soderberg Potlines if benzene emissions are found to be equal to or greater than 1.0 pounds per hour.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 88: Compliance Certification



Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.846, Subpart LL

Item 88.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 068188-85-2 FLUORIDES
CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM

Item 88.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Implementation plan.

The facility has developed and submitted, to the Department, an implementation plan for emission averaging of fluorides and polycyclic organic matter (POM) across all three potlines that make up the emission unit and process listed above. The implementation plan has been approved by the Department and the facility must operate under the approved plan for the term of this permit.

While operating under an approved implementation plan, the facility shall monitor the operating parameters of each control system, keep records, and submit periodic reports as required for each potline subject to this condition.

To revise the plan prior to the end of the permit term, the facility shall submit a request to the Department and receive approval prior to changing the emission averaging method.

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the fluorides and POM emission limits during the potline(s) restart.

Reference Test Method: EPA Method 315 & 13A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION



Condition 89: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40 CFR 63.846, Subpart LL

Item 89.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM

Item 89.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The owner or operator of an existing potline may demonstrate compliance by emission averaging according to the procedures in this section:

- Quarterly average emissions of polycyclic organic matter (POM) shall not exceed 3.8 pounds per ton of aluminum produced as set forth in Table 2 of 40 CFR 63 Subpart LL for 3 Horizontal Stud Soderberg potlines. The emission rate shall be calculated based on the total emissions from all potlines over the period divided by the quantity of aluminum produced during the period, from all potlines comprising the averaging group.

- To determine compliance with the emission limit for POM, the owner or operator shall determine the quarterly average emissions (in lb/ton) of secondary POM, from each potline, from at least one run each month (24 hours per run) per potline using the procedures and methods in 40 CFR 63.847 and 63.849. The owner or operator shall combine the result of secondary POM quarterly average with the POM results for the primary control system and divide total emissions by total aluminum production.

-The owner or operator shall develop and submit an implementation plan for emission averaging to the department for review and approval in accordance with 40 CFR 63.846(d).

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the POM



emission limit during the potline(s) restart.

Upper Permit Limit: 3.8 pounds per ton
Reference Test Method: EPA Method 315
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 90: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.846, Subpart LL

Item 90.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 068188-85-2 FLUORIDES

Item 90.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The owner or operator of an existing potline may demonstrate compliance by emission averaging according to the procedures in this section:

- Monthly average emissions of total fluorides (TF) shall not exceed 2.4 pounds per ton of aluminum produced as set forth in Table 1 of 40 CFR 63 Subpart LL for 3 Horizontal Stud Soderberg potlines. The emission rate shall be calculated based on the total emissions from all potlines over the period divided by the quantity of aluminum produced during the period, from all potlines comprising the averaging group.

- To determine compliance with the emission limit for TF, the owner or operator shall determine the monthly average emissions (in lb/ton) of secondary TF, from each potline, from at least three runs (24 hours per run) per potline each month using the procedures and methods in 40 CFR 63.847 and 63.849. The owner or operator shall combine the result of secondary TF monthly average with the TF results for the primary control system and divide total emissions



by total aluminum production.

-The owner or operator shall develop and submit an implementation plan for emission averaging to the department for review and approval in accordance with 40 CFR 63.846(d).

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the fluorides emission limit during the potline(s) restart.

Upper Permit Limit: 2.4 pounds per ton

Reference Test Method: EPA Method 13A and RM 14

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

**Condition 91: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 40CFR 63.846(b)(2), Subpart LL

Item 91.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Regulated Contaminant(s):

CAS No: 068188-85-2 FLUORIDES

Item 91.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

To determine compliance with the applicable emission limit in Table 1 of Subpart LL for total fluoride emissions, the owner or operator shall determine the monthly average emissions (in lb/ton) from each potline from at least three runs per potline each month for total fluoride secondary emissions using the procedures and methods in Sections 63.847 and 63.849. The owner or operator shall combine the results of secondary total fluoride monthly average emissions with the total fluoride results for the primary control system and divide total



emissions by total aluminum production.

Parameter Monitored: FLUORIDES
Upper Permit Limit: 2.4 pounds per ton
Reference Test Method: Method 13A
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 92: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.847(d), Subpart LL

Item 92.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM

Item 92.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The initial performance test and all subsequent performance tests for Polycyclic Organic Matter (POM) emissions shall be conducted in accordance with the requirements of the general provisions in subpart A of this part, the approved test plan, and the procedures in this section.

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the POM emission limit during the potline(s) restart.

Parameter Monitored: 40 CFR 63 SUBPART LL - POM
Upper Permit Limit: 3.8 pounds per ton
Reference Test Method: EPA RM 315
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



Condition 93: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(d), Subpart LL

Item 93.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

Regulated Contaminant(s):
CAS No: 068188-85-2 FLUORIDES

Item 93.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The initial performance test and all subsequent performance tests for Fluorides emissions shall be conducted in accordance with the requirements of the general provisions in subpart A of this part, the approved test plan, and the procedures in this section.

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the fluorides emission limit during the potline(s) restart.

Parameter Monitored: FLUORIDES
Upper Permit Limit: 2.4 pounds per ton
Reference Test Method: EPA RM 13A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 94: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 94.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Regulated Contaminant(s):

CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM
CAS No: 068188-85-2 FLUORIDES

Item 94.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility shall ensure that the alumina feed rate to each dry alumina scrubber (emission controls E5152, E5354 & E5556) remains greater than or equal to the value stated in the most recent Department approved version of the Continuous Parameter Monitoring Plan (Control Device Monitoring Plan). Readings of alumina feed rate to each dry alumina scrubber shall be monitored and recorded as detailed in the Continuous Parameter Monitoring Plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

**Condition 95: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 40CFR 63.848(a), Subpart LL

Item 95.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Regulated Contaminant(s):

CAS No: 068188-85-2 FLUORIDES

Item 95.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Using the procedures in §63.847 and in the approved test plan, the owner/operator shall monitor emissions of TF from each potline by conducting monthly performance tests. The owner/operator shall compute and record the monthly average from at least three runs for secondary emissions and the previous 12-month average of all runs for the primary control system to determine compliance with the applicable emission limit. The owner/operator must include all valid runs in the monthly average. The duration of

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



each run for secondary emissions must represent a complete operating cycle.

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the fluorides emission limit during the potline(s) restart.

Parameter Monitored: FLUORIDES

Upper Permit Limit: 2.4 pounds per ton

Reference Test Method: EPA RM 13A

Monitoring Frequency: MONTHLY

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 96: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.848(b), Subpart LL

Item 96.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Regulated Contaminant(s):

CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM

Item 96.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Using the procedures in §63.847 and in the approved test plan, the owner/operator shall monitor emissions of POM from each Soderberg (HSS, VSS1, and VSS2) potline every three months. The owner/operator shall compute and record the quarterly (3-month) average from at least one run per month for secondary emissions and the previous 12-month average of all runs for the primary control systems to determine compliance with the applicable emission limit. The owner/operator must include all valid runs in the quarterly (3-month) average. The duration of each run for secondary emissions must represent a complete operating cycle. The primary control system must be sampled over an 8-hour period, unless site-specific factors dictate an alternative sampling time subject to the approval of the

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



New York State DEC.

In the event of startup of a curtailed potline(s) a Start-up Averaging Plan will be submitted for approval and will supersede the existing Emissions Averaging Plan for the purpose of demonstrating compliance with the POM emission limit during the potline(s) restart.

Parameter Monitored: 40 CFR 63 SUBPART LL - POM
Upper Permit Limit: 3.8 pounds per ton
Reference Test Method: EPA RM 315
Monitoring Frequency: QUARTERLY
Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 97: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 97.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: A02 Emission Source: E5152
Regulated Contaminant(s):
CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM
CAS No: 068188-85-2 FLUORIDES

Item 97.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:
Facility shall ensure that the inlet static pressure to Line 1 dry alumina scrubber (emission control E5152) remains less than or equal to the value stated in the most recent Department approved version of the Continuous Parameter Monitoring Plan (Control Device Monitoring Plan). Readings of inlet static pressure to Line 1 dry alumina scrubber shall be monitored and recorded as detailed in the Continuous Parameter Monitoring Plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).



Condition 98: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 98.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Emission Source: E5354

Regulated Contaminant(s):

CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM

CAS No: 068188-85-2 FLUORIDES

Item 98.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility shall ensure that the inlet static pressure to Line 2 dry alumina scrubber (emission control E5354) remains less than or equal to the value stated in the most recent Department approved version of the Continuous Parameter Monitoring Plan (Control Device Monitoring Plan). Readings of inlet static pressure to Line 2 dry alumina scrubber shall be monitored and recorded as detailed in the Continuous Parameter Monitoring Plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 99: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 99.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: A02

Emission Source: E5556

Regulated Contaminant(s):

CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM

CAS No: 068188-85-2 FLUORIDES

Item 99.2:



Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility shall ensure that the inlet static pressure to Line 3 dry alumina scrubber (emission control E5556) remains less than or equal to the value stated in the most recent Department approved version of the Continuous Parameter Monitoring Plan (Control Device Monitoring Plan). Readings of inlet static pressure to Line 3 dry alumina scrubber shall be monitored and recorded as detailed in the Continuous Parameter Monitoring Plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

**Condition 100: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 100.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 231-8

Item 100.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 100.3:

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.

Item 100.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 100.5:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Emission Unit: P-OT001
Process: B01

Regulated Contaminant(s):
CAS No: 000463-58-1 CARBONYL SULFIDE
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 101.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

For the purposes of 6 NYCRR Part 212, sulfur dioxide (SO₂) and carbonyl sulfide (COS) emissions from the facility are given an environmental rating of B. Prebake Potline (Process B01) SO₂ and COS emissions are controlled by limiting the sulfur content of incoming coke used for anodes. The sulfur content of coke used to make prebake potline anodes is limited to 2.5% by weight on an annual average basis rolled monthly. The sulfur content shall be determined from vendor test data for each lot of coke received for processing to manufacture prebake anodes. The current annual average and any excursions above the limit shall be reported semiannually on a calendar year basis.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: COKE

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 2.5 percent by weight

Monitoring Frequency: MONTHLY

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 102: Compliance Certification
Effective for entire length of Permit



Applicable Federal Requirement:6 NYCRR 212.5 (d)

Item 102.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

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

Item 102.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under 6 NYCRR Part 212 provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology. The particulate emission limit contained in this condition is considered BACT and the particulate emission limit, based on process weight, contained in 6 NYCRR Part 212.9(d) does not apply.

Prebake potline (Process B01) total particulate emissions shall not exceed 3.30 lbs/TAP. This limit applies to the summation of particulate emissions from the primary control system for the prebake potline and the particulate emissions from the roof monitor of the prebake potline. Emissions testing and compliance demonstration shall be over the course of a normal potline cycle. Testing shall be completed upon startup and once every five years to show compliance.

Upper Permit Limit: 3.30 pounds per ton

Reference Test Method: EPA RM 5

Monitoring Frequency: Once every five years

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 103: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212.5 (d)

Item 103.1:



The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 103.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology (BACT), the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under 6 NYCRR Part 212 provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.

For the purposes of 6 NYCRR Part 212, carbon monoxide (CO) emissions from the potline are given an environmental rating of C. Prebake Potline (Process B01) CO emissions must not exceed 181 pounds of carbon monoxide per ton of aluminum produced (lb CO/TAP). Compliance shall be demonstrated as an annual average emission rate calculated by the method outlined below:

Carbon monoxide (CO) emissions are calculated differently from the other pollutants. CO generation is dependent upon the "current efficiency" of the reduction operations. Current efficiency (CE) is defined as the ratio of actual aluminum production to theoretical production:

$$CE = \frac{\text{Actual Production}}{\text{Theoretical Production}}$$

Theoretical production for a Soderberg facility is defined according to the following equation:

$$\text{Theoretical Production} = (17.752 \text{ lb/pot-day})(\text{Amperage, kA})$$

Thus, increases in aluminum production are driven by increases in current efficiency and operating amperage.



CO generation can be represented by the following chemical equation, which is referred to as the "back reaction":



The back reaction is the major mechanism for the loss of aluminum production in reduction cells and it decreases the current efficiency of the reduction operations. Based on molecular weight ratios, 1.555 pounds of CO is produced per pound of Al involved in the back reaction.

The above information can be used to calculate CO emissions from actual production operations given the operating amperage in kiloamps, the production rate in pounds per pot-day, and the number of pots in operation.

Input Data:

Average Operating Amperage - (kA)
Average Production (lb/pot-day) - (Avg. Prod.)
Average Production - (TAP)
Average # Pots in Operation - (pots)

CO Emission Calculations:

Theoretical Production (lb/pot-day) - (17.752 lb/pot-day)
x (kA)
Aluminum Lost in Back Reaction (lb/pot-day) - (Theoretical Production - Avg. Prod.)
CO Generation (lb/pot-day) - (1.555 x Aluminum Lost in Back Reaction)
CO Emissions (lb/TAP) - [CO Generation/(Avg. Prod./2000)]

During startup of the prebake potline the facility will demonstrate compliance with the 181 lb CO/TAP limit within 180 days from the date that the first pot is bath cut-in after the potline is energized.

Upper Permit Limit: 181 pounds per ton
Reference Test Method: EPA RM 10
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 60 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 104: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.190(c), NSPS Subpart S

Item 104.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

Item 104.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator of an affected facility under paragraph 40 CFR 60.190(a) may elect to comply with the requirements of 40 CFR 60 Subpart S or the requirements of 40 CFR 63 Subpart LL. For the new prebake potline (Emission unit P-OT001, Process B01) the facility has chosen to comply with the requirements of 40 CFR 63 Subpart LL and those requirements are contained in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 105: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.844(a)(1), NESHAP Subpart

LL

Item 105.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

Regulated Contaminant(s):
CAS No: 068188-85-2 FLUORIDES

Item 105.2:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The owner or operator of a new potline shall not discharge or cause to be discharged into the atmosphere any emissions of total fluorides (TF) in excess of 1.2 lb/ton of aluminum produced.

Parameter Monitored: FLUORIDES

Upper Permit Limit: 1.2 pounds per ton

Reference Test Method: EPA RM 13A or ALCOA 4075TF

Monitoring Frequency: MONTHLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 106: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(c), Subpart LL

Item 106.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: B01

Regulated Contaminant(s):

CAS No: 068188-85-2 FLUORIDES

Item 106.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Following approval of the site-specific test plan, the owner or operator shall conduct an initial performance test during the first month following the compliance date in accordance with the procedures in 40 CFR 63.847(d).

Parameter Monitored: FLUORIDES

Upper Permit Limit: 1.2 pounds per ton

Reference Test Method: EPA RM 13A or 13B and RM 14 or 14A or ALCOA 4075TF

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



Condition 107: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.847(c)(2)(i), NESHAP

Subpart LL

Item 107.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

Item 107.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Following approval of the site-specific test plan, the owner or operator must conduct a performance test to demonstrate initial compliance by the 180th day following startup for a potline or potroom group. The 180-day period starts when the first pot in a potline or potroom group is energized.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 108: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.847(d)(1), Subpart LL

Item 108.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

Regulated Contaminant(s):
CAS No: 068188-85-2 FLUORIDES

Item 108.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The initial performance test and all subsequent performance tests shall be conducted in accordance with the requirements of the general provisions in 40 CFR 63 Subpart A, the approved test plan, and the procedures in 40 CFR 63.847.



For the prebake potline (Process B01), the owner or operator shall measure and record the emission rate of total fluorides (TF) exiting the outlet of the primary control system for the prebake potline and the rate of secondary emissions exiting through the roof monitor. Using the equation in 40 CFR 63.847(e)(1), the owner or operator shall compute and record the average of at least three runs each month for secondary emissions and at least three runs each year for the primary control system to determine compliance with the applicable emission limit. Compliance is demonstrated when the emission rate of TF is equal to or less than 1.2 pounds per ton of aluminum produced.

Parameter Monitored: FLUORIDES

Upper Permit Limit: 1.2 pounds per ton

Reference Test Method: EPA RM 13A or ALCOA 4075TF

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

Condition 109: Selection of monitoring parameters - potlines and anode bake furnaces
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 109.1:

This Condition applies to Emission Unit: P-OT001
Process: B01

Item 109.2:

The owner/operator shall determine the operating limits and monitoring frequency for each control device that is to be monitored as required in §63.848(f). For potlines and anode bake furnaces, the owner/operator shall determine upper and/or lower operating limits, as appropriate, for each monitoring device for the emission control system from the values recorded during each of the runs performed during the initial performance test and from historical data from previous performance tests conducted by the methods specified in subpart LL.

Condition 110: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 110.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



Emission Unit: P-OT001
Process: B01

Item 110.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility shall determine the upper and/or lower operating limits and monitoring frequency for alumina feed rate to each dry alumina scrubber (emission controls E5152, E5354 & E5556) from the values recorded during each of the runs performed during the initial performance test of the prebake potline (Process B01).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 111: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.847(h)(1), Subpart LL

Item 111.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-OT001
Process: B01

Item 111.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility shall determine the upper and/or lower operating limits and monitoring frequency for the inlet static pressure to each dry alumina scrubber (emission controls E5152, E5354 & E5556) from the values recorded during each of the runs performed during the initial performance test of the prebake potline (Process B01).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 112: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.848(a), Subpart LL

Item 112.1:

New York State Department of Environmental Conservation

Permit ID: 6-4058-00024/00077

Facility DEC ID: 6405800024



The Compliance Certification activity will be performed for:

Emission Unit: P-OT001

Process: B01

Regulated Contaminant(s):

CAS No: 068188-85-2 FLUORIDES

Item 112.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Using the procedures in 40 CFR 63.847 and in the approved test plan, the owner or operator shall monitor emissions of total fluoride (TF) from the prebake potline (Process B01) by conducting monthly performance tests. The owner or operator shall compute and record the monthly average from at least three runs for secondary emissions and the previous 12-month average of all runs for the primary control system to determine compliance with the applicable emission limit. The owner or operator must include all valid runs in the monthly average. The duration of each run for secondary emissions must represent a complete potline operating cycle.

Parameter Monitored: FLUORIDES

Upper Permit Limit: 1.2 pounds per ton

Reference Test Method: EPA RM 13A or ALCOA 4075TF

Monitoring Frequency: MONTHLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 60 days after the reporting period.

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

**Condition 113: Notification of initial performance test
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.850(a)(5), Subpart LL

Item 113.1:

This Condition applies to Emission Unit: P-OT001

Process: B01

Item 113.2:

The owner/operator shall submit the notification of initial performance test.

**Condition 114: Notification of initial compliance status
Effective for entire length of Permit**



Applicable Federal Requirement:40CFR 63.850(a)(6), Subpart LL

Item 114.1:

This Condition applies to Emission Unit: P-OT001
Process: B01

Item 114.2:

The owner/operator shall submit the notification of initial compliance status.

**Condition 115: Performance test reports
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.850(b), Subpart LL

Item 115.1:

This Condition applies to Emission Unit: P-OT001
Process: B01

Item 115.2:

The owner/operator shall report the results of the initial performance test as part of the notification of compliance status required in §63.850(a)(6). Except as provided in §63.850(d), the owner/operator shall submit a summary of all subsequent performance tests to the New York State DEC on an annual basis.



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: 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 applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 116: Contaminant List
Effective for entire length of Permit

Applicable State Requirement:ECL 19-0301

Item 116.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000071-43-2
Name: BENZENE



CAS No: 000463-58-1
Name: CARBONYL SULFIDE

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

CAS No: 068188-85-2
Name: FLUORIDES

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: 0NY100-00-0
Name: HAP

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

CAS No: 0NY505-00-0
Name: 40 CFR 63 SUBPART LL - POM

CAS No: 0NY998-00-0
Name: VOC

**Condition 117: Unavoidable noncompliance and violations
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR 201-1.4

Item 117.1:

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.

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

**Condition 118: Compliance Demonstration
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Part 209

Item 118.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: P-OT001

Regulated Contaminant(s):

CAS No: 0NY505-00-0 40 CFR 63 SUBPART LL - POM
CAS No: 068188-85-2 FLUORIDES



Item 118.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The requirements of 40 CFR 63 Subpart LL apply to the emissions of total fluorides (TF), polycyclic organic matter (POM)(of which polycyclic aromatic hydrocarbons (PAH) are a subset), and opacity from the Soderberg potline (Emission Unit P-OT001, Process A02). As long as the facility is in compliance with the requirements in 40 CFR 63 Subpart LL, then it is in compliance with the requirements of 6 NYCRR Part 209 since the requirements in Subpart LL are more stringent than those in 6 NYCRR Part 209. See 40 CFR 63 Subpart LL requirements, elsewhere in this permit, for monitoring and reporting frequencies.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

