



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Resource Conservation and Recovery Act

Permit ID: 4-0103-00016/00016

Effective Date:

Expiration Date:

Permit Type: Industrial SPDES - Surface Discharge

Permit ID: 4-0103-00016/00020

Effective Date:

Expiration Date:

Permit Type: Air Title V Facility

Permit ID: 4-0103-00016/00048

Mod 0 Effective Date: 01/01/2016 Expiration Date: 12/31/2020

Mod 1 Effective Date: 02/20/2007 Expiration Date: No expiration date.

Mod 3 Effective Date: 06/20/2013 Expiration Date: No expiration date.

Mod 4 Effective Date: 12/31/2015 Expiration Date: No expiration date.

Mod 5 Effective Date: 12/27/2018 Expiration Date: 12/31/2020

Mod 6 Effective Date: Expiration Date:

Permit Type: Water Withdrawal Non-public

Permit ID: 4-0103-00016/00051

Effective Date:

Expiration Date:

Permit Issued To: NORLITE LLC

PO BOX 694

COHOES, NY 12047-0694

Contact: Darrell Monk

Norlite LLC

628 South Saratoga St

Cohoes, NY 12047

Facility: NORLITE LLC

628 S SARATOGA ST

COHOES, NY 12047

Contact: Darrell Monk

Norlite LLC

628 South Saratoga St

Cohoes, NY 12047

Description:

DEC Permit Conditions
Renewal 1/Mod 6/DRAFT

New York State Department of Environmental Conservation
Facility DEC ID: 4010300016



Modification to Norlite's Title V permit issued 01/01/2016 to replace two existing venturi-based wet scrubbers with two new semi-dry technology scrubbers employing lime as the sorbent material. Replacing the wet scrubbers with semi-dry technology will eliminate the need to manage lime slurry, which will dramatically reduce potential impacts from the discharge of industrial wastewater from Norlite.

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: NANCY M BAKER
 NYSDEC - REGION 4
 1130 N WESTCOTT RD
 SCHENECTADY, NY 12306-2014

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
 - 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 4 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 renewal application at least 180 days before expiration of permits for both Title V and State Facility Permits.

Item 3.3:

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

Condition 6-1: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11



Item 6-1.1:

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 6-1.2:

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

Item 6-1.3

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

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 4 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 4 Headquarters
Division of Environmental Permits
1130 North Westcott Rd.
Schenectady, NY 12306-2014
(518) 357-2069

New York State Department of Environmental Conservation

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Facility DEC ID: 4010300016



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: NORLITE LLC
PO BOX 694
COHOES, NY 12047-0694

Facility: NORLITE LLC
628 S SARATOGA ST
COHOES, NY 12047

Authorized Activity By Standard Industrial Classification Code:
3295 - MINERALS, GROUND OR TREATED

Permit Effective Date:

Permit Expiration Date:



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
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 - 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 4 HEADQUARTERS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 21 6 NYCRR Subpart 201-6: Emission Unit Definition
 - Emission Unit Level**
 - 30 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
 - 31 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=K-ILNSG,Proc=KHF

- 6-1 6 NYCRR 212-1.5 (e) (2): Compliance Certification
- 6-2 40CFR 63.1206(b)(5), Subpart EEE: Compliance Certification
- 6-3 40CFR 63.1207, Subpart EEE: Confirmatory Performance Test (CfPT)
- 61 40CFR 63.1207, Subpart EEE: Confirmatory Performance Test (CfPT)
- 6-4 40CFR 63.1209(k)(1), Subpart EEE: Compliance Certification
- 6-5 40CFR 63.1209(m)(1)(iv), Subpart EEE: Compliance Certification
- 6-6 40CFR 63.1209(m)(1)(iv), Subpart EEE: Compliance Certification
- 6-7 40CFR 63.1209(m)(1)(iv), Subpart EEE: Compliance Certification
- 6-8 40CFR 63.1209(m)(1)(iv), Subpart EEE: Compliance Certification
- 6-9 40CFR 63.1209(m)(2), Subpart EEE: Compliance Certification
- 6-10 40CFR 63.1209(n)(3), Subpart EEE: Compliance Certification
- 6-11 40CFR 63.1209(n)(3), Subpart EEE: Compliance Certification
- 6-12 40CFR 63.1209(n)(3), Subpart EEE: Compliance Certification
- 6-13 40CFR 63.1209(o)(4)(i), Subpart EEE: Compliance Certification
- 6-14 40CFR 63.1209(o)(4)(i), Subpart EEE: Compliance Certification
- 5-35 40CFR 63.1209(o)(4)(i), Subpart EEE: Compliance Certification
- 6-15 40CFR 63.1209(o)(4)(ii), Subpart EEE: Compliance Certification
- 6-16 40CFR 63.1209(o)(4)(ii), Subpart EEE: Compliance Certification
- 5-36 40CFR 63.1209(o)(4)(ii), Subpart EEE: Compliance Certification
- 5-39 40CFR 63.1209(p), Subpart EEE: Compliance Certification
- 5-40 40CFR 63.1209(p), Subpart EEE: Compliance Certification
- 5-41 40CFR 63.1209(p), Subpart EEE: Compliance Certification

EU=K-ILNSG,EP=00001

- 6-17 6 NYCRR 212-2.3 (a): Compliance Certification
- 6-18 6 NYCRR 212-3.1 (b): Compliance Certification
- 5-44 : Compliance Certification



EU=K-ILNSG,EP=00002

- 6-19 6 NYCRR 212-2.3 (a): Compliance Certification
- 6-20 6 NYCRR 212-3.1 (b): Compliance Certification
- 5-55 : Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 185 ECL 19-0301: Contaminant List
- 6-21 6 NYCRR 231-11.2 (c): Compliance Demonstration



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: 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 B: Timely Application for the Renewal of Title V Permits - 6 NYCRR 201-6.2 (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 C: Certification by a Responsible Official - 6 NYCRR 201-6.2 (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 D: Requirement to Comply With All Conditions - 6 NYCRR 201-6.4 (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 E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR 201-6.4 (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 F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4 (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 G: Property Rights - 6 NYCRR 201-6.4 (a) (6)

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

Item H: Severability - 6 NYCRR 201-6.4 (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 I: Permit Shield - 6 NYCRR 201-6.4 (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 J: Reopening for Cause - 6 NYCRR 201-6.4 (i)

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

i. When additional applicable requirements under the act become applicable to a title V facility with a remaining permit term of 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 the 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 section 201- 6.6 of this Subpart.

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

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is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item K: 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 L: 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.

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

Condition 21: Emission Unit Definition

Effective between the dates of 01/01/2016 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 21.1(From Mod 6):

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

Emission Unit: C-RUSHS

Emission Unit Description:

Shale and lightweight crushers.

This emission unit covers the crushers for the raw shale and crushers for the expanded shale from the kiln.



Buildings:

B1: Primary Plant which processes the raw shale from the quarry

B2: Finishing Plant which processes the expanded aggregate from the kiln

B5: Quarry

Building(s): B1
B2

Item 21.2(From Mod 6):

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

Emission Unit: K-ILNSG

Emission Unit Description:

Production of expanded aggregate in rotary kilns using natural shale as the raw material feed and the following fuel sources:

- 1) Hazardous Waste
- 2) Waste Fuel A
- 3) Waste Fuel B
- 4) Off-Specification Used Oil
- 5) Specification Used Oil
- 6) Number 2 Oil
- 7) Number 4 Oil
- 8) Number 6 Oil
- 9) Natural Gas

This emission unit covers the operation of the following:

Kiln # 1, Emission Point 00001
Kiln # 2, Emission Point 00002

Clinker Cooler #1, Emission Point # 0003A
Clinker Cooler #2, Emission Point # 0003B

Building:
B3: Main Plant

Building(s): B3

Item 21.3(From Mod 6):

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

Emission Unit: M-ISCES

Emission Unit Description:

Transportation, loading and unloading of product, kiln feed and rim seal, screening and hopper operations, unloading of fuel, drum storage, fuel transfer system, closed-vent vapor system, future screen, conveyer and pelletizer, and quarry operations.

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Building(s): B1
B2
B3
B4
B5

Item 21.4(From Mod 6):

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

Emission Unit: S-TANKS

Emission Unit Description:

Hazardous waste fuel storage tanks.

Building(s): B4

Item 21.5(From Mod 6):

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

Emission Unit: S-TPOPS

Emission Unit Description:

Storage pile operations.

Building(s): B1
B2

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

**Condition 30: Emission Point Definition By Emission Unit
Effective between the dates of 01/01/2016 and Permit Expiration Date**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 30.1(From Mod 6):

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

Emission Unit: K-ILNSG

Emission Point: 00001

Height (ft.): 125

Diameter (in.): 35

NYTMN (km.): 4734.284 NYTME (km.): 606.047

Emission Point: 00002

Height (ft.): 125

Diameter (in.): 35

NYTMN (km.): 4734.267 NYTME (km.): 606.044

Emission Point: 0003A

Height (ft.): 87

Diameter (in.): 45

NYTMN (km.): 4734.277 NYTME (km.): 606.098

Emission Point: 0003B

Height (ft.): 87

Diameter (in.): 45

New York State Department of Environmental Conservation

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NYTMN (km.): 4734.263 NYTME (km.): 606.099

Item 30.2(From Mod 0):

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

Emission Unit: M-ISCES

Emission Point: 00018

Height (ft.): 24

Diameter (in.): 10

NYTMN (km.): 4734.3

NYTME (km.): 606.196

Emission Point: 00046

Height (ft.): 12

Diameter (in.): 7

NYTMN (km.): 4734.339

NYTME (km.): 606.168

Emission Point: 00047

Height (ft.): 12

Diameter (in.): 7

NYTMN (km.): 4734.343

NYTME (km.): 606.164

Emission Point: 00048

Height (ft.): 12

Diameter (in.): 7

NYTMN (km.): 4734.345

NYTME (km.): 606.162

Emission Point: 00049

Height (ft.): 12

Diameter (in.): 7

NYTMN (km.): 4734.349

NYTME (km.): 606.156

Emission Point: 00050

Height (ft.): 10

Length (in.): 18

Width (in.): 16

NYTMN (km.): 4734.351

NYTME (km.): 606.152

Item 30.3(From Mod 0):

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

Emission Unit: S-TANKS

Emission Point: 00019

Height (ft.): 12

Diameter (in.): 4

NYTMN (km.): 4734.223

NYTME (km.): 606.041

Condition 31: Process Definition By Emission Unit

Effective between the dates of 01/01/2016 and Permit Expiration Date

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 31.1(From Mod 6):

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

Emission Unit: C-RUSHS

Process: FPC

Source Classification Code: 3-05-020-04

Process Description:

Finishing plant rock crusher.

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Lightweight aggregate is crushed to the desired size with this process which is located at the finishing plant.

Emission Source/Control: WTSEC - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: ELJCH - Process
Design Capacity: 86 tons per hour

Item 31.2(From Mod 6):

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

Emission Unit: C-RUSHS
Process: OOO Source Classification Code: 3-05-020-01

Process Description:
Primary plant rock crusher applicable to 40 CFR 60 Subpart OOO.

Shale is crushed to the desired size with the process which is located at the primary plant.

Emission Source/Control: WTSPR - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: WTSTC - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: PRMDC - Process

Emission Source/Control: PRTJC - Process
Design Capacity: 250 tons per hour

Emission Source/Control: SECCH - Process
Design Capacity: 200 tons per hour

Item 31.3(From Mod 6):

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

Emission Unit: K-ILNSG
Process: KAF Source Classification Code: 3-05-009-15

Process Description:
Kilns #1 and #2 scrubber exhaust.

Production of expanded aggregate in rotary kilns using natural shale as the raw material feed.

Waste Fuel A is used as a fuel, alone or in combination with off-specification used oil, specification used oil, No. 2 oil, No. 4 oil, No. 6 oil and natural gas.

Emission Source/Control: K1CT1 - Control

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Control Type: SINGLE CYCLONE

Emission Source/Control: K1CT2 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K1CT3 - Control
Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K1CT4 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K1CT5 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: K2CT1 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: K2CT2 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K2CT3 - Control
Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K2CT4 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K2CT5 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: SKLN1 - Process

Emission Source/Control: SKLN2 - Process

Item 31.4(From Mod 6):

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

Emission Unit: K-ILNSG
Process: KCC Source Classification Code: 3-05-900-01
Process Description: Kilns #1 and #2 clinker coolers.

Emission Source/Control: CC1CT - Control
Control Type: CENTRIFUGAL

Emission Source/Control: CC2CT - Control
Control Type: CENTRIFUGAL

Emission Source/Control: CLKN1 - Process

Emission Source/Control: CLKN2 - Process

Item 31.5(From Mod 6):

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

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

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Emission Unit: K-ILNSG

Process: KHF

Source Classification Code: 3-05-900-01

Process Description:

Kilns #1 and #2 scrubber exhaust.

Production of expanded aggregate in rotary kilns using natural shale as the raw material feed.

Hazardous waste is used as a fuel alone or in combination with waste fuel A, waste fuel B, off-specification used oil, specification used oil, No. 2 oil, No. 4 oil, No. 6 oil and natural gas.

Emission Source/Control: K1CT1 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: K1CT2 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K1CT3 - Control
Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K1CT4 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K1CT5 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: K2CT1 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: K2CT2 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K2CT3 - Control
Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K2CT4 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K2CT5 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: SKLN1 - Process

Emission Source/Control: SKLN2 - Process

Item 31.6(From Mod 6):

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

New York State Department of Environmental Conservation

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Emission Unit: K-ILNSG

Process: KNA

Source Classification Code: 3-05-009-15

Process Description:

Kilns #1 and #2 scrubber exhaust. Production of expanded aggregate in rotary kilns using natural shale as the raw material feed.

Off-specification used oil is used as a fuel, alone or in combination with specification used oil, No. 2 oil, No. 4 oil, No. 6 oil and natural gas.

Emission Source/Control: K1CT1 - Control

Control Type: SINGLE CYCLONE

Emission Source/Control: K1CT2 - Control

Control Type: FABRIC FILTER

Emission Source/Control: K1CT3 - Control

Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K1CT4 - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K1CT5 - Control

Control Type: MIST ELIMINATOR

Emission Source/Control: K2CT1 - Control

Control Type: SINGLE CYCLONE

Emission Source/Control: K2CT2 - Control

Control Type: FABRIC FILTER

Emission Source/Control: K2CT3 - Control

Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K2CT4 - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K2CT5 - Control

Control Type: MIST ELIMINATOR

Emission Source/Control: SKLN1 - Process

Emission Source/Control: SKLN2 - Process

Item 31.7(From Mod 6):

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

Emission Unit: K-ILNSG

Process: KNF

Source Classification Code: 3-05-900-01

Process Description:

Kilns #1 and #2 scrubber exhaust. Production of expanded

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aggregate in rotary kilns using natural shale as the raw material feed.

Specification used oil is used as a fuel, alone or in combination with No. 2 oil, No. 4 oil, No. 6 oil and natural gas.

Emission Source/Control: K1CT1 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: K1CT2 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K1CT3 - Control
Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K1CT4 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K1CT5 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: K2CT1 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: K2CT2 - Control
Control Type: FABRIC FILTER

Emission Source/Control: K2CT3 - Control
Control Type: SODIUM CARBONATE SCRUBBING

Emission Source/Control: K2CT4 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: K2CT5 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: SKLN1 - Process

Emission Source/Control: SKLN2 - Process

Item 31.8(From Mod 6):

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

Emission Unit: M-ISCES
Process: TLD Source Classification Code: 3-05-020-06
Process Description:
Loading and unloading operations.

Loading and unloading product, and vehicular transportation (excluding quarry vehicular transportation).

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Emission Source/Control: WTSRT - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: LDPRT - Process

Emission Source/Control: TRANS - Process

Item 31.9(From Mod 6):

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

Emission Unit: S-TANKS
Process: HFT Source Classification Code: 3-05-999-99
Process Description:
Hazardous waste fuel tanks.

Above ground hazardous waste fuel tanks (6x9, 516 gallon).
On the rare occasion that both kilns are not operating,
these storage tanks will vent to an active carbon
adsorbtion control device (CARB2).

Emission Source/Control: CARB2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: NBW10 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBW11 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBW12 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBW13 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBW14 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBW15 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT5 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT6 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT7 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT8 - Control

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Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT9 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: 0102A - Process
Design Capacity: 1,264 gallons

Emission Source/Control: 0102B - Process
Design Capacity: 1,264 gallons

Emission Source/Control: T100A - Process
Design Capacity: 9,491 gallons

Emission Source/Control: T100B - Process
Design Capacity: 9,491 gallons

Emission Source/Control: T100C - Process
Design Capacity: 9,491 gallons

Emission Source/Control: T200A - Process
Design Capacity: 10,663 gallons

Emission Source/Control: T200B - Process
Design Capacity: 9,491 gallons

Emission Source/Control: T200C - Process
Design Capacity: 9,491 gallons

Item 31.10(From Mod 6):

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

Emission Unit: S-TANKS

Process: HWT

Source Classification Code: 3-05-999-99

Process Description:

Hazardous waste fuel storage tanks.

Below ground horizontal hazardous waste fuel tanks. On the rare occasion that both kilns are not operating, these storage tanks will vent to an active carbon adsorption control device (CARB2).

Emission Source/Control: CARB2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: NBWT1 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT2 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT3 - Control

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Control Type: NITROGEN BLANKET

Emission Source/Control: NBWT4 - Control
Control Type: NITROGEN BLANKET

Emission Source/Control: HWOT1 - Process
Design Capacity: 27,903 gallons

Emission Source/Control: HWOT2 - Process
Design Capacity: 27,903 gallons

Emission Source/Control: HWOT3 - Process
Design Capacity: 27,903 gallons

Emission Source/Control: HWOT4 - Process
Design Capacity: 18,940 gallons

Item 31.11(From Mod 6):

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

Emission Unit: S-TPOPS
Process: FPS Source Classification Code: 3-05-020-07
Process Description:
Finishing plant storage pile operations.

Storage pile operations include the loading of material onto piles and unloading of material from piles.

Emission Source/Control: WTSFL - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: WTSFS - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: WTSPY - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: WTSTD - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: BKMSP - Process

Emission Source/Control: DPCHT - Process

Emission Source/Control: DRCHT - Process

Emission Source/Control: FINSP - Process

Emission Source/Control: FLTSP - Process

Emission Source/Control: FSTSP - Process

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Emission Source/Control: TEHSP - Process

Emission Source/Control: TQTSP - Process

Item 31.12(From Mod 6):

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

Emission Unit: S-TPOPS

Process: PPS

Source Classification Code: 3-05-020-07

Process Description:

Primary plant storage pile operations.

Storage pile operations include the loading of material onto piles and unloading of materials from piles.

Emission Source/Control: WTSKC - Control

Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: KN1CP - Process

Emission Source/Control: KN2CP - Process

Emission Source/Control: KNFSP - Process

Item 31.13(From Mod 0):

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

Emission Unit: C-RUSHS

Process: 212

Source Classification Code: 3-05-020-01

Process End Date: 6/29/2018

Process Description:

Primary plant rock crusher applicable to 6 NYCRR Part 212.

Shale is crushed to the desired size with this process which is located at the primary plant.

Emission Source/Control: WTSTC - Control

Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: SECCH - Process

Design Capacity: 100 tons per hour

Item 31.14(From Mod 0):

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

Emission Unit: M-ISCES

Process: DRS

Source Classification Code: 5-03-008-30

Process Description: Drum Storage.

Emission Source/Control: DRUMS - Process

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Item 31.15(From Mod 5):

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

Emission Unit: M-ISCES
Process: FSH Source Classification Code: 3-05-020-06
Process Description:
Finishing plant screen, hopper, conveyors, belts and
stacker operations.

Clinker is fed to the finishing plant where it is sized,
screened and blended to yield light weight aggregate.

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

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

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

Emission Source/Control: WTSK1 - Control
Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: FINCV - Process

Emission Source/Control: FINHP - Process

Emission Source/Control: FINSB - Process

Emission Source/Control: FINST - Process

Emission Source/Control: OSHOP - Process

Emission Source/Control: TPDFM - Process

Item 31.16(From Mod 0):

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

Emission Unit: M-ISCES
Process: FTS Source Classification Code: 3-05-999-99
Process Description:
Fuel transfer system.

Fuel is transferred from the storage tanks to the kilns.

Emission Source/Control: FTRAN - Process

Item 31.17(From Mod 0):

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

Emission Unit: M-ISCES



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Process: KFR Source Classification Code: 3-05-020-06

Process Description:

Kilns #1 and #2 feed and rim seal (front and rear).

Emission Source/Control: K1FCT - Process

Emission Source/Control: K1RSC - Process

Emission Source/Control: K2FCT - Process

Emission Source/Control: K2RSC - Process

Emission Source/Control: KN1FE - Process

Emission Source/Control: KN1RS - Process

Emission Source/Control: KN2FE - Process

Emission Source/Control: KN2RS - Process

Item 31.18(From Mod 5):

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

Emission Unit: M-ISCES

Process: PSH

Source Classification Code: 3-05-020-06

Process Description:

Primary plant screen, hopper, conveyors, belts and stacker operations.

Shale is crushed, screened and then conveyed to the kilns to produce clinker.

Emission Source/Control: WTSFH - Control

Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: WTSPS - Control

Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: WTST1 - Control

Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: FCONV - Process

Emission Source/Control: FEDHP - Process

Emission Source/Control: FSCRN - Process

Emission Source/Control: PELET - Process

Emission Source/Control: PRMSH - Process

Emission Source/Control: PRMSR - Process

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Emission Source/Control: TPDSK - Process

Emission Source/Control: TRPDS - Process

Item 31.19(From Mod 0):

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

Emission Unit: M-ISCES

Process: QRY

Source Classification Code: 3-05-020-09

Process Description:

Quarry operations.

Quarry blasting, drilling, loading operations and vehicular transportation.

Emission Source/Control: WTSQY - Control

Control Type: DUST SUPPRESSION BY WATER SPRAY

Emission Source/Control: QTRAN - Process

Emission Source/Control: QUAYB - Process

Emission Source/Control: QUAYD - Process

Emission Source/Control: QUAYP - Process

Item 31.20(From Mod 0):

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

Emission Unit: M-ISCES

Process: ULF

Source Classification Code: 3-05-999-99

Process Description:

Unloading of hazardous waste fuel.

Unloading of hazardous waste fuel into storage tanks.

Emission Source/Control: CARB1 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DRUMS - Process

Emission Source/Control: ULFFT - Process

**Condition 6-1: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-1.5 (e) (2)

Item 6-1.1:

The Compliance Certification activity will be performed for:

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Emission Unit: K-ILNSG
Process: KHF

Item 6-1.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For high toxicity air contaminants (HTAC) found in Table 2 of 6 NYCRR Part 212-2.2, the facility must perform a toxic impact assessment (TIA) to demonstrate that the maximum offsite ambient air concentration for each contaminant is less than the ambient guideline concentrations in DAR-1 and that emissions are less than any applicable PB trigger listed in Part 212 for the respective air contaminant.

Facility owners or operators required to submit a TIA shall submit a protocol describing the procedures to be used to predict the maximum offsite ambient air concentration of each air contaminant. Once the protocol is approved by the Department, the facility shall conduct the TIA and submit a final report to the Department along with air dispersion modeling results for approval within 6 months of the effective date of this Title V permit modification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 6-2: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1206(b)(5), Subpart EEE

Item 6-2.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Item 6-2.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

If the facility changes the design, operation, or maintenance practices of the source in a manner that may



adversely affect compliance with any emission standard that is not monitored with a CEMS, the facility must:

- 1) Notify NYSDEC at least 60 days prior to the change, unless the circumstances are documented that dictate why such prior notice is not reasonably feasible. The notification must include a description of the changes and which emission standards may be affected and a comprehensive performance test schedule and test plan under the requirements of §63.1207(f) that will document compliance with the affected emission standard.
- 2) Conduct a performance test under the requirements of §63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s) and establish operating parameter limits as required in §63.1209, and submit to NYSDEC a Notification of Compliance under §63.1207(j) and §63.1210(d).
- 3) The facility will be allowed a maximum total of 3600 non-consecutive hours of HW burning for the purposes of commissioning, pre-testing and performance testing following the design changes proposed under Project Delta and up until the time a NOC is submitted to the Department. The facility must operate the kilns within the following parameter limits at all times while burning HW:

Process and CEM Parameters

Maximum Total and Pumpable LLGF Feed Rate - 10.5 gpm
Maximum Shale Feed Rate - 24.3 tph
Minimum LLGF Atomization Pressure - 35.9 psi
Minimum Back End Temperature 866 °F
Maximum CO Concentration @ 7% O₂ – 100 ppmvd

APC Parameters

Maximum GCT Exit Temperature – 400 °F
Maximum Baghouse Inlet Temperature – 400 °F
Minimum Total Lime Feed Rate – 209 lb/hr
Minimum Total Lime Carrier Fluid Flow Rate – 180 scfm

Constituent Feed Rates

Maximum Total Chlorine Feed Rate – 92.6 lb/hr (12-HRA)
Maximum Total SVM Feed Rate (Cd & Pb) – 5.79 lb/hr (12-HRA)
Maximum Total LVM Feed Rate (As + Be + Cr) – 4.0 lb/hr (12-HRA)
Maximum Total Pumpable LVM Feed Rate – 7.0 lb/hr

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(12-HRA)

Maximum Total Mercury Feed Rate – 0.007 lb/hr (12-HRA)

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 6-3: Confirmatory Performance Test (CfPT)
Effective for entire length of Permit**

Applicable Federal Requirement: 40CFR 63.1207, Subpart EEE

Replaces Condition(s) 61

Item 6-3.1:

This Condition applies to Emission Unit: K-ILNSG
Process: KHF

Item 6-3.2:

The permittee must conduct confirmatory performance tests to (i) demonstrate compliance with the dioxin/furan emission standard in Subpart EEE when the source operates under normal operating conditions; and (ii) conduct a performance evaluation of continuous monitoring systems (CMS) required for compliance assurance with the dioxin/furan emission standard under 40 CFR 63.1209(k).

The Confirmatory Performance Test (CfPT) must commence no earlier than 18 months and no later than 31 (thirty-one) months after the date of commencing the previous CPT, unless the Administrator grants a time extension under 40 CFR 63.1207(i) or a waiver pursuant to 40 CFR 63.1207(e)(3).

The CfPT must be completed within the 60 (sixty) days after the date of commencement, unless the Administrator determines that a time extension is warranted based on documentation of factors beyond the facility's control that prevent the facility from meeting the 60-day deadline.

The permittee must submit to the NYSDEC a notification of intention to conduct a CfPT and CMS performance evaluation, and a site specific test plan and CMS performance evaluation plan at least 60 calendar days before the performance test are scheduled to begin.

The provisions of 40 CFR 63.7(c)(2)(i)-(iii) and (v) regarding the content of the test plan apply. In addition, the CfPT plan must include content specified at 40 CFR 63.1207(f)(2).

The permittee must make the site-specific test plan and CMS performance evaluation test plan available to the public for review no later than 60 calendar days before initiation of the test. The permittee must issue a public notice and allow for the plans to be reviewed as described in 40 CFR 63.1207(e)(2).

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Condition 61: Confirmatory Performance Test (CfPT)
Effective between the dates of 01/01/2016 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1207, Subpart EEE

Replaced by Condition(s) 6-3

Item 61.1:

This Condition applies to Emission Unit: K-ILNSG
Process: KHF

Item 61.2:

The permittee must conduct confirmatory performance tests to (i) demonstrate compliance with the dioxin/furan emission standard in Subpart EEE when the source operates under normal operating conditions; and (ii) conduct a performance evaluation of continuous monitoring systems (CMS) required for compliance assurance with the dioxin/furan emission standard under 40 CFR 63.1209(k).

The Confirmatory Performance Test (CfPT) must commence no earlier than 18 months and no later than 31 (thirty-one) months after the date of commencing the previous CfPT, unless the Administrator grants a time extension under 40 CFR 63.1207(i) or a waiver pursuant to 40 CFR 63.1207(e)(3).

The CfPT must be completed within the 60 (sixty) days after the date of commencement, unless the Administrator determines that a time extension is warranted based on documentation of factors beyond the facility's control that prevent the facility from meeting the 60-day deadline.

The permittee must submit to the NYSDEC a notification of intention to conduct a CfPT and CMS performance evaluation, and a site specific test plan and CMS performance evaluation plan at least 60 calendar days before the performance test are scheduled to begin.

The provisions of 40 CFR 63.7(c)(2)(i)-(iii) and (v) regarding the content of the test plan apply. In addition, the CfPT plan must include content specified at 40 CFR 63.1207(f)(2).

The permittee must make the site-specific test plan and CMS performance evaluation test plan available to the public for review no later than 60 calendar days before initiation of the test. The permittee must issue a public notice and allow for the plans to be reviewed as described in 40 CFR 63.1207(e)(2).

Condition 6-4: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(k)(1), Subpart EEE

Item 6-4.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

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Regulated Contaminant(s):

CAS No: 001746-01-6 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

Item 6-4.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the dioxin/furan emission standard by establishing and complying with a combustion gas temperature limit at the exit of the last combustion chamber (or exit of any waste heat recovery system). The facility must base the limit on operations during the comprehensive performance test.

The facility must establish a limit during the 2020 comprehensive performance test for the maximum temperature of the gas at the exit of the gas suspension absorber on an hourly rolling average. The limit must be established as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 6-5: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.1209(m)(1)(iv), Subpart EEE

Item 6-5.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Process: KHF

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 6-5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For particulate matter control devices other than baghouses, electrostatic precipitators, and high energy or



ionizing wet scrubbers, the facility must ensure that the control device is properly operated and maintained as required in §63.1206(c)(7) and by monitoring the operation as follows:

1) During each comprehensive performance test conducted to demonstrate compliance with the particulate matter emissions standard, the facility must establish a range of operating values for the control device that is a representative and reliable indicator that the control device is operating within the same range of conditions as during the performance test. The facility must establish this range of operating values as follows:

- the facility must select a set of operating parameters appropriate for the control device design that the facility determines to be a representative and reliable indicator of the control device performance.

- the facility must measure and record values for each of the selected operating parameters during each test run of the performance test. A value for each selected parameter must be recorded using a continuous monitor

- for each selected operating parameter measured in accordance with this condition, the facility must establish a minimum operating parameter limit or a maximum operating parameter limit, as appropriate for the parameter, to define the operating limits within which the control device can operate and still continuously achieve the same operating conditions as during the performance test

- the facility must prepare written documentation to support the operating parameter limits established for the control device and the facility must include this documentation in the performance test plan that is submitted for review and approval. This documentation must include a description for each selected parameter and the operating range and monitoring frequency required to ensure the control device is being properly operated and maintained

2) The facility must install, calibrate, operate, and maintain a monitoring device equipped with a recorder to measure the values for each operating parameter selected in accordance with the requirements of this condition. The facility must install, calibrate, and maintain the monitoring equipment in accordance with the equipment manufacturer's specifications. The recorder must record the detector responses at least every 60 seconds, as required in the definition of continuous monitor.



3) The facility must regularly inspect the data recorded by the operating parameter monitoring system at a sufficient frequency to ensure the control device is operating properly. An excursion is determined to have occurred any time that the actual value of a selected operating parameter is less than the minimum operating limit (or, if applicable, greater than the maximum operating limit) established for the parameter in accordance with the requirements of §63.1209(m)(1)(iv)(A)(3).

4) Operating parameters selected in accordance with this condition may be based on manufacturer specifications provided the facility supports the use of manufacturer specifications in the performance test plan that is submitted for review and approval.

Monitoring Frequency: CONTINUOUS
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 6-6: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.1209(m)(1)(iv), Subpart EEE

Item 6-6.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

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

Item 6-6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The facility must comply with the particulate matter emission standard by establishing and complying with the operating parameter limits for gas suspension absorbers. The facility must base the limits on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a minimum total sorbent carrier fluid flowrate and comply using a CMS.

The facility must establish the limit on an hourly rolling

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average as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 6-7: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 63.1209(m)(1)(iv), Subpart EEE

Item 6-7.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

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

Item 6-7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the particulate matter emission standard by establishing and complying with the operating parameter limits for gas suspension absorbers. The facility must base the limits on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a minimum total lime injection feedrate and comply using a CMS.

The facility must establish the limit on an hourly rolling average as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.

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Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



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

Condition 6-8: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(m)(1)(iv), Subpart EEE

Item 6-8.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Process: KHF

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 6-8.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the particulate matter emission standard by establishing and complying with the operating parameter limits for gas suspension absorbers. The facility must base the limits on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a maximum gas conditioning tower combustion gas exit temperature and comply using a CMS.

The facility must establish the limit on an hourly rolling average as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 6-9: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(m)(2), Subpart EEE

Item 6-9.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



Emission Unit: K-ILNSG
Process: KHF

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

Item 6-9.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility must comply with the particulate matter emission standard by establishing and complying with a maximum production rate limit. The facility must base the limit on operations during the comprehensive performance test.

The facility must establish a limit for the maximum shale feedrate on an hourly rolling average.

The facility must establish a maximum hourly rolling average limit as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: MASS FLOW RATE

Upper Permit Limit: 24.3 tons per hour

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1
MINUTE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 6-10: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(n)(3), Subpart EEE

Item 6-10.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

CAS No: 007440-38-2	ARSENIC
CAS No: 007440-47-3	CHROMIUM
CAS No: 007440-41-7	BERYLLIUM

Item 6-10.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the semi-volatile and low volatility metal emission standards by establishing and complying with the operating parameter limits for gas suspension absorbers. The facility must base the limits on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a minimum gas suspension absorber lime injection feedrate and comply using a CMS.

The facility must establish the limit on an hourly rolling average as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 6-11: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.1209(n)(3), Subpart EEE

Item 6-11.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):	
CAS No: 007440-38-2	ARSENIC
CAS No: 007440-47-3	CHROMIUM
CAS No: 007440-41-7	BERYLLIUM

Item 6-11.2:

Compliance Certification shall include the following monitoring:



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the semi-volatile and low volatility metal emission standards by establishing and complying with the operating parameter limits for gas suspension absorbers. The facility must base the limits on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a maximum gas conditioning tower combustion gas exit temperature and comply using a CMS.

The facility must establish the limit on an hourly rolling average as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 6-12: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.1209(n)(3), Subpart EEE

Item 6-12.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Process: KHF

Regulated Contaminant(s):

CAS No: 007440-38-2	ARSENIC
CAS No: 007440-47-3	CHROMIUM
CAS No: 007440-41-7	BERYLLIUM

Item 6-12.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the semi-volatile and low volatility metal emission standards by establishing and complying with the operating parameter limits for gas suspension absorbers. The facility must base the limits

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

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on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a minimum gas suspension absorber sorbent carrier fluid flowrate and comply using a CMS.

The facility must establish the limit on an hourly rolling average as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 6-13: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(o)(4)(i), Subpart EEE

Item 6-13.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):
CAS No: 007782-50-5 CHLORINE

Item 6-13.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with a minimum sorbent feedrate limit and base the limit on operations during the comprehensive performance test.

The facility must establish a limit on the minimum lime injection feedrate prior to the baghouse on an hourly rolling average basis.

The facility must establish the limit as the average of the test run averages.

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Permit ID: 4-0103-00016/00048

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Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: MASS FLOW RATE

Lower Permit Limit: 270 pounds per hour

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1 MINUTE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 6-14: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 63.1209(o)(4)(i), Subpart EEE

Item 6-14.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Process: KHF

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

Item 6-14.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with a minimum sorbent feedrate limit and base the limit on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a limit on the minimum total lime injection feedrate on an hourly rolling average basis.

The facility must establish the limit as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

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Facility DEC ID: 4010300016



Monitoring Frequency: CONTINUOUS
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 5-35: Compliance Certification
Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1209(o)(4)(i), Subpart EEE

Expired by Mod 6
Replaces Condition(s) 120

Item 5-35.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

Item 5-35.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with a minimum sorbent feedrate limit and base the limit on operations during the comprehensive performance test.

The facility must establish a limit on the minimum lime injection feedrate prior to the baghouse on an hourly rolling average basis.

The facility must establish the limit as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: LIME INJECTION FEED RATE

Lower Permit Limit: 270 pounds per hour

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1
MINUTE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

Reports due 30 days after the reporting period.
The initial report is due 4/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 6-15: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(o)(4)(ii), Subpart EEE

Item 6-15.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):
CAS No: 007782-50-5 CHLORINE

Item 6-15.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with a gas suspension absorber minimum carrier fluid flowrate limit and base the limit on operations during the comprehensive performance test.

The facility must establish during the 2020 comprehensive performance test a limit for the minimum total sorbent carrier fluid flowrate on an hourly rolling average basis.

The facility must establish the limit as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Monitoring Frequency: CONTINUOUS
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 6-16: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63.1209(o)(4)(ii), Subpart EEE

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



Item 6-16.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Process: KHF

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

Item 6-16.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with a minimum carrier fluid flowrate limit and base the limit on operations during the comprehensive performance test.

The facility must establish a limit for the minimum sorbent carrier fluid flowrate prior to the baghouse on an hourly rolling average basis.

The facility must establish the limit as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: VOLUMETRIC FLOW RATE

Lower Permit Limit: 171.6 cubic feet per minute
(standard conditions)

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1
MINUTE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 5-36: Compliance Certification

Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1209(o)(4)(ii), Subpart EEE

Expired by Mod 6

Replaces Condition(s) 121

Item 5-36.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

Item 5-36.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with a minimum carrier fluid flowrate limit and base the limit on operations during the comprehensive performance test.

The facility must establish a limit on the minimum sorbent carrier fluid flowrate prior to the baghouse on an hourly rolling average basis.

The facility must establish the limit as the average of the test run averages.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: VOLUMETRIC FLOW RATE

Lower Permit Limit: 171.6 cubic feet per minute
(standard conditions)

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1
MINUTE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2019.

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

Condition 5-39: Compliance Certification

Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1209(p), Subpart EEE

Expired by Mod 6

Replaces Condition(s) 125

Item 5-39.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

Item 5-39.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Combustion system leaks of hazardous air pollutants must be controlled by maintaining the maximum interstitial pressure (back end) on an hourly rolling average basis less than or equal to the pressure limit using an instantaneous monitor within the interstitial space of the rear double seal hood assembly of the kiln and engaging the automatic waste feed cut-off when the pressure limit is not adequately maintained.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: PRESSURE
Upper Permit Limit: -0.08 inches of water
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2019.
Subsequent reports are due every 6 calendar month(s).

Condition 5-40: Compliance Certification
Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1209(p), Subpart EEE

Expired by Mod 6
Replaces Condition(s) 127

Item 5-40.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG
Process: KHF

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



Item 5-40.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Combustion system leaks of hazardous air pollutants must be controlled by maintaining the maximum interstitial pressure (back end) less than or equal to the pressure limit using an instantaneous monitor within the interstitial space of the rear double seal hood assembly of the kiln and engaging the automatic waste feed cut-off when the pressure limit is not adequately maintained allowing for only a 1 second delay.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameter below is not met.

Parameter Monitored: PRESSURE

Upper Permit Limit: 0.00 inches of water

Monitoring Frequency: CONTINUOUS

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2019.

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

Condition 5-41: Compliance Certification

Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement:40CFR 63.1209(p), Subpart EEE

Expired by Mod 6

Replaces Condition(s) 126

Item 5-41.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Process: KHF

Regulated Contaminant(s):

CAS No: 0NY100-00-0 TOTAL HAP

Item 5-41.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

Combustion system leaks of hazardous air pollutants must be controlled by maintaining simultaneously the maximum kiln draft pressure (front end) and the maximum interstitial pressure (back end) less than or equal to the pressure limit using an instantaneous monitor at the discharge end seal hood assembly of the kiln and within the interstitial space of the rear double seal hood assembly of the kiln and engaging the automatic waste feed cut-off when the pressure limit is not adequately maintained.

Data from the continuous monitoring system shall be sent to the automatic waste feed cut-off and feed to the kilns shall be immediately terminated if the limit on the monitored parameters are not met.

Parameter Monitored: PRESSURE
Upper Permit Limit: 0.00 inches of water
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2019.
Subsequent reports are due every 6 calendar month(s).

**Condition 6-17: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-2.3 (a)

Item 6-17.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG Emission Point: 00001

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 6-17.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:
SO2 from kiln #1 must be controlled to 91%

Parameter Monitored: SULFUR DIOXIDE
Lower Permit Limit: 91 percent
Reference Test Method: 40 CFR 60
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 6-18: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-3.1 (b)

Item 6-18.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG Emission Point: 00001

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

Item 6-18.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This emission point shall not discharge emissions that contain oxides of nitrogen in excess of 22.4 pounds per hour.

Upper Permit Limit: 22.4 pounds per hour

Reference Test Method: 40 CFR 60

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 5-44: Compliance Certification
Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 6

Item 5-44.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG Emission Point: 00001

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

Item 5-44.2:

Compliance Certification shall include the following monitoring:



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This emission point shall not discharge emissions that contain oxides of nitrogen in excess of 28 pounds per hour.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 28 pounds per hour

Reference Test Method: 40 CFR 60

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2019.

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

**Condition 6-19: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212-2.3 (a)

Item 6-19.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG

Emission Point: 00002

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 6-19.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

SO2 from kiln #2 must be controlled to 91%

Parameter Monitored: SULFUR DIOXIDE

Lower Permit Limit: 91 percent

Reference Test Method: 40 CFR 60

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 6-20: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212-3.1 (b)



New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016

Item 6-20.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG Emission Point: 00002

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

Item 6-20.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This emission point shall not discharge emissions that contain oxides of nitrogen in excess of 22.4 pounds per hour.

Upper Permit Limit: 22.4 pounds per hour

Reference Test Method: 40 CFR 60

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 5-55: Compliance Certification
Effective between the dates of 12/27/2018 and Permit Expiration Date

Applicable Federal Requirement:

Expired by Mod 6

Item 5-55.1:

The Compliance Certification activity will be performed for:

Emission Unit: K-ILNSG Emission Point: 00002

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

Item 5-55.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This emission point shall not discharge emissions that contain oxides of nitrogen in excess of 28 pounds per hour.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 28 pounds per hour

Reference Test Method: 40 CFR 60

New York State Department of Environmental Conservation

Permit ID: 4-0103-00016/00048

Facility DEC ID: 4010300016



Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2019.

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



STATE ONLY ENFORCEABLE CONDITIONS

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department 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 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 and maintained;

(3) During the period of the emergency the facility owner 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 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 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: 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 185: Contaminant List

Effective between the dates of 01/01/2016 and Permit Expiration Date

Applicable State Requirement:ECL 19-0301

Item 185.1:

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

CAS No: 000108-90-7
Name: CHLOROBENZENE

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

CAS No: 001746-01-6
Name: 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

CAS No: 007439-92-1
Name: LEAD

CAS No: 007439-97-6
Name: MERCURY

CAS No: 007440-38-2
Name: ARSENIC

CAS No: 007440-41-7
Name: BERYLLIUM



CAS No: 007440-43-9
Name: CADMIUM

CAS No: 007440-47-3
Name: CHROMIUM

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

CAS No: 007647-01-0
Name: HYDROGEN CHLORIDE

CAS No: 007782-50-5
Name: CHLORINE

CAS No: 012672-29-6
Name: POLYCHLORINATED BIPHENYLS (48%CL)

CAS No: 051207-31-9
Name: 2,3,7,8-TETRACHLORODIBENZOFURAN

CAS No: 0NY075-00-0
Name: PARTICULATES

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

CAS No: 0NY100-00-0
Name: TOTAL HAP

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

**Condition 6-21: Compliance Demonstration
Effective for entire length of Permit**

Applicable State Requirement: 6 NYCRR 231-11.2 (c)

Item 6-21.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 6-21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For a modification with a project emission potential which is less than 50 percent of the applicable significant project threshold in Table 3, Table 4 or Table 6 of Subpart 231-13 of this Part, but equals or exceeds 50 percent of the applicable significant project threshold



when emissions excluded in accordance with clause 231-4.1(b)(41)(i)(c) of this Part are added and is less than the applicable significant project threshold, or for a modification with a project emission potential which equals or exceeds 50 percent of the applicable significant project threshold in Table 3, Table 4 or Table 6 of Subpart 231-13 of this Part and is less than the applicable significant project threshold, the facility owner or operator must submit an application to modify the facility permit under the minor permit provisions of Subpart 201-6 of this Title or obtain a preconstruction permit under the provisions of Subpart 201-6 of this Title, and must:

(1) maintain the following information for a minimum of five years:

(i) a description of the modification.

(ii) an identification of each new or modified emission source(s) including the associated processes and emission unit.

(iii) the calculation of the project emission potential for each modified emission source(s) including supporting documentation.

(iv) the date the modification commenced operation.

(2) monitor the emissions of each regulated NSR contaminant from the emission source(s) that will increase as a result of the modification, and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the modification, or for a period of 10 years following resumption of regular operations after the change if the modification increases the design capacity of or potential to emit the regulated NSR contaminant at such emission source(s); and

(3) submit a report to the department within 30 days after the end of each year during which records must be generated in accordance with Paragraph 231-11.2(c)(2) of this Part. The report must contain:

(i) the name, address, and telephone number of the major facility.

(ii) the annual emissions as calculated pursuant to Paragraph (c)(2) of this Section.

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(iii) a comparison of actual annual emissions to the projected actual emissions and, if applicable, an explanation as to why the actual annual emissions exceeded the projected actual emissions.

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 12 calendar month(s).