Division of Air Resources
Permit Review Report

Permit ID: 3-5148-00084/00025
Renewal Number: 4
01/21/2021

Facility Identification Data
Name: NORTHEAST SOLITE CORPORATION
Address: 962 OLD KINGS HWY
MT MARION, NY 12456

Owner/Firm
Name: NORTHEAST SOLITE CORP
Address: PO BOX 431
MOUNT MARION, NY 12456-0431, USA
Owner Classification: Corporation/Partnership

Permit Contacts
Division of Environmental Permits:
Name: CARRIE MACKEY
Address: NYSDEC - REGION 3
21 S PUTT CORNERS RD
NEW PALTZ, NY 12561-1696
Phone:8452563040

Division of Air Resources:
Name: JEFFREY C LAWYER
Address: NYSDEC - REGION 3
21 S PUTT CORNERS RD
NEW PALTZ, NY 12561
Phone:8452563056

Air Permitting Facility Owner Contact:
Name: ALBERT GALLIANO
Address: NORTHEAST SOLITE CORP
PO BOX 437
MT MARION, NY 12456

Permit Description
Introduction
The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project
The application is for renewal of the Title V permit.

Attainment Status
NORTHEAST SOLITE CORPORATION is located in the town of SAUGERTIES in the county of
ULSTER.
The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

<table>
<thead>
<tr>
<th>Criteria Pollutant</th>
<th>Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter (PM)</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Particulate Matter&lt;10µ in diameter (PM10)</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO2)</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Ozone*</td>
<td>TRANSPORT REGION (NON-ATTAINMENT)</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NOx)**</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>ATTAINMENT</td>
</tr>
</tbody>
</table>

* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.
** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

Facility Description:
The facility is a lightweight aggregate manufacturing facility. Shale, either quarried on site or off site, is processed on site to be sold as a product or used as a raw material in three rotary kilns to produce lightweight aggregate. The facility consists of three rotary kilns, a clinker cooler, and associated crushing, screening, and conveying equipment.

Permit Structure and Description of Operations
The Title V permit for NORTHEAST SOLITE CORPORATION is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types: combustion - devices which burn fuel to generate heat, steam or power incinerator - devices which burn waste material for disposal control - emission control devices process - any device or contrivance which may emit air contaminants that is not included in the above categories.

NORTHEAST SOLITE CORPORATION is defined by the following emission unit(s):
Emission unit U00001 - Three rotary kilns are used in the pyro-processing of shale to produce lightweight aggregate. Fuel for the kilns include bituminous coal, distillate oil, and natural gas. Propane is also used during start-up and occasionally for the short term ignition of coal. Each kiln has an associated scrubber to reduce emissions. Kiln 3 has an associated clinker cooler and conveyors to manage the clinker discharged from the kiln. Alternatively, a bypass chute may be used in place of the clinker cooler and conveyors to manage the discharge from the kiln.

Emission unit U00001 is associated with the following emission points (EP):
000K1, 000K2, 000K3, K3CLR
Process: P01 Shale rock is expanded in any of the three rotary kilns fueled with bituminous coal.
Process: P02 Shale rock is expanded in any of the three rotary kilns fueled with number 2 oil.
Process: P03 Shale rock is expanded in any of the three rotary kilns fueled with natural gas.
Process: P04 Clinker exiting Kiln #3 is cooled in a 6’ x 29’ cooler prior to being collected in stockpiles and processed into lightweight aggregate.

Emission unit U00002 - This emission unit is the raw material processing area, and includes crushing, screening, and conveying. Raw material is used either as a product or in the production of lightweight aggregate in the three rotary kilns. Finished material, or other aggregates, such as recycled material from off-site, may also be crushed, screened, and conveyed in this processing area.

Process: P05 Raw material, finished product, or other aggregate material is crushed in a 30” x 42” jaw crusher and a 5 1/2’ cone crusher.
Process: P06 Raw material, finished product, or other aggregate material is screened to size in two 7’ x 16’ screeners.
Process: P07 Raw material, finished product, or other aggregate material is transported throughout the plant using a series of different sized conveyor belts and three bucket elevators.

Emission unit U00003 - This emission unit is the finished material processing area. Lightweight aggregate material and other aggregates, such as recycled material from off-site, are crushed, screened, and conveyed.

Process: P08 Lightweight aggregate material and other aggregate material is crushed in a 24” x 36” jaw crusher and in two 4 1/4’ cone crushers.
Process: P09 Lightweight aggregate material and other aggregate material is screened to size in a 5’ x 12’ double screener and a 7’ x 20’ shaker screener.
Process: P10 Lightweight aggregate material and other aggregate material is transported throughout the plant using a series of different sized conveyor belts and two screw conveyors.

Emission unit  U00004  - Coal is processed and conveyed for use as a fuel in the three rotary kilns.

Process: P11 Bituminous coal is processed for use as a fuel for the three rotary kilns. Coal is loaded into a hopper and then transported via conveyor belts to two kiln feed hoppers.

Emission unit  U00005  - Lime is used at the facility to help control pH of the scrubber water. Lime is slurried with water and discharged into the wet scrubber effluent. The lime is stored in a silo equipped with a baghouse. Lime is also mixed with coal in the mill and blown into the kiln with the coal. This is accomplished either by mixing the lime with the coal directly in the coal hopper or via a separate lime hopper and lime screw conveyor that feeds it directly into the coal mill. The lime is stored in a pile under cover and adjacent to the coal processing area.

Process: P12 Lime is used to help control pH of the scrubber water. Lime is also added to the coal in the mill via a separate hopper and screw conveyor.

Title V/Major Source Status
NORTHEAST SOLITE CORPORATION is subject to Title V requirements. This determination is based on the following information:
Oxides of nitrogen, sulfur dioxide, carbon monoxide, and PM-10 potential emissions are more than the thresholds of a major stationary source, as stated in the definitions in 6NYCRR Part 201. Therefore, the facility is a major source.

Program Applicability
The following chart summarizes the applicability of NORTHEAST SOLITE CORPORATION with regards to the principal air pollution regulatory programs:

<table>
<thead>
<tr>
<th>Regulatory Program</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSD</td>
<td>NO</td>
</tr>
<tr>
<td>NSR (non-attainment)</td>
<td>NO</td>
</tr>
<tr>
<td>NESHAP (40 CFR Part 61)</td>
<td>NO</td>
</tr>
<tr>
<td>NESHAP (MACT - 40 CFR Part 63)</td>
<td>NO</td>
</tr>
<tr>
<td>NSPS</td>
<td>YES</td>
</tr>
<tr>
<td>TITLE IV</td>
<td>NO</td>
</tr>
<tr>
<td>TITLE V</td>
<td>YES</td>
</tr>
</tbody>
</table>
NOTES:

PSD  Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR  New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP  National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP’s).

MACT  Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS  New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC’s (chlorofluorocarbons), HCFC’s (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT  Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC’s and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP  State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that,
when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

**Compliance Status**
Facility is in compliance with all requirements.

**SIC Codes**
SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3295</td>
<td>MINERALS, GROUND OR TREATED</td>
</tr>
</tbody>
</table>

**SCC Codes**
SCC or Source Classification Code is a code developed and used by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC’s.

<table>
<thead>
<tr>
<th>SCC Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-05-009-04</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - CLAY &amp; FLY ASH SINTERING</td>
</tr>
<tr>
<td></td>
<td>Raw Clay/Shale Crushing/Screening</td>
</tr>
<tr>
<td>3-05-009-05</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - CLAY &amp; FLY ASH SINTERING</td>
</tr>
<tr>
<td></td>
<td>Raw Clay/Shale Transfer/Conveying</td>
</tr>
<tr>
<td>3-05-009-08</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - CLAY &amp; FLY ASH SINTERING</td>
</tr>
<tr>
<td></td>
<td>Sintered Clay/Shale Product Crushing/Screening</td>
</tr>
<tr>
<td>3-05-009-09</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - CLAY &amp; FLY ASH SINTERING</td>
</tr>
<tr>
<td></td>
<td>Expanded Shale Clinker Cooling</td>
</tr>
<tr>
<td>3-05-009-15</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - CLAY &amp; FLY ASH SINTERING</td>
</tr>
<tr>
<td></td>
<td>Rotary Kiln</td>
</tr>
<tr>
<td>3-05-016-13</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - LIME MANUFACTURE</td>
</tr>
<tr>
<td></td>
<td>Lime Silos</td>
</tr>
<tr>
<td>3-05-025-03</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - CONSTRUCTION SAND AND GRAVEL</td>
</tr>
<tr>
<td></td>
<td>Material Transfer and Conveying</td>
</tr>
<tr>
<td>3-05-105-03</td>
<td>MINERAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>MINERAL PRODUCTS - BULK MATERIALS LOADING</td>
</tr>
<tr>
<td></td>
<td>OPERATION</td>
</tr>
<tr>
<td></td>
<td>Coal</td>
</tr>
</tbody>
</table>
Facility Emissions Summary
In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.’s contain a ‘NY’ designation within them. These are not true CAS No.’s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.’s do not do. As an example, volatile organic compounds or VOC’s are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term ‘HAP’ refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

<table>
<thead>
<tr>
<th>Cas No.</th>
<th>Contaminant</th>
<th>PTE  lbs/yr</th>
<th>PTE  tons/yr</th>
<th>Actual lbs/yr</th>
<th>Actual tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>000630-08-0</td>
<td>CARBON MONOXIDE</td>
<td>494094</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>000050-00-0</td>
<td>FORMALDEHYDE</td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>007647-01-0</td>
<td>HYDROGEN CHLORIDE</td>
<td>19174</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0NY210-00-0</td>
<td>OXIDES OF NITROGEN</td>
<td>1601731</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0NY075-00-0</td>
<td>PARTICULATES</td>
<td>760574</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0NY075-00-5</td>
<td>PM-10</td>
<td>285605</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>007446-09-5</td>
<td>SULFUR DIOXIDE</td>
<td>2501900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0NY100-00-0</td>
<td>TOTAL HAP</td>
<td>1831</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0NY998-00-0</td>
<td>VOC</td>
<td>642832</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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 Part 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 Part 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 Part 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 Part 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 Part 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 Part 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 Part 201-6.4(i)

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

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

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

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

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

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

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

Item 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.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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_02

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.

### Regulatory Analysis

<table>
<thead>
<tr>
<th>Location</th>
<th>Regulation</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY</td>
<td>ECL 19-0301</td>
<td>45</td>
</tr>
<tr>
<td>FACILITY</td>
<td>40CFR 60-A.7(a)</td>
<td>35</td>
</tr>
<tr>
<td>FACILITY</td>
<td>40CFR 60-000.672(b)</td>
<td>36</td>
</tr>
<tr>
<td>FACILITY</td>
<td>40CFR 60-000.675(c)(1)</td>
<td>37</td>
</tr>
<tr>
<td>FACILITY</td>
<td>40CFR 68</td>
<td>19</td>
</tr>
<tr>
<td>FACILITY</td>
<td>40CFR 82-F</td>
<td>20</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 200.6</td>
<td>1</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 200.7</td>
<td>10</td>
</tr>
<tr>
<td>U-00001</td>
<td>6NYCRR 200.7</td>
<td>40, 41</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 201-1.4</td>
<td>46</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 201-1.7</td>
<td>11</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 201-1.8</td>
<td>12</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 201-3.2(a)</td>
<td>13</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 201-3.3(a)</td>
<td>14</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6NYCRR 201-6</td>
<td>21, 38, 39</td>
</tr>
</tbody>
</table>
Applicability Discussion:
Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

- General Conditions - Requirement to Provide Information
- General Conditions - Fees
- General Conditions - Right to Inspect
- Use, Maintenance, and Installation of Monitoring Equipment
- Recordkeeping and Reporting of Compliance Monitoring Records of Monitoring, Sampling and Measurement
- Reporting Requirements - Deviations and Noncompliance
- Compliance Schedules - Progress Reports
- Compliance Certification
- Off Permit Changes
- Permit Shield
- State Enforceable Requirements
- Required emissions tests.
- Emission Statements - Applicability
- Emission Statements - record keeping requirements.
- General Prohibitions - air pollution prohibited
- General Prohibitions - visible emissions limited.
- Limiting of Opacity
- Limiting of Opacity
- Table 6 Permissible Emission Rate
- Table 6 Permissible Emission Rate
- RACT applicability for facilities outside of Lower Orange Co and NYC Metro area
- Open Fires - Prohibitions
- Sulfur-in-Fuel Limitations
- Sulfur-in-Fuel Limitations
ECL 19-0301
This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6
Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7
Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4
This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6 NYCRR 201-1.7
Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8
Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)
An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, 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.

6 NYCRR 201-3.3 (a)
The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6
This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.
6 NYCRR 201-6.4 (a) (4)
This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)
This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)
This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.4 (c)
This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)
This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.4 (c) (3) (ii)
This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.4 (d) (4)
This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (e)
Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.4 (f) (6)
This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.
6 NYCRR 201-6.4 (g)
Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

6 NYCRR 202-1.1
This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.1
Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

6 NYCRR 202-2.5
This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 211.2
This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68
This Part lists the regulated substances and their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F
Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements
In addition to Title V, NORTHEAST SOLITE CORPORATION has been determined to be subject to the following regulations:
40 CFR 60.672 (b)
This citation specifies the opacity limits for emission sources at a nonmetallic mineral processing plant. This applies to five conveyors that are proposed to be added to the facility. The conveyors are identified as emission sources 00MB1, 00MB2, 00MH1, FCB16, and FCB17 in the permit.
40 CFR 60.675 (c) (1)
When determining compliance with applicable particulate matter standards, Method 9 and 40 CFR 60.11 procedures must be followed. This citation lists three other criteria that must be followed.

40 CFR 60.7 (a)
This provision requires various written notifications in regard to new emission sources subject to 40 CFR 60. The notifications apply to five conveyors that are proposed to be added to the facility.

6 NYCRR 201-6.4 (b) (3)
This citation is for requirements concerning the use, maintenance, and installation of monitoring equipment or methods. Specifically, the facility must operate the scrubber whenever the associated kiln is in operation, and must maintain and test kiln fuel shut off interlocks for shutting off the kilns when there is no water flow to the scrubber.

6 NYCRR 201-6.5 (a)
This subdivision states that the Department shall include state enforceable conditions in Title V permits. State enforceable conditions related to regulations developed pursuant to the Climate Leadership and Community Protection Act (CLCPA) and Article 75 of New York State Environmental Conservation Law may be included in future versions of this permit, as applicable.

6 NYCRR 211.1
This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

6 NYCRR 212-1.6 (a)
This provision requires that the facility owner or operator not cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water.

6 NYCRR 212-2.5 (b)
6NYCRR Part 212-2.5 applies to different processes, including expanded aggregate kilns at lightweight aggregate plants. Pursuant to this citation, the permissible solid particulate emission rate is determined according to process weight. The equation (for process weight sources up to 100,000 pounds per hour) is used to calculate the particulate emission limit for each of the kilns when burning different fuels.
During the initial permit term, the limits for Kilns #1 and #2 were based on a maximum aggregate feed rate of 28 tons per hour. The maximum feed rate was increased to 32 tons per hour in 2006, but the particulate limits were kept the same. The maximum coal feed rate also remained the same, and a coal feed rate limit of 4.3 tons per hour was established in the permit. There was no increase in potential emissions. Therefore, no new regulatory requirements, such as New Source Review or Prevention of Significant Deterioration, apply to the facility.

The particulate emission limit for Kiln #3 when burning coal is based on a process weight of 47,400 pounds per hour. This includes a maximum aggregate feed rate of 20 tons per hour and a coal feed rate of 3.7 tons per hour. The limit for Kiln #3 when burning oil or natural gas is based on on 20 tons per hour.

6 NYCRR 212-3.1 (a) (2)
This provision requires reasonably available control technology (RACT) for major facilities of NOx or VOC emissions, located outside of the New York City metropolitan area and outside of lower Orange County.

The facility is a major source of NOx emissions. Tangential firing of the kilns shall constitute RACT, in order to minimize NOx emissions. There are no emission control devices or other technology, which are technically or economically feasible for reducing NOx emissions from the kilns. However, the addition of natural gas as a fuel for the kilns is expected to result in a reduction of NOx emissions.

6 NYCRR 225-1.2 (c)
This citation specifies sulfur content limits for any solid fuel used by the facility.

6 NYCRR 225-1.2 (h)
This citation specifies a sulfur content limit of 0.0015 percent for any distillate oil, including number 2 heating oil, used by the facility.

Non Applicability Analysis
List of non-applicable rules and regulations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Regulation</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY</td>
<td>40 CFR Part 60, Subpart Y Standards of Performance for Coal Preparation Plants</td>
<td></td>
</tr>
</tbody>
</table>
Permit ID: 3-5148-00084/00025
Renewal Number: 4
01/21/2021

Reason: The throughput of coal processing and conveying at the facility is less than 200 tons per day. Therefore, this regulation does not apply.

NOTE: Non-applicability determinations are cited as a permit condition under 6 NYCRR Part 201-6.4(g). This information is optional and provided only if the applicant is seeking to obtain formal confirmation, within an issued Title V permit, that specified activities are not subject to the listed federal applicable or state only requirement. The applicant is seeking to obtain verification that a requirement does not apply for the stated reason(s) and the Department has agreed to include the non-applicability determination in the issued Title V permit which in turn provides a shield against any potential enforcement action.

Compliance Certification
Summary of monitoring activities at NORTHEAST SOLITE CORPORATION:

<table>
<thead>
<tr>
<th>Location</th>
<th>Cond No.</th>
<th>Type of Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY</td>
<td>35</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>36</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>U-00001</td>
<td>40</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>U-00001</td>
<td>41</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>U-00001</td>
<td>42</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>5</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>6</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>7</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>25</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>FACILITY</td>
<td>26</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>U-00001/K3CLR</td>
<td>44</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>FACILITY</td>
<td>27</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>FACILITY</td>
<td>28</td>
<td>intermittent emission testing</td>
</tr>
<tr>
<td>FACILITY</td>
<td>29</td>
<td>intermittent emission testing</td>
</tr>
<tr>
<td>FACILITY</td>
<td>30</td>
<td>intermittent emission testing</td>
</tr>
<tr>
<td>U-00001/000K3/F01/000K3</td>
<td>43</td>
<td>intermittent emission testing</td>
</tr>
<tr>
<td>FACILITY</td>
<td>31</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>32</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>FACILITY</td>
<td>33</td>
<td>work practice involving specific operations</td>
</tr>
<tr>
<td>FACILITY</td>
<td>34</td>
<td>work practice involving specific operations</td>
</tr>
</tbody>
</table>

Basis for Monitoring
6NYCRR Part 200.7 and Part 201-6.4(b) Monitoring and maintaining emission control devices
Periodic monitoring and maintenance of the scrubbers is necessary to ensure reduction of kiln emissions and compliance with particulate limits.
This is achieved by the following:
daily monitoring of scrubber differential pressure;
daily monitoring of scrubber water discharge;
quarterly inspections of scrubber nozzles and water lines; and
quarterly testing of interlocks which shut off kiln fuel flow when water flow to the scrubber is interrupted.

6NYCRR Part 212-1.6(a) Opacity limit
A Method 9 observation for visible emissions from each of the kiln stacks is performed and documented semi-annually to correspond to Title V reporting requirements, pursuant to Part 201-6.4(c)(3).

6NYCRR Part 212-2.5(b) Particulate limits
Emission testing, to ascertain compliance with the particulate limits specified in the permit, is required when directed by the Department. Testing of particulate emissions from Kilns #1 or #2 when burning coal was conducted during previous permit terms. Test results show that particulate emissions are well below the permitted limit. Particulate emissions are expected to be lower when the kilns are fueled with natural gas. As an alternative to emission testing, monitoring and maintaining the scrubbers as emission control shall demonstrate compliance with the particulate limits.

6NYCRR Part 212-3.1(a)(2) NOx RACT requirements
The facility shall utilize tangential firing of the kilns to minimize NOx emissions. There is no emission control equipment that is technically or economically feasible to reduce NOx emissions. Both the tangential firing and emission control feasibility are based on a past review of NOx control methods. Any new NOx control method must be evaluated. The addition of natural gas to the facility is expected to reduce NOx emissions from the kilns. Emission testing will demonstrate if there is a reduction, and a NOx limit will be established based on the test results.