



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 5-5205-00013/00058

Renewal Number: 3

09/26/2016

Facility Identification Data

Name: LEHIGH NORTHEAST CEMENT COMPANY
Address: 313 WARREN ST
GLENS FALLS, NY 12801

Owner/Firm

Name: LEHIGH NORTHEAST CEMENT COMPANY
Address: 313 WARREN ST
GLENS FALLS, NY 12801, USA
Owner Classification: Corporation/Partnership

Permit Contacts

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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

Application for renewal of Air Title V Facility.

Attainment Status

LEHIGH NORTHEAST CEMENT COMPANY is located in the town of GLENS FALLS in the county of



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WARREN.

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.)

| Criteria Pollutant | Attainment Status |
|--|-----------------------------------|
| Particulate Matter (PM) | ATTAINMENT |
| Particulate Matter< 10µ in diameter (PM10) | ATTAINMENT |
| Sulfur Dioxide (SO2) | ATTAINMENT |
| Ozone* | TRANSPORT REGION (NON-ATTAINMENT) |
| Oxides of Nitrogen (NOx)** | ATTAINMENT |
| Carbon Monoxide (CO) | ATTAINMENT |

* 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 Lehigh Northeast Cement Company, located in Glens Falls, NY, consists of a Portland cement manufacturing operation and an associated quarry. Various types of Portland cements are produced using a combination of limestone, sand gypsum, and other materials of similar chemical composition. These materials are heated in the facility's rotary kiln to form cement clinker, which is cooled and ground to form cement.

Operations at the facility have been broken down into nine (9) emission units, each having related functions and processes, as follows:

- Stone quarrying and preliminary crushing (Emission Unit U-QUARY);
- Raw material storage and handling (Emission Unit U-RMHND);
- Raw material grinding (Emission Unit (U-RAWGR);
- Kiln or pyroprocessing system (Emission Unit U-KILN);
- Solid fuel (coal and Enviro-Fuelcubes) and other alternative fuels (Emission Unit U-FUEL);
- Cement clinker transport and storage (Emission Unit U-CLTRN);
- Precrusher (Polycom)system (Emission Unit U-PLYCM);
- Finish mill\Product storage (Emission Unit U-FINML); and
- Product packing and loading (Emission Unit U-SHPNG).

Applicable Requirements at the facility-wide level include:

- | | |
|---------------------|---|
| 6 NYCRR 200 | 6 NYCRR 215.2 |
| 6 NYCRR 202-2 | 6 NYCRR 220-1.4(c) |
| 6 NYCRR 211.2 | 40 CFR 82.106 (SubPart E) |
| 6 NYCRR 211.3 | 40 CFR 63 Subpart LLL for existing Area Sources |
| 40 CFR 60 Subpart F | 6 NYCRR Part 212 |

Quarry Operations (Emission Unit U-QUARY) - Glens Falls owns and operates a quarry on property adjacent to the manufacturing facility. Limestone is mined from the quarry walls primarily by drilling and blasting into the stone. The fragmented stone loosened from the walls is loaded into large dump trucks



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using wheel loaders. The rock is transported to a crusher where the size of the mined stone is reduced. The crushed material is transported by conveyor to the stone storage building or storage piles to await further processing or direct sale. Applicable Requirements Include: 6 NYCRR Part 212-1.6 & Part 212-2.4(a).

Raw Material Handling (Emission Unit U-RMHND) - Raw materials (other than limestone) are delivered to the facility via trucks.. These materials are off-loaded for storage using a series of conveyors and wheel loaders and placed in piles. As previously mentioned, limiestone and related raw material stone is stored in the stone storage building. A reclaimr is used to recover the piles within the storage guilding. A series of conveyors are used to transport the raw materials from storage to the raw grinding operation. Applicable Requirements Include: 6 NYCRR Part 220, 40 CFR 60 (SubPart F) & 40 CFR 63 (SubPart LLL) for area source.

Raw Material Grinding (Emission Unit U-RAWGR) - After transport from storage, the various raw materials are blended and pulverized in the raw (roller) mill for preparation as a feed mixture for the kilns. When the feed mixture has reached a desired consistency or blend, it is transported to a series of storage silos until it is fed into the kiln for further processing. Applicable Requirements Include: 6 NYCRR Part 220, 40 CFR 60 (SubPart F) & 40 CFR 63 (SubPart LLL) for area source.

Kiln (Pyroprocessing) System (Emission Unit U-KILN) - The rotary kiln (and its associated clinker cooler) are the primary tools used in the manufacture of Portland cement. Two primary operations occur in this equipment: (1) creation of cement "clinker" in the kilns and (2) cooling of the newly-manufactured clinker for further processsing or storage. Raw feed is transported to the kiln from the storage silow. Within the interior of the kiln, temperatures in excess of 2700 deg F create the clinker, consisting of balls of hard, rock-like material, from the raw feed. Coal and/or Enviro-Fuelcubes are the primary fuel used to fire the kiln, with natural gas used as a startup or backup fuel. When the clinker has been fully formed, it is conveyed to the clinker cooler, which consisits of a series of grates over which the clinker travels and is exposed to forced ambient air for cooling. The Applicable Requirements Include:

| | |
|---|---|
| 6 NYCRR 212-1.3(a) for "A" rated toxics | 40 CFR 60.7 (SubPart A) |
| 6 NYCRR 220-1.3(a) | 40 CFR 60.8 (SubPart A) |
| 6 NYCRR 220-1.6(b)(1) | 40 CFR 60.11 (SubPart A) |
| 6 NYCRR 220-1.7 | 40 CFR 60.13 (SubPart A) |
| 6 NYCRR 225-1.2(a)(2) | 40 CFR 60 (SubPart F) |
| 6 NYCRR 204 | 40 CFR 63 (SubPart LLL) for area source |

Note: Not all equipment and/or processes within this emission unit are subject to the requirments of 40 CFR 60 (New Source Performance Standards).

Solid Fuel System (Emission Unit U-FUEL) which includes coal, Enviro-Fuelcubes and other engineered fuels - Coal is delivered to the facility via trucks or railcars. The material is unloaded to an outdoor storage pile directly from the truck (through dumping) or using wheel loaders or similar equipment. Coal from the pile is fed into a coal bin to a ball mill (coal mill), which reduces the size of the coal for optimum combustion within the kiln.

Note: The equipment and processes within this emission unit are subject to facility-wide applicable requirements only.

Clinker Transport and Storage (Emission Unit U_CLTRN) - After being cooled within the clinker cooler, the clinker is transported (via conveyors) to a series of storage silow, or in cases of excess production, to an exclosed outdoor storage facility. If for some reason the clinker is found to not meet required



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specifications, it is sent to one of several outdoor "off-spec" clinker piles, where it is stored until it can be re-used within the manufacturing operation. Applicable Requirements Include:

40 CFR 60.11 (SubPart A)
40 CFR 60.7 (SubPart A) 40 CFR 60 (SubPart F)
40 CFR 60.8 (SubPart A) 40 CFR 63 Subpart LLL for existing Area Sources

Note: Not all equipment and/or processes within this emission unit are subject to the requirements of 40 CFR 60 (New Source Performance Standards).

Precrusher (Polycom) System (Emission Unit U-PLYCM) - Prior to entering the finishing stage of the manufacturing process, clinker is conveyed to the pre-crusher or Polycom. This equipment reduces the size of the clinker and allows the mills which produce the finished product (cement) to operate more efficiently. Applicable Requirements Include:

40 CFR 60.11 (SubPart A)
40 CFR 60.7 (SubPart A) 40 CFR 60 (SubPart F)
40 CFR 60.8 (SubPart A) 40 CFR 63 Subpart LLL for existing Area Sources

Note: Not all equipment and/or processes within this emission unit are subject to the requirements of 40 CFR 60 (New Source Performance Standards).

Finish Mill System (Emission Unit U-FINML) - The facility operates two (2) finish mills which process the precrushed clinker into saleable product. Clinker is conveyed to the mills where it is mixed with additional solids (such as gypsum, limestone, or other materials) and grinding aids. These additional materials are delivered to the site via trucks, unloaded to storage and conveyed to the finish mills in a manner which is similar to that described in Emission Unit U-RMHND. The Applicable Requirements Include:

40 CFR 60.11. (SubPart A)
40 CFR 60.7 (SubPart A) 40 CFR 60 (SubPart F)
40 CFR 60.8 (SubPart A) 40 CFR 63 Subpart LLL for existing Area Sources

Note: Not all equipment and/or processes within this emission unit are subject to the requirements of 40 CFR 60 (New Source Performance Standards).

Product Packaging and Loading (Emission Unit U-SHPNG) - The finished cement is stored within two large banks of silos. The finished product is loaded into the silos from the top and withdrawn from the bottom. The finished product may be shipped from the facility in bulk (via railcars or trucks) or packaged. Applicable Requirements Include:

40 CFR 60.11
40 CFR 60.7 (SubPart A) 40 CFR 60 (SubPart F)
40 CFR 60.8 (SubPart A) 40 CFR 63 Subpart LLL for existing Area Sources

Note: Not all equipment and/or processes within this emission unit are subject to the requirements of 40 CFR 60 (New Source Performance Standards).

Processes at the facility are regulated for emissions of particulates under 6 NYCRR 212, 6 NYCRR 220, 40 CFR 60 SubPart F and 40 CFR 63 Subpart LLL. Emissions of oxides of nitrogen (NO_x) under 6 NYCRR 220-1.6(b)(1-4). Emissions of sulfur compounds are indirectly regulated through the sulfur in fuel limits contained in 6 NYCRR 225 and 6 NYCRR 220-1.6(a).



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Permit Structure and Description of Operations

The Title V permit for LEHIGH NORTHEAST CEMENT COMPANY 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.

LEHIGH NORTHEAST CEMENT COMPANY is defined by the following emission unit(s):

Emission unit 0UFUEL - This emission unit consists of all operations and equipment involved in the storage, transfer, and preparation of coal for use in the pyro-processing (kiln) system. Processes include the loading, unloading, hauling, and storage of the fuel and preparation of the fuel (by crushing) for use. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6 .3(d)(7). See Appendix C.

Process: H01 Loading, unloading, and hauling of coal (or other solid fuels). The fuel arrives on-site via trucks or rail cars. Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: H02 Outdoor pile for the storage of coal or other solid fuels. Emission from this process are Insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: H03 Loading, unloading, hauling, and preparation (crushing) of coal (or other solid fuels) prior to its use as a fuel in the kiln. Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Emission unit 0UKILN - This emission unit consists of all operations and equipment involved in the production of cement clinker by the pyroprocessing (kiln) system. Processes include the transfer and weighing of raw feed, the firing of the kiln, and the transfer of excess cement kiln dust produced by the



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process. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit 0UKILN is associated with the following emission points (EP):
01041, 01068, 01070, 01122

Process: D01 is located at MAIN, Building PRHEAT - Equipment which transfers the kiln feed produced by the raw mill system into the pyroprocessing system or kiln.

Process: D02 is located at MAIN, Building PRECIP - Equipment for storage of kiln dust (produced as a by product of clinker production) which is cleaned out of the kiln exhaust by the electrostatic precipitators.

Process: D03 Equipment for collecting and storing kiln dust (in case of emergency) resulting from the operation of the spray tower. Emissions this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. Emissions from this process are fugitive.

Process: D04 Removal (to temporary storage prior to return to the process) of kiln dust produced by the spray tower generated during operation of process d03. Emissions are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: G01 Equipment used (in case of emergency) to transfer kiln dust collected by the electrostatic precipitator to temporary storage prior to return to the process. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: G02 is located at MAIN, Building PRECIP - Operation of the pyroprocessing system with simultaneous operation of the raw mill. During this operation the raw feed is transformed into cement clinker through slow rotation of the kiln and the application of high temperature. The heat for the process is provided through the combustion of coal, natural gas and compressor condensate generated on-site. This process exhausts to emission point 01070.

ES/C 1070C (SNCR) is being added by 7/1/2012 for BART and NOx RACT. The existing ESP (ES/C 1070B) shall be considered as BART for PM effective 1/1/2014.

Process: G03 is located at MAIN, Building PRECIP - Operation of the pyroprocessing system without simultaneous operation of the raw mill. During this operation the raw feed is transformed into cement clinker through slow rotation of the kiln and the application of high temperature. The heat for the process is provided through the combustion of coal, natural gas and compressor condensate generated on-site. This process exhausts to emission point 01070.

ES/C 1070C (SNCR) is being added by 7/1/2012 for BART and NOx RACT. The existing ESP (ES/C 1070B) shall be considered as BART for PM effective 1/1/2014.

Process: G04 is located at MAIN, Building PRECIP - Operation of the pyroprocessing system with simultaneous operation of the raw mill. During this operation the raw feed is transformed into cement clinker through slow rotation of the kiln and the application of high temperature. The heat for the process is provided through the combustion of coal, natural gas, compressor condensate generated on-site or alternative fuels as approved under the Op-Flex provisions of this permit and subsequent permit modification for final authorization of use in this process. This process exhausts to emission point 01070 from the baghouse 1070D.



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Process: G05 is located at MAIN, Building PRECIP - Operation of the pyroprocessing system without simultaneous operation of the raw mill. During this operation the raw feed is transformed into cement clinker through slow rotation of the kiln and the application of high temperature. The heat for the process is provided through the combustion of coal, natural gas, compressor condensate generated on-site or alternative fuels as approved under the Op-Flex provisions of this permit and subsequent permit modification for final authorization of use in this process. This process exhausts to emission point 01070.

The Electrostatic Precipitator (ES/C 1070C) must be removed and replaced by a baghouse (ES/C 1070D) by January 1, 2014 in order to comply with BART requirements under Part 249.

Process: J01 is located at Building COOLER - Operation of clinker cooler in which hot cement clinker produced by the kiln is cooled through the use of air movement.

Emission unit UCLTRN - This emission unit consists of all operations and equipment involved in the storage and transfer of cement clinker. Processes include material loading, unloading, indoor and outdoor storage and rail and truck loadout. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit UCLTRN is associated with the following emission points (EP):
01118, 01119, 01123, 01811, 01812, 01830, 01910, 0K06A, 0K06B, 0K06C

Process: K01 is located at MAIN, Building OFFSPC - Transfer and storage of cement clinker (silos 1 system).

Process: K02 is located at MAIN, Building OFFSPC - Transfer and storage of cement clinker (silos 2 system).

Process: K03 Transfer of cement clinker to and from outdoor storage piles. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: K04 Storage of cement clinker in outdoor piles. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information not required to determine emissions. These emissions are fugitive.

Process: K05 is located at MAIN, Building CLSILO - Equipment associated with the storage of cement clinker in silos.

Process: K06 is located at Building CLSILO - Equipment for loadout of clinker by truck and rail.

Emission unit UFINML - This emission unit consists of all operations and equipment involved in the finish grinding of cement clinker and other materials within the finish mill. Processes include the storage, transfer, and weighing of materials (clinker and other additives), grinding of the materials, and the transfer and storage of the finished product. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit UFINML is associated with the following emission points (EP):
04031, 04032, 04210, 04230, 04250, 04270, 04290, PTBIN, PTMIL



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Process: M01 Unloading of gypsum (or similar calcium sulfate-bearing materials) to a storage pile. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine emissions. These emissions are fugitive.

Process: M02 Emissions associated with the gypsum (or other calcium sulfate-bearing material) storage pile. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: M03 Emissions associated with the transfer of gypsum (or other calcium sulfate-bearing material) to a transfer hopper. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions from this process are fugitive.

Process: M04 Unloading of marble (or similar calcium-bearing materials) to a storage pile. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: M05 Emissions associated with the marble (or other calcium-bearing material) storage pile. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: M06 Emissions associated with the transfer of marble (or other calcium-bearing material) to a transfer hopper. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: M07 Unloading of limestone (or similar calcium-bearing materials) to a storage pile. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: M08 Emissions associated with the limestone (or other calcium-bearing material) storage pile. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine emissions. The emissions associated with this process are fugitive.

Process: M09 Emissions associated with the transfer of limestone (or other calcium-bearing material) to a transfer hopper. Emission from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: M10 Processes and equipment associated with the transfer of materials from the os belt to the os elevator. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.

Process: M11 Equipment and processes associated with transfer of materials within the crane bay. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: M12 Equipment and processes associated with the transfer of materials to the finish mill storage bins. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.



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Process: N13 is located at MAIN, Building FINISH - Equipment used to transfer raw materials and cement clinker to finish mill #1 and the operation of the mill itself. A portion of the emissions associated with this process are fugitive.

Process: N14 Equipment used to transfer raw materials and cement clinker to finish mill #2 and the operation of the mill itself. A portion of the emissions associated with this process are fugitive.

Process: N15 is located at mAIN, Building FINISH - Proposed equipment used to transfer raw materials and cement to Finish Mill #3 and the operation of the mill itself.

Emission unit UPLYCM - This emission unit consists of all operations and equipment involved in the pre-crushing of cement clinker prior to processing in the finish mill system. Processes include the transfer and weighing of the clinker and crushing. A number of processes within this emission unit have been deemed "Insignificant" based on guidance contained in 6 NYCRR 201-6.3(d)(7). See Appendix C.

Emission unit UPLYCM is associated with the following emission points (EP):
01904, 01905, 01906, 01936

Process: L01 is located at MAIN, Building PLYCOM - Transfer, weighing, and crushing of cement clinker in the polycom crusher system. A portion of the emissions associated with this process are fugitive.

Process: L02 Transfer of cement clinker (previously crushed by the polycom system) to storage. Emissions from this process are Insignificant per 6 NYCRR 201-6.3(d)(7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: L03 Crushing material in the boneyard.

Emission unit UQUARY - This emission unit consists of all operations and equipment associated with the quarry portion of the facility. Associated sources and emission points include blasting, truck loading/unloading, stone hauling, stone crushing, and material storage/transfer operations. Fugitive emissions within the emission unit include road traffic and storage piles. A number of processes within the emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit UQUARY is associated with the following emission points (EP):
00902

Process: A01 Loading/unloading of trucks and hauling of quarry overburden (excess soils/stone). Throughput information is not required to demonstrate compliance. The emissions associated with this process are fugitive.

Process: A02 Loading/unloading of trucks and hauling of resale stone and sand within quarry. Throughput information is not required to demonstrate compliance. The emissions associated with this process are fugitive.

Process: A03 Loading/unloading and hauling of stone to quarry crusher. Throughput information is not required to determine compliance. The emissions associated with this process are fugitive.



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Process: A04 Stockpiling of stone for feeding through crusher. Throughput information is not required to determine compliance. The emissions associated with this process are fugitive. Emissions from this process are insignificant per 6 NYCRR 201-6.3(d)(7).

Process: A05 is located at MAIN - Operation of primary quarry crusher. A portion of the emissions associated with this process are fugitive.

Process: A06 Transfer of quarry stone from belts 903 to 904 and 904 to no. 5 transfer point after crushing. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: A07 Transfer of crushed quarry stone over various belts to indoor storage. Transfers include no. 5 to no. 1; no. 1 to no. 2 and no. 2 to 906, 906 to 953, and 953 to storage. Emissions from these processes are insignificant per 6 NYCRR 201.6.3 (d) (7). Emissions are fugitive. Throughput information is not required to determine compliance.

Process: A09 Storage of materials, such as quarry stone, in outdoor piles. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: A10 Drop out for quarry stone used and sold for road maintenance. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: A11 Storage of limestone and other calcium bearing materials for use in production or for resale. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. Emissions are fugitive.

Emission unit URAWGR - This emission unit consists of all operations and equipment involved in the production of raw feed for the pyroprocessing (kiln) system. Processes include the transfer, weighing, and mixing of raw materials, the formation of raw feed within the raw mill, and mixing/storage of various types of raw feeds. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit URAWGR is associated with the following emission points (EP):

01009, PTRAW

Process: C01 Transfer, weighing, milling and blending of raw kiln feed and the raw materials from which it is produced. A portion of the emissions associated with this process are fugitive.

Emission unit USHPNG - This emission unit consists of all operations and equipment involved in the packing and bulk shipment of the finished product (cement). Processes include material transfer, weighing, packaging, and the loading of railcars for bulk shipping. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit USHPNG is associated with the following emission points (EP):

06000, 06049, 06059, 06245, 06255, 06302, 06303, 06304, 06305, 06340, 06375, 06695, 06990, 07000,



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07010, 07020, 07200, 07333, 07505, 07526

Process: P01 is located at MAIN, Building STSILO - Equipment for transferring and storing (silos) finished product (cement) for bulk shipment.

Process: P02 is located at MAIN, Building WAREPK - Equipment for bulk loading of finished product (cement) into railcars and trucks.

Process: P03 is located at MAIN, Building WAREPK - The silo 33 air slide system used in the transfer of finished product (cement).

Process: Q01 is located at MAIN, Building STSILO - Equipment for transferring and storing (silos) finished product (cement) for packaging.

Process: Q02 is located at MAIN, Building WAREPK - Equipment for transferring finished product (cement) from the storage silos to the packaging and bulk loading areas.

Process: Q03 is located at MAIN, Building WAREPK - A cement packaging (bagging) machine.

Process: Q04 is located at MAIN, Building WAREPK - A cement packaging (bagging) machine.

Emission unit URMHND - This emission unit consists of all operations and equipment involved in the storage and handling of raw materials (other than quarry stone). These materials are all solids and may consist of iron bearing materials, silica bearing materials, calcium bearing materials or other materials which are similar in chemical and/or physical composition. A number of processes within this emission unit have been deemed "insignificant" based on guidance contained in 6 NYCRR 201-6.3 (d) (7).

Emission unit URMHND is associated with the following emission points (EP):

01033, PT950

Process: B01 Loading, unloading, and storage (in piles) of sand and other silica bearing materials. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. These emissions are fugitive loading, unloading, and storage (in piles) of sand and other silica bearing materials. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. These emissions are fugitive.

Process: B02 Loading, unloading, and storage (in piles) of iron ore and other iron bearing materials. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. Emissions are fugitive. Loading, unloading, and storage (in piles) of iron ore and other iron bearing materials. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. Emissions are fugitive.

Process: B03 Operating of material reclaimer and transfer of stored materials (belts 906, 953, 955, 950 and 956 and the storage pile). Materials transferred include stone, silica bearing, iron bearing, calcium bearing, and other raw materials with similar physical and chemical composition. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. The emissions from this process are fugitive. Emissions from this process are insignificant per 6 NYCRR 201-6.3 (d) (7). Throughput information is not required to determine compliance. The emissions from this process are fugitive.

Process: B05 Transfer of raw materials to and from storage silos and the silos themselves. Transfers include 950 to 955, 955 to 956, 956 to 957, 957 to 959, 959 to 958, 958 to 960 and 960 to silos.



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Title V/Major Source Status

LEHIGH NORTHEAST CEMENT COMPANY is subject to Title V requirements. This determination is based on the following information:

| CONTAMINANT | PERMITTED EMISSION RANGE |
|-------------|--------------------------|
| CO | >250 TPY |
| PM | >250 TPY |
| PM-10 | >250 TPY |
| SO2 | >250 TPY |
| NOx | >250 TPY |

Program Applicability

The following chart summarizes the applicability of LEHIGH NORTHEAST CEMENT COMPANY with regards to the principal air pollution regulatory programs:

| Regulatory Program | Applicability |
|--------------------------------|---------------|
| PSD | NO |
| NSR (non-attainment) | NO |
| NESHAP (40 CFR Part 61) | YES |
| NESHAP (MACT - 40 CFR Part 63) | YES |
| NSPS | YES |
| TITLE IV | NO |
| TITLE V | YES |
| TITLE VI | NO |
| RACT | YES |
| SIP | YES |

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,



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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 212.10, 226, 227-2, 228, 229, 230, 232, 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.

SIC Code

Description

3241

CEMENT, HYDRAULIC

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



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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.

| SCC Code | Description |
|-----------------|---|
| 3-05-006-06 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Kilns |
| 3-05-006-07 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Raw Material Unloading |
| 3-05-006-08 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Raw Material Piles |
| 3-05-006-09 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Primary Crushing |
| 3-05-006-10 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Secondary Crushing |
| 3-05-006-12 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Raw Material Transfer |
| 3-05-006-13 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Raw Material Grinding and Drying |
| 3-05-006-14 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Clinker Cooler |
| 3-05-006-15 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Clinker Piles |
| 3-05-006-16 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Clinker Transfer |
| 3-05-006-17 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Clinker Grinding |
| 3-05-006-18 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Cement Silos |
| 3-05-006-19 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Cement Load Out |
| 3-05-006-99 | MINERAL PRODUCTS MINERAL PRODUCTS - CEMENT MANUFACTURE (DRY PROCESS) Other Not Classified |
| 3-05-020-06 | MINERAL PRODUCTS STONE QUARRYING-PROCESSING (SEE ALSO 3-05- |



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|-------------|--|
| 3-05-320-32 | 320 FOR DIFFERENT UNITS) Miscellaneous Operations: Screen/Convey/Handling |
| 3-90-002-01 | MINERAL PRODUCTS STONE QUARRYING-PROCESSING (SEE ALSO 3-05-020 FOR DIFFERENT UNITS) TRUCK LOADING - CONVEYOR IN-PROCESS FUEL USE INDUSTRIAL PROCESSES - IN-PROCESS FUEL USE CEMENT KILN/DRYER (BITUMINOUS COAL) |

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 of 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 Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). 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.

| Cas No. | Contaminant Name | PTE | |
|-------------|--------------------------------------|--------|-----------------------------|
| | | lbs/yr | Range |
| 001746-01-6 | 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN | | > 0 but < 10 tpy |
| 0NY504-00-0 | 40 CFR 63 - TOTAL HYDROCARBONS (THC) | | > 0 but < 10 tpy |
| 000630-08-0 | CARBON MONOXIDE | | >= 250 tpy but < 75,000 tpy |
| 007782-50-5 | CHLORINE | | > 0 but < 10 tpy |
| 007439-92-1 | LEAD | | > 0 but < 10 tpy |
| 007439-97-6 | MERCURY | | > 0 but < 10 tpy |
| 0NY210-00-0 | OXIDES OF NITROGEN | | >= 250 tpy but < 75,000 tpy |
| 0NY075-00-0 | PARTICULATES | | >= 250 tpy but < 75,000 tpy |
| 0NY075-00-5 | PM-10 | | >= 250 tpy but < 75,000 tpy |
| 007446-09-5 | SULFUR DIOXIDE | | >= 250 tpy but < 75,000 tpy |
| 0NY100-00-0 | TOTAL HAP | | >= 10 tpy but < 25 tpy |
| 0NY998-00-0 | VOC | | >= 2.5 tpy but < 10 tpy |



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

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

Item C: Timely Application for the Renewal of Title V Permits -6 NYCRR 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 D: 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,



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accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- Item E: Requirement to Comply With All Conditions - 6 NYCRR 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 F: 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 G: 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 H: 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 I: 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 J: 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;



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- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR 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 L: Permit Exclusion - ECL 19-0305

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



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under the Clean Air Act brought by the United States or any person.

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

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

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

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

Regulatory Analysis

| Location Facility/EU/EP/Process/ES | Regulation | Condition | Short Description |
|---|-------------------|------------------|---|
| FACILITY | ECL 19-0301 | 94 | Powers and Duties of the Department with respect to air pollution control |
| FACILITY | 40CFR 60-A.13(a) | 44 | General provisions - Monitoring requirements |
| FACILITY | 40CFR 60-A.13(d) | 45 | General provisions - Monitoring requirements |
| FACILITY | 40CFR 60-A.13(e) | 46 | General provisions - Monitoring requirements |
| FACILITY | 40CFR 60-A.13(h) | 47 | General provisions - Monitoring requirements |
| FACILITY | 40CFR 60-A.4 | 39 | General provisions - Address |
| FACILITY | 40CFR 60-A.7(b) | 40 | Notification and Recordkeeping |
| FACILITY | 40CFR 60-A.7(c) | 41 | Notification and |



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| | | | |
|----------|-------------------------|----------------|---|
| FACILITY | 40CFR 60-A.7(d) | 42 | Recordkeeping |
| FACILITY | 40CFR 60-A.7(f) | 43 | Notification and Recordkeeping |
| FACILITY | 40CFR 60-F.62(c) | 48 | Notification and Recordkeeping |
| FACILITY | 40CFR 60-F.65 | 49 | Portland cement plants - standard for particulate matter |
| FACILITY | 40CFR 63-LLL.1342 | 50 | Portland cement plants - recordkeeping and reporting |
| 0-UKILN | 40CFR 63-LLL.1342 | 85 | NESHAP for Portland Cement Manufacturing - General Standards |
| FACILITY | 40CFR 63-LLL.1343 | 51 | NESHAP for Portland Cement Manufacturing - General Standards |
| FACILITY | 40CFR 63-LLL.1343(b)(1) | 52, 53, 54, 55 | NESHAP for Portland Cement Manufacturing - Standards for kilns and in-line kilns/raw mills |
| FACILITY | 40CFR 63-LLL.1343(c) | 56 | NESHAP for Portland Cement Manufacturing - Standards for kilns and in-line kilns/raw mills |
| FACILITY | 40CFR 63-LLL.1345 | 57 | Portland Cement NESHAP - Opacity Standard |
| FACILITY | 40CFR 63-LLL.1346 | 58 | NESHAP for Portland Cement Manufacturing - Standards for new or reconstructed raw material dryers |
| FACILITY | 40CFR 63-LLL.1346(g) | 59 | Portland Cement NESHAP - startup/shutdown provisions |
| FACILITY | 40CFR 63-LLL.1347 | 60 | NESHAP for Portland Cement Manufacturing - Operation and Maintenance Plan Requirements |
| FACILITY | 40CFR 63-LLL.1348(a) | 61 | Portland Cement NESHAP - Compliance Requirements - Initial Performance Tests |
| FACILITY | 40CFR 63-LLL.1348(b) | 62 | Portland Cement NESHAP - Compliance Requirements - Continuous Monitoring Requirements |
| FACILITY | 40CFR 63-LLL.1348(b)(9) | 63 | Portland Cement NESHAP - Compliance Requirements - Startup and Shutdown |
| FACILITY | 40CFR 63-LLL.1348(c) | 64 | Portland Cement |



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|---------------|-------------------------|----|---|
| FACILITY | 40CFR 63-LLL.1348(d) | 65 | NESHAP - Compliance Requirements - Changes in Operations Portland Cement NESHAP - Compliance Requirements - General Duty to Minimize Emissions Portland Cement |
| FACILITY | 40CFR 63-LLL.1349(a) | 66 | NESHAP - Performance Testing Requirements - Documentation Portland Cement |
| FACILITY | 40CFR 63-LLL.1349(b)(1) | 67 | NESHAP - Performance Testing Requirements - PM Emissions Tests Portland Cement |
| 0-UKILN/01068 | 40CFR 63-LLL.1349(b)(3) | 87 | NESHAP - Performance Testing Requirements - Dioxins and Furans Portland Cement |
| 0-UKILN/01070 | 40CFR 63-LLL.1349(b)(4) | 90 | NESHAP - Performance Testing Requirements - THC Portland Cement |
| 0-UKILN/01070 | 40CFR 63-LLL.1349(b)(5) | 91 | NESHAP - Performance Testing Requirements - Mercury Portland Cement |
| 0-UKILN/01070 | 40CFR 63-LLL.1349(b)(6) | 92 | NESHAP - Performance Testing Requirements - HCl Portland Cement |
| FACILITY | 40CFR 63-LLL.1349(c) | 68 | NESHAP - Performance Testing Requirements - Testing Frequency Portland Cement |
| FACILITY | 40CFR 63-LLL.1349(d) | 69 | NESHAP - Performance Testing Requirements - Reporting Requirements Monitoring Requirements |
| FACILITY | 40CFR 63-LLL.1350(a) | 70 | Cement Manufacturing - PM Monitoring Requirements Portland Cement |
| FACILITY | 40CFR 63-LLL.1350(b)(1) | 71 | NESHAP - Monitoring Requirements - Clinker Production Monitoring Requirements Portland Cement |
| FACILITY | 40CFR 63-LLL.1350(d) | 72 | NESHAP - Monitoring Requirements - Mercury Monitoring Portland Cement |
| FACILITY | 40CFR 63-LLL.1350(i) | 73 | NESHAP - Opacity monitoring - COMs and bag leak detection systems Mercury in fly ash Notification Requirements |
| FACILITY | 40CFR 63-LLL.1350(k) | 74 | |
| FACILITY | 40CFR 63-LLL.1350(m) | 75 | |
| FACILITY | 40CFR 63-LLL.1350(p) | 76 | |
| FACILITY | 40CFR 63-LLL.1353 | 77 | |



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|----------|--------------------------|------------|--|
| FACILITY | 40CFR 63-LLL.1354 | 78 | Reporting Requirements |
| FACILITY | 40CFR 63-LLL.1355 | 79 | Recordkeeping Requirements |
| FACILITY | 40CFR 64 | 80 | COMPLIANCE ASSURANCE MONITORING |
| FACILITY | 40CFR 68 | 19 | Chemical accident prevention provisions |
| FACILITY | 40CFR 82-E | 81 | Protection of Stratospheric Ozone - labelling of products using ozone depleting substances |
| FACILITY | 40CFR 82-F | 20 | Protection of Stratospheric Ozone - recycling and emissions reduction |
| FACILITY | 6NYCRR 200.6 | 1 | Acceptable ambient air quality. |
| FACILITY | 6NYCRR 200.7 | 10 | Maintenance of equipment. |
| FACILITY | 6NYCRR 201-1.4 | 95 | Unavoidable noncompliance and violations |
| FACILITY | 6NYCRR 201-1.7 | 11 | Recycling and Salvage |
| FACILITY | 6NYCRR 201-1.8 | 12 | Prohibition of reintroduction of collected contaminants to the air |
| FACILITY | 6NYCRR 201-3.2(a) | 13 | Exempt Activities - Proof of eligibility |
| FACILITY | 6NYCRR 201-3.3(a) | 14 | Trivial Activities - proof of eligibility |
| FACILITY | 6NYCRR 201-6 | 21, 82, 83 | Title V Permits and the Associated Permit Conditions |
| FACILITY | 6NYCRR 201-6.4(a)(4) | 15 | General Conditions - Requirement to Provide Information |
| FACILITY | 6NYCRR 201-6.4(a)(7) | 2 | General Conditions - Fees |
| FACILITY | 6NYCRR 201-6.4(a)(8) | 16 | General Conditions - Right to Inspect |
| FACILITY | 6NYCRR 201-6.4(c) | 3 | Recordkeeping and Reporting of Compliance Monitoring |
| FACILITY | 6NYCRR 201-6.4(c)(2) | 4 | Records of Monitoring, Sampling and Measurement |
| FACILITY | 6NYCRR 201-6.4(c)(3)(ii) | 5 | Reporting Requirements - Deviations and Noncompliance |
| FACILITY | 6NYCRR 201-6.4(d)(4) | 22 | Compliance Schedules - Progress Reports |
| FACILITY | 6NYCRR 201-6.4(e) | 6 | Compliance Certification |
| FACILITY | 6NYCRR 201-6.4(f) | 23 | Operational Flexibility |
| FACILITY | 6NYCRR 201-6.4(f)(6) | 17 | Off Permit Changes |
| FACILITY | 6NYCRR 201-7 | 84 | Federally Enforceable Emissions Caps |
| FACILITY | 6NYCRR 202-1.1 | 18 | Required emissions |



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| FACILITY | 6NYCRR 202-1.3 | 25, 26 | tests. |
| FACILITY | 6NYCRR 202-1.5 | 27 | Acceptable procedures. |
| FACILITY | 6NYCRR 202-2.1 | 7 | Prohibitions. |
| FACILITY | 6NYCRR 202-2.5 | 8 | Emission Statements - Applicability |
| FACILITY | 6NYCRR 211.1 | 28 | Emission Statements - record keeping requirements. |
| FACILITY | 6NYCRR 211.2 | 96 | General Prohibitions - air pollution prohibited |
| FACILITY | 6NYCRR 212-1.6(a) | 29, 30 | General Prohibitions - visible emissions limited. |
| FACILITY | 6NYCRR 212-2.1 | 97 | Limiting of Opacity Requirements |
| FACILITY | 6NYCRR 212-2.4(a) | 31, 32 | Control of Particulate from Existing Process Emission Sources |
| FACILITY | 6NYCRR 212-2.4(b) | 33 | Control of Particulate from New and Modified Process Emission Sources |
| FACILITY | 6NYCRR 215.2 | 9 | Open Fires - Prohibitions |
| 0-UKILN/01068 | 6NYCRR 220-1.4(a) | 86 | Opacity limits for portland cement processes. |
| 0-UKILN/01122 | 6NYCRR 220-1.4(b) | 101 | Opacity limits for portland cement processes. |
| FACILITY | 6NYCRR 220-1.4(c) | 34 | Opacity limits for portland cement processes. |
| FACILITY | 6NYCRR 220-1.6(b) | 98 | Emissions of nitrogen oxides from kiln stacks. |
| FACILITY | 6NYCRR 220-1.7 | 99 | Source monitoring, recordkeeping, and reporting. |
| 0-UKILN/01070 | 6NYCRR 220-1.7(b) | 100 | Opacity monitoring for dry process plant kilns and all clinker coolers. |
| FACILITY | 6NYCRR 225-1.2(c) | 35 | Sulfur-in-Fuel Limitations |
| 0-UKILN/01070 | 6NYCRR 225-2.4(a) | 88 | Eligibility to burn waste fuels A and B. |
| FACILITY | 6NYCRR 249.3(a) | 36, 37 | BART Emission Limitation Requirements for Sources |
| FACILITY | 6NYCRR 249.3(d) | 38 | Deadline for BART Controls and/or Emission Reduction Measures |
| 0-UKILN/01070 | 6NYCRR 249.3(f) | 89 | Each BART determination established by the Department will be submitted to the EPA for approval as a SIP |



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6NYCRR 249.3(f)

93

revision.
Each BART
determination
established by the
Department will be
submitted to the EPA
for approval as a SIP
revision.

Applicability Discussion:

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

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.



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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) (5)

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



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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 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 there 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



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In addition to Title V, LEHIGH NORTHEAST CEMENT COMPANY has been determined to be subject to the following regulations:

40 CFR 60.13 (a)

This regulation specifies that all New Source Performance Standard (NSPS) affected sources that are required to have continuous monitoring systems (CMS) are subject to the requirements of Appendix B of 40 CFR Part 60 and if the CMS is used to demonstrate compliance with emission limits on a continuous basis, then it is also subject to Appendix F of 40 CFR Part 60.

40 CFR 60.13 (d)

This regulation contains the requirements for daily drift testing for continuous monitoring systems required by 40 CFR Part 60.

40 CFR 60.13 (e)

This regulation specifies minimum frequency of operation requirements for continuous monitoring systems required by 40 CFR Part 60.

40 CFR 60.13 (h)

This regulation specifies the data averaging requirements for continuous monitoring systems subject to 40 CFR Part 60.

40 CFR 60.4

This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR 60.62 (c)

Any affected facility, other than the kiln or clinker cooler may not discharge any gases which exhibit a 10% opacity or greater.

40 CFR 60.65

This regulation sets forth the recordkeeping and reporting requirements for the continuous opacity monitoring system (section (a)), visible emissions reports (section (b)), and malfunction reports (section (c)). Section (d) of this part also allows alternative means of compliance surveillance if approved by the State.

40 CFR 60.7 (b)

This regulation requires the owner or operator to maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the source or control equipment or continuous monitoring system.

40 CFR 60.7 (c)

This requirement details the information to be submitted in excess emissions and monitoring systems



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performance reports which must be submitted at least semi-annually for sources with compliance monitoring systems.

40 CFR 60.7 (d)

This condition specifies the required information and format for a summary report form and details when either a summary form and/or excess emissions reports are required.

40 CFR 60.7 (f)

This condition specifies requirements for maintenance of files of all measurements, including continuous monitoring system (CMS), monitoring device, and performance testing measurements; all CMS performance evaluations; all CMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices for at least two years.

40 CFR 63.1342

This section provides general emission standards and operating limits for specific sources at Portland Cement Manufacturing Facilities. Table 1 provides a summary.

40 CFR 63.1343

This section contains the standards for kilns, clinker coolers, raw material dryers, and open clinker storage piles operated at portland cement manufacturing facilities subject to the requirements of 40 CFR 63 Subpart LLL.

40 CFR 63.1343 (b) (1)

This section provides particulate matter emission limitations for certain operations (kilns and in-line kiln/raw mills) at existing, reconstructed, or new brownfield/major sources.

40 CFR 63.1343 (c)

This section describes the requirements for the owner or operator of an open clinker storage pile located at a portland cement manufacturing facility subject to the requirements of 40 CFR 63 Subpart LLL.

40 CFR 63.1345

40 CFR 63.1346

40 CFR 63.1346 (g)

This section describes the operating limits for portland cement kilns during periods of start-up and



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shutdown.

40 CFR 63.1347

This section describes the operation and maintenance plan requirements for portland cement kilns.

40 CFR 63.1348 (a)

This section describes the initial performance testing requirements for portland cement plants subject to 40 CFR 63 Subpart LLL.

40 CFR 63.1348 (b)

This section describes the continuous monitoring requirements for portland cement plants subject to the requirements of 40 CFR 63 Subpart LLL.

40 CFR 63.1348 (b) (9)

40 CFR 63.1348 (c)

This section describes the performance testing requirements for changes in operations at portland cement plants that are subject to the requirements of 40 CFR 63 Subpart LLL.

40 CFR 63.1348 (d)

This section states that it is the general duty of the owner or operator of a portland cement plant subject to the requirements of 40 CFR 63 Subpart LLL to operate the plant in such a way as to minimize emissions.

40 CFR 63.1349 (a)

This section outlines various information to be documented when determining compliance with emission limits.

40 CFR 63.1349 (b) (1)

Performance tests for determining if the facility is meeting particulate matter emission limits are specified in this section along with emission rate equations.

40 CFR 63.1349 (b) (3)



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Performance tests for determining if the facility is meeting dioxin/furan emission limits are specified in this section.

40 CFR 63.1349 (b) (4)

This section describes the performance testing requirements for portland cement plants that are subject to a limitation on emissions of total hydrocarbons under 40 CFR 63 Subpart LLL.

40 CFR 63.1349 (b) (5)

This section describes the performance testing requirements for portland cement plants that are subject to a mercury limitation under 40 CFR 63 Subpart LLL.

40 CFR 63.1349 (b) (6)

This section describes the performance testing requirements for portland cement plants that are subject to a hydrogen chloride limitation under 40 CFR 63 Subpart LLL.

40 CFR 63.1349 (c)

This requires the owner or operator to repeat performance tests every five years.

40 CFR 63.1349 (d)

This section describes the reporting requirements for performance tests conducted pursuant to 40 CFR 63 Subpart LLL.

40 CFR 63.1350 (a)

The owner or operator of a portland cement plant subject to this regulation is required to provide a written operations and maintenance plan. This plan includes procedures for proper operation, corrective action should a problem occur, inspection procedures, and periodic monitoring of sources subject to opacity standards.

40 CFR 63.1350 (b) (1)

40 CFR 63.1350 (d)

This section contains the monitoring requirements for facilities that need to monitor clinker production in order to demonstrate compliance with 40 CFR 63 Subpart LLL.



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40 CFR 63.1350 (i)

The owner or operator subject to dioxin and furan emission limits under this subpart shall inspect the components of the combustion system at least once per year.

40 CFR 63.1350 (k)

This section describes the mercury monitoring requirements for portland cement plants that are subject to 40 CFR 63 Subpart LLL.

40 CFR 63.1350 (m)

40 CFR 63.1350 (p)

This condition requires any facility that opts to use a fly ash derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control to demonstrate that the use of this fly ash does not increase mercury emissions. They must obtain daily fly ash samples, composites monthly, and analyze the samples for mercury

40 CFR 63.1353

Notification requirements including performance tests, visible emission observations, and compliance status, among other things, are specified in this section.

40 CFR 63.1354

The owner or operator of affected facilities have to comply with the reporting requirements of this section. These reporting requirements outline what information needs to be provided in the reports, and when the reports need to be submitted.

40 CFR 63.1355

Recordkeeping requirements specify that the owner or operator shall maintain files of all required information on site for inspection and review purposes. Generally, the files are kept for a minimum of five years.

40 CFR Part 64

The federal Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64, requires monitoring of control device, capture system, and/or process parameters to provide a reasonable assurance of compliance with emission limitations or standards. It applies to emission units that use a control device to comply with certain standards and limitations and that have potential pre-control device emissions equal to or greater than a major source threshold.

Acid Rain program requirements; stratospheric ozone protection requirements; post-1990 New Source Performance Standards, Emission Guidelines, and National Emission Standards for Hazardous Air Pollutants; and some other limitations are exempt from CAM. However, many of the exempt requirements are subject to less stringent periodic monitoring under 40 CFR Part 70 and 6NYCRR Subpart 201-6.



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40 CFR Part 82, Subpart E

Subpart E of 40 CFR Part 82, requires warning statements on containers of, and products containing or manufactured with, certain ozone-depleting substances, pursuant to section 611 of the Clean Air Act Amendments of 1990. Specific requirements are detailed in sections 82.106 thru 82.124.

6 NYCRR 201-6.4 (f)

This section describes the operational flexibility protocol proposed by the facility. The protocol will allow the facility owner or operator to make certain changes at the facility without the need for a permit modification. Changes made pursuant to the protocol must be approved by the Department, and will be rolled into the permit during the next renewal or modification.

6 NYCRR 202-1.3

This regulation requires that any emission testing, sampling and analytical determination used to determine compliance must use methods acceptable to the department. Acceptable test methods may include but are not limited to the reference methods found in 40 CFR Part 60 appendix A and Part 61, appendix B. Alternate methods may be also be used provided they are determined to be acceptable by the department. Finally, unless otherwise specified, all emission test reports must be submitted within 60 days after completion of testing.

6 NYCRR 202-1.5

This rule prohibits the concealment of an emission by the use of air or other gaseous diluents (diluting agents) to achieve compliance with an emission standard which is based on the concentration of a contaminant in the gases emitted through a stack.

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 provisions 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 212-2.1

Emissions of air contaminants to the outdoor atmosphere from any process emission



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source or emission point are restricted as follows:

(a) For an air contaminant listed in section 212-2.2 table 2 – high toxicity air contaminant list, of this Subpart, the facility owner or operator shall either limit the actual annual emissions from all process operations at the facility so as to not exceed the mass emission limit listed for the individual HTAC; or demonstrate compliance with the air cleaning requirements for the HTAC as specified in subdivision 212-2.3(b), table 4 – degree of air cleaning required for non-criteria air contaminants, of this Subpart for the environmental rating assigned to the contaminant by the department.

(b) For any air contaminant not listed on table 2, unless it is a solid particulate described in subdivision (c) of this section, the facility owner or operator shall not allow emissions of an air contaminant to violate the requirements specified in subdivision 212-2.3(a), table 3 – degree of air cleaning required for criteria air contaminants of this Subpart, or subdivision 212-2.3(b), table 4 – degree of air cleaning required for non-criteria air contaminants of this Subpart, as applicable, for the environmental rating assigned to the contaminant by the department.

(c) For a solid particulate assigned an environmental rating of B or C emitted from a process emission source, the facility owner or operator shall not allow emissions of particulate to exceed the requirements specified in section 212-2.4 of this Subpart.

6 NYCRR 212-2.4 (a)

Particulate emissions from any process emission source, which received a B or C Environmental Rating, and for which an application was received by the department prior to July 1, 1973 are restricted to 0.15 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis.

6 NYCRR 212-2.4 (b)

Particulate emissions from any process emission source, which received a B or C Environmental Rating, and for which an application was received by the department after July 1, 1973 are restricted to 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis.

6 NYCRR 220-1.4 (a)

6 NYCRR 220-1.4 (b)

The emissions from a clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor points, bagging,



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and bulk loading and unloading systems which commenced construction or modification after August 17, 1971 shall not have a six-minute average opacity equal to or greater than 10 percent.

6 NYCRR 220-1.4 (c)

Corrective measures must be applied to any area, parking lot, clinker gallery, railcar loading shed, conveyor tunnel, access road, stockpile, building opening or refuse disposal area, at a portland cement plant that has the potential to emit visible emissions for one continuous hour or longer.

6 NYCRR 220-1.6 (b)

A reasonably available control technology (RACT) analysis shall be submitted to the department for emissions of oxides of nitrogen (NO_x) from the kiln that proposes a RACT emission limit(s), and identifies the procedures and monitoring equipment to be used to demonstrate compliance with the proposed RACT emission limit(s). The RACT emissions limit(s) shall be expressed in pounds of NO_x per ton of clinker produced.

6 NYCRR 220-1.7

6 NYCRR 220-1.7 (b)

A continuous opacity monitor must be installed, maintained, calibrated, and operated for all dry process cement kilns and all clinker cooler subject to the opacity requirements of subdivision (a) or (b) of section 220-1.4.

6 NYCRR 225-1.2 (c)

Sulfur-in-fuel limitations for solid fuel fired facilities on or after July 1, 2014.

6 NYCRR 225-2.4 (a)

This regulation allows a source owner or operator to burn Waste Fuels A or B at their facility, provided the following information is submitted and is acceptable to the Department:

1. a demonstration that the emissions will not be above the ambient air quality standards
2. an analysis of the fuel to be burned is submitted and accepted by the Department
3. a demonstration of compliance with 40 CFR Part 761 regarding the PCB level in the fuel.



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6 NYCRR 249.3 (a)

6 NYCRR 249.3(a) - requires control of SO2 from the kiln to meet BART requirements.

6 NYCRR 249.3 (d)

The kiln at Lehigh has been determined to be subject to control requirements under the BART rule.

6 NYCRR 249.3 (f)

The emission limits in this permit for NOx, SO2, and/or PM10 established under Part 249 are based on New York's Best Available Retrofit Technology (BART) Rule (6 NYCRR Part 249), are effective on the date of this permit's issuance, and are state enforceable. Federal enforceability of these facility-specific requirements is effective on the date on which these emission limits, as submitted to EPA as a revision to New York State's Implementation Plan for Regional Haze, are published in the Federal Register.

6 NYCRR Subpart 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is

Compliance Certification

Summary of monitoring activities at LEHIGH NORTHEAST CEMENT COMPANY:

| Location Facility/EU/EP/Process/ES | Cond No. | Type of Monitoring |
|---|-----------------|---|
| FACILITY | 44 | record keeping/maintenance procedures |
| FACILITY | 45 | record keeping/maintenance procedures |
| FACILITY | 46 | record keeping/maintenance procedures |
| FACILITY | 47 | record keeping/maintenance procedures |
| FACILITY | 39 | record keeping/maintenance procedures |
| FACILITY | 40 | record keeping/maintenance procedures |
| FACILITY | 41 | record keeping/maintenance procedures |
| FACILITY | 42 | record keeping/maintenance procedures |
| FACILITY | 43 | record keeping/maintenance procedures |
| FACILITY | 48 | monitoring of process or control device parameters as surrogate |
| FACILITY | 49 | record keeping/maintenance procedures |
| FACILITY | 51 | record keeping/maintenance procedures |
| FACILITY | 52 | intermittent emission testing |
| FACILITY | 53 | intermittent emission testing |
| FACILITY | 54 | intermittent emission testing |
| FACILITY | 55 | intermittent emission testing |
| FACILITY | 56 | record keeping/maintenance procedures |
| FACILITY | 57 | monitoring of process or control device parameters |



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| | | |
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| | | as surrogate |
| FACILITY | 58 | record keeping/maintenance procedures |
| FACILITY | 59 | record keeping/maintenance procedures |
| FACILITY | 60 | record keeping/maintenance procedures |
| FACILITY | 61 | record keeping/maintenance procedures |
| FACILITY | 62 | record keeping/maintenance procedures |
| FACILITY | 63 | record keeping/maintenance procedures |
| FACILITY | 64 | record keeping/maintenance procedures |
| FACILITY | 65 | record keeping/maintenance procedures |
| FACILITY | 66 | record keeping/maintenance procedures |
| FACILITY | 67 | record keeping/maintenance procedures |
| FACILITY | 70 | record keeping/maintenance procedures |
| FACILITY | 71 | record keeping/maintenance procedures |
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| FACILITY | 74 | record keeping/maintenance procedures |
| FACILITY | 75 | record keeping/maintenance procedures |
| FACILITY | 76 | record keeping/maintenance procedures |
| FACILITY | 77 | record keeping/maintenance procedures |
| FACILITY | 78 | record keeping/maintenance procedures |
| FACILITY | 79 | record keeping/maintenance procedures |
| FACILITY | 80 | record keeping/maintenance procedures |
| FACILITY | 5 | record keeping/maintenance procedures |
| FACILITY | 6 | record keeping/maintenance procedures |
| FACILITY | 23 | record keeping/maintenance procedures |
| FACILITY | 24 | intermittent emission testing |
| FACILITY | 7 | record keeping/maintenance procedures |
| FACILITY | 29 | monitoring of process or control device parameters as surrogate |
| FACILITY | 30 | monitoring of process or control device parameters as surrogate |
| FACILITY | 97 | record keeping/maintenance procedures |
| FACILITY | 31 | intermittent emission testing |
| FACILITY | 32 | intermittent emission testing |
| FACILITY | 33 | intermittent emission testing |
| 0-UKILN/01068 | 86 | continuous emission monitoring (cem) |
| 0-UKILN/01122 | 101 | monitoring of process or control device parameters as surrogate |
| FACILITY | 34 | work practice involving specific operations |
| FACILITY | 98 | work practice involving specific operations |
| FACILITY | 99 | record keeping/maintenance procedures |
| FACILITY | 35 | record keeping/maintenance procedures |
| 0-UKILN/01070 | 88 | monitoring of process or control device parameters as surrogate |
| FACILITY | 36 | work practice involving specific operations |
| FACILITY | 37 | intermittent emission testing |
| FACILITY | 38 | record keeping/maintenance procedures |
| 0-UKILN/01070 | 89 | record keeping/maintenance procedures |
| 0-UKILN/01122 | 93 | record keeping/maintenance procedures |

Basis for Monitoring

6NYCRR 201-6.4(f)(2) - This is an Op-Flex Plan. The objective of this Plan is to allow Lehigh Northeast Cement Company perform trial burns of alternate fuels and/or raw materials with DEC approval.

This plan does not address those types of changes that would invoke the Part 201-6.6(d) Significant Permit Modification". Rather, it addresses changes that qualify, as minor modifications pursuant to the criteria specified by 6 NYCRR, Part 201-6.6(c)(1)(i & ii):

- (i) Do not violate any applicable requirement;
- (ii) Do not involve significant changes to existing monitoring, reporting, or record keeping



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requirements in the permit and are not otherwise a significant change in the permit.

6NYCRR 212-2.1 – This is an air toxics provision which specifies control of high toxic emissions from the kiln and/or clinker cooler. No other Process Sources at Lehigh emit “A” rated contaminants.

6NYCRR 212-1.6(a) & 212-2.4(a) - Daily visible emissions (V.E.) observations are used as a surrogate to determine if there is a problem with the quarry crusher and/or its baghouse. If VE are observed for two consecutive days and corrective measures do not bring them back to normal, a Method 9 must be performed. Failure to meet the 20% limit with the M9 testing will trigger the need for stack testing to demonstrate compliance with the 0.15 gdsf particulate emissions requirement for the affected source.

6 NYCRR 212-2.4(a) – All Process Sources at Lehigh, other than the Kiln and Clinker Cooler emission points (1068, 1070 & 1122), constructed prior to July 1, 1973 are subject to a daily visible emissions (VE) requirement. If VE are observed and corrective measures do not eliminate them within 2 days, then this must be reported to NYS DEC and they must perform a Method 9 to demonstrate compliance with the 10% opacity limit under 40 CFR 60.62(c). The Quarry crusher is subject to 20% opacity under Part 212. Failure to meet the 10% or 20% opacity will be a violation of 60.62(c) or 212, as applicable, and trigger the need for a stack test to demonstrate compliance with the 0.15 gdsf under 212-2.4(a).

6 NYCRR 212-2.4(b) All Process Sources (constructed after July 1, 1973) are subject to a daily visible emissions (VE) requirement. If VE are observed and corrective measures do not eliminate them within 2 days, then this must be reported to NYS DEC and they must perform a Method 9 to demonstrate compliance with the 10% opacity limit under 40 CFR 60.62(c). Failure to meet the 10% opacity will be a violation of 60.62(c) and trigger the need for a stack test to demonstrate compliance with the 0.05 gdsf under 212-2.4(b).

6NYCRR 220-1.4(a) – The kiln is subject to 20% opacity with compliance to be determined by a continuous opacity monitor.

6 NYCRR 220-1.4(b) – The clinker cooler is subject to 10% opacity with compliance to be determined by a continuous opacity monitor.

6NYCRR 220-1.4(c) - Daily inspections and appropriate action as described in GFLC's "Fugitive Dust Control Plan", which is an attachment to this permit, are used to comply with the requirement to apply corrective measures to eliminate visible emissions which may occur for one continuous hour or longer from any area, parking lot, clinker gallery, rail car loading shed, conveyor tunnel, access road, stockpile, building opening, or refuse disposal area at a portland cement plant.

6NYCRR 220-1.6(b)(1) - The NO_x RACT limit is 2.88 lb/ton of clinker produced. Compliance with this limit also demonstrates compliance with the “Best Available Retrofit Technology” (BART) requirements under Part 249.3(a). Compliance is determined by continuous emissions monitoring.

6 NYCRR 220-1.7(b) – Requires records from the kiln & Clinker Cooler COMS be kept for 5 yrs.

6NYCRR 225-1.2(c) – This specifies the allowable sulfur content in coal based on a pound per mmBTU heat content. Coal is analyzed before being fed to the kiln.

6 NYCRR 249.3(a) - requires control of SO₂ from the kiln to meet BART requirements. SO₂ is



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controlled by lime slurry injection.

40 CFR 60.62(c) – requires that all portland cement processes subject to Subpart F, other than the kiln are subject to 10% opacity. Daily visible emissions (VE) observations are used as a surrogate to determine if there is a problem with the process and/or control device. If there are VE observed and corrective measures do not eliminate them within 2 days, then this must be reported to NYS DEC and a Method 9 must be performed to demonstrate compliance with the 10% opacity limit. Failure to meet the 10% opacity limit is a violation and must be reported to NYS DEC within 2 days.

6NYCRR 201-7 capping out of 40CFR 52-A - Daily visible emissions (VE) observations are used as a surrogate to determine if there is a problem with the process and/or control device. If VE are excessive and for two consecutive days and corrective measures do not bring them back to normal, then stack testing is required to demonstrate compliance with the 2.38 lb/hr (PM-10) and 2.83 lb/hr (PM) requirements for the affected sources.

6NYCRR 211.3 - This compliance monitoring activity is the "Schedule A" of an Order on Consent for resolution of the formation of a secondary plume with opacity in excess of the 20% opacity standard in 6 NYCRR 211.3.

40 CFR 60.65 – Contains the requirements for the reporting of excess emissions created as a result of the de-energization of the electrostatic precipitator on the kiln exhaust.

40 CFR 63 Subpart LLL – Lehigh is an Existing Area Source under this MACT regulation.