

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 3-5522-00087/00019 Renewal Number: 1



05/18/2007

Facility Identification Data

Name: LAFARGE NORTH AMERICA INC - BUCHANAN
Address: 350 BROADWAY
BUCHANAN, NY 10511-1010

Owner/Firm

Name: LAFARGE NORTH AMERICA INC
Address: 12950 WORLDGATE DR STE 500
HERNDON, VA 20170, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:

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Division of Air Resources:

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Air Permitting Contact:

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350 BROADWAY
BUCHANAN, NY 10511
Phone:9149303013

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.

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Summary Description of Proposed Project

Application for renewal of Air Title V Facility.

Attainment Status

LAFARGE NORTH AMERICA INC - BUCHANAN is located in the town of CORTLANDT in the county of WESTCHESTER.

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* | SEVERE 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

Lafarge produces bulk gypsum and wallboard. Gypsum rock is delivered to the facility by water borne vessel. Raw, reclaimed gypsum material, and synthetic gypsum material can be stockpiled or sent directly to processing.

The first step in the process is the crushing of the raw, reclaimed gypsum material and synthetic gypsum to reduce the maximum rock size. The material then proceeds to the calcining mill, where the free and chemically-bound water is removed.

The product of the calcining mill, called stucco, is then pneumatically conveyed to the wallboard plant. Here the stucco is conveyed to the pin mixer. Depending upon the type of wallboard being produced, appropriate additives, including water, are mixed with the stucco in the pin mixer to produce a slurry. The slurry is extruded between two sheets of paper on the forming line. While traveling down the length of the forming line, the slurry hardens into wet wallboard. At the end of the forming, the wet wallboard is cut into varying lengths and is inverted to protect the face of the board during drying.

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Finally, the boards are conveyed through the board dryer to drive off moisture and induce chemical bonding of the wallboard ingredients. The wallboard is finished with end saws and the exposed ends are sealed with tape. The wallboard is then stored until shipment off site.

Permit Structure and Description of Operations

The Title V permit for LAFARGE NORTH AMERICA INC - BUCHANAN 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.

LAFARGE NORTH AMERICA INC - BUCHANAN is defined by the following emission unit(s):

Emission unit 0000F2 - This emission unit represents all of the fugitive particulate sources associated with the rock hopper building which are not regulated by a NSPS.

It is further defined by the following process(es):

Process: 005 is located at Building Rock Hop. - This process includes all of the fugitive particulate sources from inside the rock hopper building. Particulate matter that does not settle out exits the building through wall openings, open doors and wall vents.

Emission unit 0000F3 - This emission unit represents all of the fugitive particulate sources associated with the crusher building which are not regulated by a NSPS.

It is further defined by the following process(es):

Process: 00A is located at Building Crusher - This process represents all of the fugitive particulate sources from inside the crusher building including screening, crushing and conveyance. Particulate matter that does not settle out exists the building through wall openings, open doors and wall vents.

Process: 00B is located at Building Crusher - This process includes fugitive particulate emissions

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associated with the crusher building outdoor baghouse screw conveyor.

Emission unit 0000F4 - This emission unit represents all of the fugitive particulate sources associated with the main plant building which are not regulated by a NSPS.

It is further defined by the following process(es):

Process: 00C is located at Building MAIN PLANT - This process includes indoor fugitive particulate matter emissions that may occur to some degree from every production process in the main plant building. The particulate matter that does not settle out exits through wall openings, open doors and wall vents.

Emission unit 0000F6 - This emission unit covers the new rock crusher and associated equipment located inside the crusher building. The rock crusher will be subject to NSPS Subpart OOO.

It is further defined by the following process(es):

Process: 06A is located at Building CRUSHER - This process comprise the crushing of rock inside the crusher building. Particulate matter is the pollutant associated with this process.

Emission unit 0000F7 - This emission unit covers the new reclaim system which includes a receiving hopper/feeder and conveyor system. This emission unit is located with in the crusher building. This unit started operation in January of 2006. This unit is subject to NSPS Subpart OOO.

It is further defined by the following process(es):

Process: 07A This process involves the conveying of reclaimed gypsum via the receiving hopper and the recaliming conveyor. This process may genarate emissions of particualte matter.

Process: 07B is located at Building CRUSHER - This process involves the metering on reclaim conveyor feeder system. Associated emission included particulate matter.

Emission unit 000E17 - This emission unit is comprised of the Raymond Mill No. 2 that vents to a dedicated baghouse. Raymond Mill No.2 is intended to operate for approximately 5 hours per week, 52 weeks a year (i.e. 260 hours per year) on average. Prior to the modification being completed, Raymond Mill No.2 will be exhausting through the ESP.

It must be noted that this unit may operate above the intended hours but it will always stay below the permitted cap which enables the facility to cap out of 231-2.

Emission unit 000E17 is associated with the following emission points (EP):

OPT17

It is further defined by the following process(es):

Process: 017 is located at Building MILL - This source serves the combustion and process emissions from the Raymond Mill No.2. The Raymond Mill No.2 has a design heat input of 7.5 MMbtu/hr and combusts natural gas. The Raymond Mill No.2 exhausts through a dedicated bag house. Raymond Mill No.2 is intended to operate for approximately 5 hours per week, 52 weeks per year (i.e. 260 hours per year) on average.

Prior to the modification being completed, Raymond Mill No.2 will be exhausting through the ESP if the bag house is undergoing maintenacne.

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Emission unit 000E30 - This emission unit consists of the Calcining Mill system. This system is designed to further grind gypsum while removing free moisture and chemically bound water from the gypsum, forming stucco.

Heat for the calcining reaction in the system is provided by Low NOx natural gas burner rated at 100 mmbtu/hr. The combined process stream consisting of stucco and combustion by-products is vented through a bag house system to separate stucco from gas.

Bag house performance is based on a pressure differential which is set in accordance with manufacturer's recommendations.

Emission unit 000E30 is associated with the following emission points (EP):

OPT30

It is further defined by the following process(es):

Process: 030 is located at Building MILL - This source serves the combustion and process emissions of the Calcining Mill system. The mill system has a design heat input rating of 100 MMbtu/hr and combusts natural gas.

Emission unit 000E31 - This emission unit consists of a stucco cooling system that vents to a dedicated baghouse.

Emission unit 000E31 is associated with the following emission points (EP):

OPT31

It is further defined by the following process(es):

Process: 031 is located at Building MILL - This process serves the stucco cooling system. In this process, ambient air is mixed with the hot stucco and pneumatically conveyed through a dedicated baghouse that separates the cooling air from the stucco.

Emission unit 000E33 - This emission unit comprise the end trim saw process and its associated controls.

Emission unit 000E33 is associated with the following emission points (EP):

OPT33

It is further defined by the following process(es):

Process: 033 is located at Building PLANT - This process comprises the sizing of wallboard to customary specification. The process may generate particulates which are vented to the atmosphere through a bag house.

Emission unit 000E38 - This emission unit consists of a board dryer.

Emission unit 000E38 is associated with the following emission points (EP):

OPT38

It is further defined by the following process(es):

Process: 038 is located at Building MILL - This emission unit serves the combustion and process emissions from the board dryer. The board dryer has a design heat input rating of 157 mmbtu/hr and

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combusts natural gas.

Emission unit 000E32 - This emission unit comprises all air contamination sources located in the "dry additives" area. This unit is included in this modification due to increasing its capacity.

Emission unit 000E32 is associated with the following emission points (EP):

OPT32

It is further defined by the following process(es):

Process: 032 is located at Building PLANT - This process comprises the addition of additives to the slurry that will become wall board. Its emissions are vented outdoors through a baghouse.

Emission unit 0000F1 - This emission unit represents all of the fugitive particulate emissions generated when the main conveyor conveys raw gypsum from vessels up to the storage sheds. This emission unit is included in the modification because the motor associated with the conveyor is replaced with a new one. The new motor operates at a higher speed thereby increasing the conveyor rate from 1,200 tons/hr to 1,850 tons/hr. This increase may result in an increase of particulate fugitives.

It is further defined by the following process(es):

Process: 000 is located at Building NONE - This process includes all of the fugitive particulates associated with ship unloading and stockpiling of raw or synthetic material. Fugitives are generated when the main conveyor conveys raw gypsum from vessels up to the storage sheds. This modification includes the replacement of the motor that drives the conveyor.

The new motor operates at a higher speed thus increasing the material transfer rate from 1,200 tons/hr to 1,850 tons/hr, resulting in increased emissions.

Process: 001 is located at Building NONE - This process includes all of the fugitive particulate sources from the unenclosed areas of the facility that are associated with management and/or processing of fresh or old reclaimed gypsum which are not regulated by a NSPS.

Process: 002 is located at Building NONE - This process includes all of the fugitive particulate sources from the unenclosed areas of the facility that are associated with mechanical conveyance of crushed rock or synthetic gypsum which are not regulated by a NSPS.

Process: 004 is located at Building NONE - This process includes all of the fugitive particulate sources from the unenclosed areas of the facility that are not associated with either ship unloading or synthetic or raw material stockpiling or with the management and/or processing of fresh or old reclaimed gypsum, or with the crusher building or with the mechanical conveyance of crushed rock or synthetic material, none of which are regulated by a NSPS.

Title V/Major Source Status

LAFARGE NORTH AMERICA INC - BUCHANAN is subject to Title V requirements. This determination is based on the following information:

The facility is major for NOx and particulate matter.

Program Applicability

The following chart summarizes the applicability of LAFARGE NORTH AMERICA INC -

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BUCHANAN with regards to the principal air pollution regulatory programs:

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

NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52) - 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 Part 231) - 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) - 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) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.



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NSPS New Source Performance Standards (40 CFR 60) - 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) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - 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) - 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 |
|-----------------|--------------------|
| 3275 | GYPSUM PRODUCTS |

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SCC Codes

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

| SCC Code | Description |
|-------------|---|
| 3-05-015-11 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Continuous Kettle: Calciner |
| 3-05-015-04 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Conveying |
| 3-05-015-20 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Drying Kiln |
| 3-05-015-13 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Impact Mill |
| 3-05-015-18 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Mixers/Conveyors |
| 3-05-015-03 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE NOT CLASSIFIED ** |
| 3-05-015-05 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE PRIMARY CRUSHING: GYPSUM ORE |
| 3-05-015-08 | MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Stockpile: Gypsum Ore |
| 3-05-040-30 | MINERAL PRODUCTS MINERAL PRODUCTS - MINING & QUARRYING OF NONMETALLIC MINERALS Primary Crusher |

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Series code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for

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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 |
| 000630-08-0 | CARBON MONOXIDE | | >= 100 tpy but < 250 tpy |
| 0NY100-00-0 | HAP | | > 0 but < 2.5 tpy |
| 007439-92-1 | LEAD (HAP) | | > 0 but < 10 tpy |
| 0NY210-00-0 | OXIDES OF NITROGEN | 80300 | |
| 0NY075-00-0 | PARTICULATES | | >= 100 tpy but < 250 tpy |
| 0NY075-00-5 | PM-10 | | >= 100 tpy but < 250 tpy |
| 007446-09-5 | SULFUR DIOXIDE | | > 0 but < 2.5 tpy |
| 0NY998-00-0 | VOC | | >= 10 tpy but < 25 tpy |

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6NYCRR Part 201-1.5

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

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

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

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

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(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 - 6NYCRR Part 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 6NYCRR 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 201-6.3(a)(4)

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

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

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

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

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

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

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

Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6NYCRR

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Part 201-6.5(a)(5)

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

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

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

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

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

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

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

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

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- 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 201-6.5(i)

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

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Item L: Permit Exclusion - ECL 19-0305

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

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

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

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.

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Regulatory Analysis

| Location Facility/EU/EP/Process/ES | Regulation | Short Description | Condition |
|---------------------------------------|------------------------|--|------------|
| FACILITY | ECL 19-0301 | Powers and Duties of the Department with respect to air pollution control | 44 |
| 0-000F6 | 40CFR 60-000.672 (e) | Rock, gravel, sand, and clay processing and conveying - standard for particulate matter | 32 |
| 0-000F7 | 40CFR 60-000.672 (e) | Rock, gravel, sand, and clay processing and conveying - standard for particulate matter | 33 |
| 0-00E30/0PT30 | 40CFR 60-UUU | Standards of performance for calciners and dryers in mineral industries | 39 |
| 0-00E30/0PT30 | 40CFR 60-UUU.732 (a) | Standards of performance for calciners and dryers in mineral industries standards for particulate matter | 40 |
| 0-00E31 | 40CFR 64 | COMPLIANCE ASSURANCE MONITORING | 41 |
| FACILITY | 40CFR 68 | Chemical accident prevention provisions | 21 |
| FACILITY | 40CFR 82-F | Protection of Stratospheric Ozone - recycling and emissions reduction | 22 |
| FACILITY | 6NYCRR 200.6 | Acceptable ambient air quality. | 1 |
| FACILITY | 6NYCRR 200.7 | Maintenance of equipment. | 10 |
| FACILITY | 6NYCRR 201-1.4 | Unavoidable noncompliance and violations | 45 |
| FACILITY | 6NYCRR 201-1.7 | Recycling and Salvage | 11 |
| FACILITY | 6NYCRR 201-1.8 | Prohibition of reintroduction of collected contaminants to the air | 12 |
| FACILITY | 6NYCRR 201-3.2 (a) | Exempt Activities - Proof of eligibility | 13 |
| FACILITY | 6NYCRR 201-3.3 (a) | Trivial Activities - proof of eligibility | 14 |
| FACILITY | 6NYCRR 201-6 | Title V Permits and the Associated Permit Conditions | 23, 30, 31 |
| FACILITY | 6NYCRR 201-6.5 (a) (4) | General conditions | 15 |
| FACILITY | 6NYCRR 201-6.5 (a) (7) | General conditions | |
| Fees 2 | | | |
| FACILITY | 6NYCRR 201-6.5 (a) (8) | General conditions | 16 |
| FACILITY | 6NYCRR 201-6.5 (c) | Permit conditions for Recordkeeping and Reporting of Compliance Monitoring | 3 |



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| | | | |
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| FACILITY | 6NYCRR 201-6.5(c)(2) | Permit conditions for Recordkeeping and Reporting of Compliance Monitoring | 4 |
| FACILITY | 6NYCRR 201-6.5(c)(3)(ii) | Permit conditions for Recordkeeping and Reporting of Compliance Monitoring | 5 |
| FACILITY | 6NYCRR 201-6.5(d)(5) | Compliance schedules | 17 |
| FACILITY | 6NYCRR 201-6.5(e) | Compliance Certification | 6 |
| FACILITY | 6NYCRR 201-6.5(f)(6) | Off Permit Changes | 18 |
| FACILITY | 6NYCRR 201-6.5(g) | Permit shield | 24 |
| FACILITY | 6NYCRR 201-7 | Federally Enforceable Emissions Caps | 25, 26, 27 |
| FACILITY | 6NYCRR 202-1.1 | Required emissions tests. | 19 |
| FACILITY | 6NYCRR 202-2.1 | Emission Statements - Applicability | 7 |
| FACILITY | 6NYCRR 202-2.5 | Emission Statements - record keeping requirements. | 8 |
| FACILITY | 6NYCRR 211.2 | General Prohibitions - air pollution prohibited. | 46 |
| FACILITY | 6NYCRR 211.3 | General Prohibitions - visible emissions limited | 20, 28 |
| 0-00E30/OPT30 | 6NYCRR 212.10 | NOx and VOC RACT required at major facilities | 37 |
| 0-00E38/OPT38 | 6NYCRR 212.10 | NOx and VOC RACT required at major facilities | 43 |
| 0-00E17 | 6NYCRR 212.3(b) | General Process Emission Sources - emissions from existing emission sources | 34 |
| 0-00E17/OPT17 | 6NYCRR 212.6 | Opacity Limitation | 35 |
| 0-00E31/OPT31 | 6NYCRR 212.6 | Opacity Limitation | 42 |
| FACILITY | 6NYCRR 215 | Open Fires | 9 |
| FACILITY | 6NYCRR 227.2(b)(1) | Particulate emissions. | 29 |
| 0-00E17/OPT17/017 | 6NYCRR 227-2.4(g) | Emission limitations for other combustion sources. | 36 |
| 0-00E30/OPT30 | 6NYCRR 227-2.4(g) | Emission limitations for other combustion sources. | 38 |
| FACILITY | 6NYCRR 231-2 | New Source Review in Nonattainment Areas and Ozone Transport Region | 26, 27 |

Applicability Discussion:

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

ECL 19-301.

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.

6NYCRR Part 200-.6

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

6NYCRR Part 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

6NYCRR Part 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.

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR Part 201-6

This regulation applies to those terms and conditions which are subject to Title V

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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.

6NYCRR 201-6.5(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.

6NYCRR 201-6.5(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.

6NYCRR 201-6.5(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.

6NYCRR Part 201-6.5(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.

6NYCRR Part 201-6.5(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.

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6NYCRR Part 201-6.5(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.

6NYCRR 201-6.5(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 semiannually.

6NYCRR Part 201-6.5(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.

6NYCRR 201-6.5(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.

6NYCRR Part 201-6.5(g)

Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

6NYCRR Part 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.

6NYCRR Part 202-2.1

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

6NYCRR Part 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.

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere

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which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

40 CFR Part 68.

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

40 CFR Part 82, Subpart F

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

Facility Specific Requirements

In addition to Title V, LAFARGE NORTH AMERICA INC - BUCHANAN has been determined to be subject to the following regulations:

40CFR 60-000.672 (e)

NSPS compliance is required.

40CFR 60-UUU

This regulation sets forth the limitations on emissions from calciners and dryers in mineral industries. The emissions of particulates from stacks at these facilities are limited to 0.040 grains per dry standard cubic foot. In addition, the opacity from these stacks may not exceed 10%.

40CFR 60-UUU.732 (a)

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This regulation limits the discharge of particulate matter to the atmosphere.

40CFR 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.

6NYCRR 201-7

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

6NYCRR 212 .10

Annual tune ups are required to maintain compliance.

6NYCRR 212 .3 (b)

This rule requires existing sources (in operation on or before July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which Permissible Emission Rate is Based on Process Weight, to be limited to a particulate emission rate not to exceed 0.15 grains per dry standard cubic foot.

6NYCRR 212 .6

Daily monitoring of opacity is required and shall not exceed 20%.

6NYCRR 227 .2 (b) (1)

This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6NYCRR 227-2.4 (g)

This subdivision is meant to require RACT on a significant combustion source which has no RACT provisions. This includes those units which have been "exempted." Rather than treat a significant source that falls below the size cutoffs of other subdivisions in this section as requiring no control, if the unit emits over 3 lb/hr uncontrolled or more than 15 lb./day.

As an example, a 300 hp internal combustion engines which is uncontrolled is exempt from needing a permit upstate. However, this unit emits about 7 lb/hr. This unit is a significant source of NOx and should therefore have RACT applied.



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6NYCRR 231-2

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

Non Applicability Analysis

List of non-applicable rules and regulations:

| Location Facility/EU/EP/Process/ES | Short Description | Regulation |
|---|--|---------------------|
| 0-00E38 | Standards of performance for calciners and dryers in mineral industries | 40CFR 60-UUU |
| Reason: This NSPS is not applicable to this board dryer which is considered to be a "tunnel dryer" which is exempt under 40 CFR 60.730 (b). | | |
| 0-00E38 | Standards of performance for calciners and dryers in mineral industries standards for particulate matter | 40CFR 60-UUU.732(a) |
| Reason: This NSPS is not applicable to this board dryer which is considered to be a "tunnel dryer" which is exempt under 40 CFR 60.730 (b). | | |

NOTE: Non-applicability determinations are cited as a permit condition under 6 NYCRR Part 201-6.5(g). This information is optional and provided only if the applicant is seeking to obtain formal confirmation, within an issued Title V permit, that specified activities are not subject to the listed federal applicable or state only requirement. The applicant is seeking to obtain verification that a requirement does not apply for the stated reason(s) and the Department has agreed to include the non-applicability determination in the issued Title V permit which in turn provides a shield against any potential enforcement action.

Compliance Certification

Summary of monitoring activities at LAFARGE NORTH AMERICA INC - BUCHANAN:

| Location Facility/EU/EP/Process/ES | Type of Monitoring | Cond No. |
|---|---|-----------------|
| 0-000F6 | monitoring of process or control device parameters as surrogate | 32 |
| 0-000F7 | monitoring of process or control device parameters as surrogate | 33 |
| 0-00E30/0PT30 | monitoring of process or control device parameters as surrogate | 39 |
| 0-00E30/0PT30 | monitoring of process or control device parameters as surrogate | 40 |
| 0-00E31 | record keeping/maintenance procedures | 41 |
| FACILITY | record keeping/maintenance procedures | 5 |
| FACILITY | record keeping/maintenance procedures | 6 |



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| FACILITY | work practice involving specific operations | 26 |
| FACILITY | record keeping/maintenance procedures | 27 |
| FACILITY | record keeping/maintenance procedures | 7 |
| FACILITY | monitoring of process or control device parameters as surrogate | 28 |
| 0-00E30/0PT30 | record keeping/maintenance procedures | 37 |
| 0-00E38/0PT38 | record keeping/maintenance procedures | 43 |
| 0-00E17 | monitoring of process or control device parameters as surrogate | 34 |
| 0-00E17/0PT17 | monitoring of process or control device parameters as surrogate | 35 |
| 0-00E31/0PT31 | monitoring of process or control device parameters as surrogate | 42 |
| FACILITY | intermittent emission testing | 29 |
| 0-00E17/0PT17/017 | record keeping/maintenance procedures | 36 |
| 0-00E30/0PT30 | record keeping/maintenance procedures | 38 |

Basis for Monitoring

This is major facility whose major emissions are NO_x, Particulates and VOC. The facility has a Title V permit which is renewed.