



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

**TITLE V/STATE OPERATING PERMIT**

Issue Date: May 31, 2016

Effective Date: February 5, 2018

Revision Date: February 5, 2018

Expiration Date: [REDACTED]

Revision Type: Modification, Significant

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

**TITLE V Permit No: 14-00002**

Federal Tax Id - Plant Code: 25-1527520-1

**Owner Information**

Name: GRAYMONT PA INC  
Mailing Address: 965 E COLLEGE AVE  
PLEASANT GAP, PA 16823-6823

**Plant Information**

Plant: GRAYMONT PA INC/PLEASANT GAP, CON-LIME & BELLEFONTE PLTS  
Location: 14 Centre County 14931 Spring Township  
SIC Code: 3274 Manufacturing - Lime

**Responsible Official**

Name: ERIC STOVER  
Title: PLANT MANAGER  
Phone (814) 355 - 4761

**Permit Contact Person**

Name: JOHN MAITLAND  
Title: U.S. EHS MANAGER  
Phone: (814) 353 - 2106

[Signature] \_\_\_\_\_  
MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION

Pages: 2-102                      Completely Redacted

Pages: 105-110                      Completely Redacted

Pages: 115-128                      Completely Redacted

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**SECTION D. Source Level Requirements**

[REDACTED]

[REDACTED]

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this permit condition is also derived from 25 Pa. Code Section 129.99]

(a) The permittee shall not permit emission into the outdoor atmosphere of NO<sub>x</sub> from Source ID P408 (kiln 6) in such a manner that the hourly NO<sub>x</sub> emission rate exceeds 205 pounds per hour based on 30-day average, rolling by 1 day as monitored by a Department-certified continuous emissions monitoring system (CEMS).

(b) The permittee shall not permit emission into the outdoor atmosphere of NO<sub>x</sub> from Source ID P408 (kiln 6) in such a manner that the NO<sub>x</sub> emissions exceed 767 tons per year based on 12-month sum, rolling by 1 month as monitored by a Department-certified CEMS.

Fuel Restriction(s).

[REDACTED]



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[REDACTED]

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[REDACTED]

# 028 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

[Authority for this permit condition is also derived from 25 Pa. Code Sections 129.99 and 129.100]

(a) A 30-day rolling average NOx emission rate for the applicable RACT emission limitation shall be calculated by the permittee for Source ID P408 for each consecutive operating day.

(b) Each 30-day rolling average NOx emission rate for Source ID P408 shall include the NOx emissions that occur during the entire operating day, including emissions from start-ups, shutdowns and malfunctions.

#### IV. RECORDKEEPING REQUIREMENTS.

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**SECTION D. Source Level Requirements**

[REDACTED]

# 034 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this permit condition is also derived from 25 Pa. Code Sections 129.99 and 129.100]

The permittee shall keep records for Source ID P408 to demonstrate compliance with the RACT emission limitations in the following manner:

- (1) The records shall include sufficient data and calculations to demonstrate that the requirements are met.
- (2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

[REDACTED]

**SECTION D. Source Level Requirements**

~~shutdown and malfunction.~~

~~(c) Initial quarterly reports following system certification shall be submitted to the Department within 35 days following the date upon which the Department notifies the permittee, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standard(s).~~

~~(d) Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.~~

~~(e) Failure to submit required reports of continuous emission monitoring within the time periods specified in this permit condition, shall constitute violations of this Permit, unless approved in advance by the Department in writing.~~

~~(f) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.~~

**# 036 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall comply with the applicable reporting requirements pertaining to Source ID P408, as specified in 40 CFR Sections 60.343, 63.7130 and 63.7131.

**VI. WORK PRACTICE REQUIREMENTS.**

**# 037 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall keep on hand a sufficient quantity of spare bags for the ID C408 fabric collector associated with Source ID P408, in order to be able to immediately replace any bags that are torn or deteriorated. The spare bags shall meet the specifications as provided in the application, including supplemental information, for Plan Approval 14-00002A.

**# 038 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this streamlined permit condition is also derived from 40 CFR 63.7090(b)]

Source ID P408 shall never be operated without simultaneous operation of the ID C408 fabric collector.

**# 039 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR Section 63.7090(b)]

The permittee shall maintain the ID C408 fabric collector associated with Source ID P408 such that the 6 minute average opacity for any 6 minute block period does not exceed 15 percent.

**# 040 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR Sections 63.7090(b)]

The permittee shall inspect the ID C408 fabric collector including its capture system at least once each calendar year.

**# 041 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall operate and maintain the ID C408 fabric collector in accordance with the procedures and requirements in the OM&M plan, as required by 40 CFR Section 63.7100. Implementation of corrective action is required after any instances in which the opacity is approaching 10%, as continuously monitored by the COMS read-out inside the kiln operator room.

**# 042 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

(l) The permittee shall conduct tune-ups on the kiln preheat burner associated with Source ID P408, and maintain and operate the preheat burner in accordance with the burner manufacturer's recommended specifications and instructions.



**SECTION D. Source Level Requirements**

The tune-ups shall be conducted at a frequency as recommended by the manufacturer, and include the following procedures, at least:

- (a) Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled kiln shutdown);
- (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled kiln shutdown);

(II) After the performance of the first tune-up, the permittee shall conduct subsequent tune-ups within one year after the previous tune-up or as recommended by the manufacturer.

**VII. ADDITIONAL REQUIREMENTS.****# 043 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Source ID P408 is Kiln No. 6, located at the Pleasant Gap plant, which is a 1,200 ton per day rotary lime kiln that is equipped with a preheater and a 240 million Btu per hour coal/petroleum coke fired burner. Kiln No. 6 is fired with No. 2 fuel oil or pipeline quality natural gas during periods of preheat. The air contaminant emissions shall be controlled by a pulse jet fabric collector, designated as 326-PDC-660, which is ID C408 or sometimes referenced herein as the ID C408 fabric collector.

(b) ID C408 is a F.L. Smidth, suction type, pulse jet fabric collector which shall have a minimum fabric area of 48,833 square feet and shall not handle more than 155,000 actual cubic feet per minute of effluent gas from Source ID P408, except for instances in which a compartment is taken offline for any inspection and/or maintenance associated with implementation of corrective action.

**# 044 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Source ID P408 is subject to the National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants as codified in 40 CFR Part 63 Subpart AAAAA. The permittee shall comply with the applicable provisions pertaining to Source ID P408, as specified in 40 CFR Sections 63.7080 through 63.7143.

**# 045 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Source ID P408 is subject to the Standards of Performance for Lime Manufacturing Plants as codified in 40 CFR Part 60 Subpart HH. The permittee shall comply with the applicable requirements pertaining to Source ID P408, as specified in 40 CFR Sections 60.340 through 60.344.

**# 046 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Source ID P408 is subject to Compliance Assurance Monitoring (CAM) as codified in 40 CFR Part 64. The permittee shall comply with the applicable provisions pertaining to Source ID P408, as specified in 40 CFR Sections 64.1 through 64.10. Applicable monitoring to Source ID P408 as required herein pursuant to 40 CFR Part 63 Subpart AAAAA satisfies the monitoring required in the CAM requirement, according to 40 CFR Section 64.4(b).

**\*\*\* Permit Shield in Effect. \*\*\***



## SECTION D. Source Level Requirements

Source ID: P413

Source Name: LIME KILN NO. 7 [PG]

Source Capacity/Throughput:



### I. RESTRICTIONS.

#### Emission Restriction(s).

##### # 001 [25 Pa. Code §123.24]

###### General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million (1 hr block average), by volume, dry basis.

##### # 002 [25 Pa. Code §123.41]

###### Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

##### # 003 [25 Pa. Code §127.441]

###### Operating permit terms and conditions.

Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the ammonia emissions from Source ID P413 shall not exceed 18.3 pounds per hour, until a final limit is established. Compliance with the ammonia emission restriction shall be evaluated based upon stack testing done in accordance with the Department Stack Testing Manual, and approved by the Department.

##### # 004 [25 Pa. Code §127.441]

###### Operating permit terms and conditions.

Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the hydrogen chloride emissions from Source ID P413 shall not exceed 25.0 pounds per hour, until a final limit is established. Compliance with the hydrogen chloride emission restriction shall be evaluated based upon stack testing done in accordance with the Department Stack Testing Manual, and approved by the Department.

##### # 005 [25 Pa. Code §127.441]

###### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

The air contaminant emissions from Source ID P413 shall not exceed the following limitations.

DATA						
Pollutant	Units	Moist. %	O <sub>2</sub>	Sub	Violation Standard	Averaging Period
						Variable

## SECTION D. Source Level Requirements

NOx	lbs/hr	NA	NA	Yes	>	179	30-day average, rolling by 1 day	NO
NOx	tons	NA	NA	Yes	>	709	12-month sum, rolling by 1 month	NO
CO	lbs/hr	NA	NA	No	>	1800	1-hour average, block	NO
CO	tons	NA	NA	Yes	>	1150	12-month sum, rolling by 1 month	NO
SO2	lbs/hr	NA	NA	Yes	>	92.83	3-hour average, block	NO
SO2	tons	NA	NA	Yes	>	213	12-month sum, rolling by 1 month	NO

NA is not applicable

### # 006 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the particulate matter emissions from Source ID P413 shall not exceed 0.10 pound per ton of stone feed (lb/tsf) and the particulate matter concentration of the exhaust from the ID C413B fabric collector shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf), as measured by 40 CFR Part 60 Appendix A, Method 5. Compliance with the filterable particulate matter emission restrictions in this permit condition shall be evaluated based upon stack testing approved by the Department and done in accordance with the Department's Stack Testing Manual, 40 CFR Part 60 Subpart HH, and 40 CFR Part 63 Subpart AAAAA.

[Compliance with the 0.10 lb/tsf emission restriction in this permit condition assures compliance with the applicable lb/tsf emission restrictions as specified in 40 CFR Sections 60.342 and 63.7090]

[Compliance with the 0.01 gr/dscf emission restriction in this permit condition assures compliance with the applicable gr/dscf emission restriction as specified in 25 Pa. Code Section 123.13.]

### # 007 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the volatile organic compound emissions from Source ID P413 shall not exceed 0.118 pound per ton of lime, until a final limit is established. Compliance with the volatile organic compound emission restriction shall be evaluated based upon stack testing done in accordance with the Department Stack Testing Manual, and approved by the Department.

### # 008 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The opacity of the exhaust from the ID C413B fabric collector shall not exceed 10%, as measured by the continuous opacity monitor, required herein.

### # 009 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Authority for this permit condition is also derived from 25 Pa. Code Section 129.99]

(a) The permittee shall not permit emission into the outdoor atmosphere of NOx from Source ID P413 (kiln 7) in such a manner that the hourly NOx emission rate exceeds 179 pounds per hour based on 30-day average, rolling by 1 day as monitored by a Department-certified continuous emissions monitoring system (CEMS).

(b) The permittee shall not permit emission into the outdoor atmosphere of NOx from Source ID P413 (kiln 7) in such a manner that the NOx emissions exceed 709 tons per year based on 12-month sum, rolling by 1 month as monitored by a Department-certified CEMS.

#### Fuel Restriction(s).

### # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The quality of the natural gas fired in Source ID P413 shall meet pipeline specification.

### # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the sulfur content of the No. 2 fuel oil fired in Source ID P413 shall not exceed 0.5% (by weight). Additionally, the No. 2 fuel oil shall be virgin fuel to which no reclaimed or waste oil or other waste materials have been added.

**SECTION D. Source Level Requirements**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**# 034 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

[Authority for this permit condition is also derived from 25 Pa. Code Sections 129.99 and 129.100]

(a) A 30-day rolling average NO<sub>x</sub> emission rate for the applicable RACT emission limitation shall be calculated by the permittee for Source ID P413 for each consecutive operating day.

(b) Each 30-day rolling average NO<sub>x</sub> emission rate for Source ID P413 shall include the NO<sub>x</sub> emissions that occur during the entire operating day, including emissions from start-ups, shutdowns and malfunctions.

**IV. RECORDKEEPING REQUIREMENTS.**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



# 042 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

[Authority for this permit condition is also derived from 25 Pa. Code Sections 129.99 and 129.100]

The permittee shall keep records for Source ID P413 to demonstrate compliance with the RACT emission limitations in the following manner:

- (1) The records shall include sufficient data and calculations to demonstrate that the requirements are met.
- (2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

[REDACTED]

[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## SECTION D. Source Level Requirements

### # 050 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall operate and maintain the ID C413B fabric collector in accordance with the procedures and requirements in the OM&M plan, as required by 40 CFR Section 63.7100. Implementation of corrective action is required after any instances in which the opacity is approaching 10% as continuously monitored by the COMS read-out inside the kiln operator room.

### # 051 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Section 63.7090(b)]

The permittee shall maintain the ID C413B fabric collector associated with Source ID P413 such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent.

### # 052 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

(I) The permittee shall conduct tune-ups on the kiln preheat burner associated with Source ID P413, and maintain and operate the preheat burner in accordance with the burner manufacturer's recommended specifications and instructions. The tune-ups shall be conducted at a frequency as recommended by the manufacturer, and include the following procedures, at least:

- (a) Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled kiln shutdown);
- (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled kiln shutdown);

(II) After the performance of the first tune-up, the permittee shall conduct subsequent tune-ups within one year after the previous tune-up or as recommended by the manufacturer.

## VII. ADDITIONAL REQUIREMENTS.

### # 053 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Source ID P413 is subject to the Standards of Performance for Lime Manufacturing Plants as codified in 40 CFR Part 60 Subpart HH. The permittee shall comply with the applicable requirements pertaining to Source ID P413, as specified in 40 CFR Sections 60.340 through 60.344.

### # 054 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Source ID P413 is subject to Compliance Assurance Monitoring as codified in 40 CFR Part 64. The permittee shall comply with the applicable provisions pertaining to Source ID P413, as specified in 40 CFR Sections 64.1 through 64.10. Applicable monitoring to Source ID P413 as required herein pursuant to 40 CFR Part 63 Subpart AAAAA satisfies the monitoring required in the CAM requirement, according to 40 CFR Section 64.4(b).

### # 055 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

(a) Source ID P413 is Kiln No. 7, located at the Pleasant Gap plant, which is a 1,050 ton per day rotary lime kiln that is equipped with a 280 million Btu per hour coal/petroleum coke fired burner. Kiln No. 7 is fired with No. 2 fuel oil or natural gas during periods of preheat.

(b) ID C413A is a semi-wet scrubbing system, consisting of the following equipment: