Shasta County Department of Resource Management
Air Quality Management District
1855 Placer Street, Suite 101
Redding, CA 96001
530-225-5674

Evaluation Report

Regarding Proposed Issuance of a
Title V Operating Permit to

Lehigh Cement Company

For Equipment Located at:

15390 Wonderland Blvd.,
Redding, CA 96003

September 17, 2014

Evaluation Report
Regarding Proposed Renewal of a
Title V Operating Permit
Lehigh Cement Company

Introduction

The District proposes to renew Title V operating permit #02-VP-07 to Lehigh Cement Company. This evaluation, with the renewed Title V operating permit, sets forth the legal and factual basis for the conditions contained in the proposed permit. This permit renewal is based on a renewal application received by the District from Lehigh Southwest Cement Company on October 30, 2012, an application addendum received on July 5, 2013, and a minor permit revision submission on November 6, 2013. The National Emissions Standards for Hazardous Air Pollutants will be incorporated into this permit as they exist after the U.S. Court of Appeals April 18, 2014 decision.

Facility Description

Lehigh Southwest Cement Company operates a Portland Cement plant in Redding, California. The plant was originally constructed in 1961 and modernized in 1981. The plant is considered a Federal Major Source and subject to the Title V permitting program due to the facility's potential to emit emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), particulate matter (PM10), and oxides of sulfur (SOx).

Since the initial evaluation for the issuance of the Title V permit in 2002, the following Authorities to Construct have been granted by the District:

Additional Packhouse Dust Collector, J-387, April 30, 2003
Automated Tire Handling System, March 3, 2004
Portable Silo, PRM-1, August 5, 2004
Quarry Drill, R-116, August 5, 2004
Secondary Fuel System, May 16, 2006
Diesel Particulate Filters, April 7, 2008.

Since the current Title V permit was issued on August 5, 2009, the following Authorities to Construct has been issued by the District:

Add a 67 horsepower diesel welder, March 3, 2011
Add a portable silo with baghouse, March 1, 2012
Add a kiln dust shuttling system, August 12, 2014.

The facility is considered a major source of hazardous air pollutants since it emits approximately 16 tons per year of hydrogen chloride. The facility is subject to the following National Emission Standards for hazardous Air Pollutants: 40 CFR Part 63, subpart A (General Provisions), Subpart LLL (Portland Cement Manufacturing) and ZZZZ (Stationary Reciprocating Internal Combustion Engines).

Equipment Description

The major equipment located at the Lehigh Southwest Cement Company, facility includes:

QUARRIES AND CRUSHING DEPARTMENT

Limestone Crusher (Allis Chalmers)
Shale Crusher
Raise Shaft Sly Dust Collector (B-13)
Limestone Belt Transfer Sly Dust Collector (B-25)
Shale Crusher Sly Dust Collector (C-36)
Secondary Crusher BHA Model 505-4220 Dust Collector (C-34)
Transfer Building Sly Dust Collector (C-38)
Preblending Dome Building
Shale 30" X 42" Jaw Crusher (C168)

RAW MILLING AND KILN DEPARTMENT

Cement In-Line Kiln/Raw Mill With Baghouse Dust Collector (S260)
Shredded Tire and Whole Tire Fuel Feed Systems, Automated
Raw Mix Tanks Dust Collector (C172)
Clinker Handling Dust Collector (G418-1)
Blending Silos Dust Collector (F173)
Raw Storage Silo Dust Collector (F184)
Pre-Heater Kiln Feed Bin Dust Collector (F350)
R-1 Silo Dust Collectors (G231 & G244)
Deep Bucket Conveyor Dust Collector (G425)
Roller Mill Rock Feeders Dust Collector (S210)
Bucket (meal) Elevator Dust Collector (S253)
Coal Unloading Facility
Coal Silo Dust Collector (G206)
Indirect Coal Firing System Dust Collector (G465)
Clinker Cooler (Closed System)
Secondary Fuel System (G228-F, G228-G)
One Hobart Mega-Arc Portable Welder
One Portable Silo with 330 PulseJet Baghouse
One Kiln Dust Shuttling System

FINISH MILL / GRINDING OPERATION

Finish Mills with Six (6) Dust Collectors:
EA87, EA92/93, EB147/148, EB142, E35/34, E30
C Mill Feed Elevator (E8) Dust Collector (E12)
C Mill Gypsum Weigh Feeder Dust Collector (E230)
C Mill Clinker Weigh Feeder Dust Collector (E231)
Gypsum Elevator Dust Collector (D34)
Synthetic Gypsum Loading System Dust Collectors (D122, D123)

STORAGE AND SHIPPING DEPARTMENT

Dust Collectors: J159, J162, J165, J168, J174, J321, J345, J350, J387, J390

As approved by the U.S. Environmental Protection Agency (U.S. EPA), all equipment exempted from permit, per Shasta County Air Quality Management District (District) Rule 2.5, is each considered an insignificant activity. These include the following:

Dust Collector J294 (G228-NA)

INTERNAL COMBUSTION ENGINES

(1) Detroit Model V-71 489 BHP Diesel Engine (ID. #R100A)

(5) Caterpillar Model ZW3516-CAT, 2132 BHP Diesel Engines (ID. #'s M151, M152, M153, M154, and M155) with Miratech Combikat Diesel Particulate Filters.

APPLICABLE FEDERAL REQUIREMENTS:

Based upon information submitted in the application and the district's review, the following applicable federal requirements apply to this facility:

SIP Requirements:

Rule 1:2 Definitions

This rule lists the definitions used throughout the District rule book. This rule is an administrative rule, and Lehigh Southwest Cement Company, certified compliance in the application. However, the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 2.1A Permits Required

These are the District's requirements for preconstruction permits and Permits to Operate. This rule is an administrative rule, and Lehigh Southwest Cement Company, certified compliance in the application. However, the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 2:5 Exemptions

This rule lists the types of devices or operations that the Air Pollution Control Officer (APCO) may exempt. This rule is addressed in Rule V, Attachment 1 (insignificant activities); therefore, the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 2:6 Open Burning (2:6.a.4.c & 2:6.b)

This rule lists the regulations required to conduct open burning operations. Lehigh Southwest Cement Company may conduct open burning operations at this facility and the requirements of this rule are included in the Title V permit at Condition F17.

Rule 2:7 Conditions for Open Burning

This rule lists the regulations required to conduct open burning operations. Lehigh Southwest Cement Company may conduct open burning operations at this facility and the requirements of

this rule are included in the Title V permit at Condition F17.

Rule 2:10 Action on Applications
This rule requires that an application for an Authority to Construct be filed in a manner and on the form prescribed by the APCO. This rule is an administrative rule and the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 2:12 Expiration of Applications
This rule requires that an Authority to Construct application will expire after the Permit to Operate has been issued or two years after the Authority to Construct was issued unless construction has commenced on the site. It also states that a Permit to Operate application will expire two years after being issued. This rule is an administrative rule and the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 2:14 Testing Facilities
This rule requires the operator to provide and maintain testing and sampling facilities as specified in the Authority to Construct or Permit to Operate. This requirement is included in the proposed Title V permit.

Rule 2:21 Defacing Permit (formerly Rule 2:24)
This rule requires that a permit not be defaced. This requirement is included in the proposed Title V permit.

Rule 2:23 Posting of Permit
This rule requires that the permit be posted. This requirement is included in the proposed Title V permit.

Rule 2:25 Public Records
This rule lists the requirements for what may or may not be public records and includes labeling requirements. This requirement is included in the proposed Title V permit.

Rule 3:1 Applicability of State Laws
This rule adopts by reference all state and federal rules for air contaminants. This requirement is included in the proposed Title V permit.

Rule 3:2 Specific Air Contaminants

This rule specifies limits for emissions of:
1) Combustion particulate matter in gr/dscf;
2) Particulate matter less than or equal to 10 microns in gr/dscf;
3) All other particulate matter in gr/dscf
4) Particulate matter process weight: maximum hourly emissions as a function of process weight in tons per hour;

5) Oxides of Sulfur (as SO2) in ppm;
6) Oxides of Nitrogen (as NO2) in ppm; and
7) Opacity.

The requirements of this rule are included in the proposed Title V permit. Other permit conditions found in this Title V permit limiting emissions from various emission sources within the cement plant are either more specific or more stringent than the emission limitations of this rule and, therefore, subsume the requirements of this rule for particular emission units. (See section below titled "New Source Performance Standards")

Rule 3:4 Industrial Use of Organic Solvents

This rule requires that a control device achieving 85 percent control be utilized unless listed lb/day emission limits of solvents into the atmosphere are met. This requirement is included in the proposed Title V permit.

Rule 3:6 Circumvention

This rule requires that emissions cannot be concealed by circumvention. This requirement is included in the proposed Title V permit.

Rule 3:9 Recommendations of Control Officer

This rule states that no recommendation of the APCO is a guarantee that the recommended device or process will result in compliance. This rule is an administrative rule, and the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 3:10 Excess Emissions

This rule requires certain reporting and corrective action in the case of emissions that exceed permit requirements. These requirements are included in the proposed Title V permit.

Rule 3:11 Local Rules

This rule states that any city or public agency, having authority to do so, may enact by ordinance more restrictive rules than contained in the District's rule book. Because this permit is a federal permit and does not concern local rules, the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 3:17 Organic Solvent Degreasing Operations

This rule required degreasing operations to meet design and operating practice specifications. This rule was repealed by the District when the District adopted a revised organic solvent operations rule.

The new Rule 3:17 has not been submitted for inclusion into the SIP and, therefore, the District believes that the environmental benefits are not such that this rule should be included in the proposed Title V permit.

Rule 5 Additional procedures for issuing permits to operate for sources subject to Title V

of the Federal Clean Air Act Amendments of 1990

This rule lists the requirements of the Title V program. All specific applicable requirements imposed by this rule are included in the proposed Title V permit.

40 CFR 82.161

This regulation requires that equipment utilizing ozone depleting substances be maintained by certified technicians. These requirements are included in the proposed Title V permit.

New Source Performance Standards (NSPS)

This facility is subject to 40 CFR Part 60 - Standards of Performance for New Stationary Sources, Subparts A and F. The requirements of these standards are included and are, in some instances, subsumed by other more stringent conditions in the proposed Title V permit.

The following applicability and streamlining demonstration for 40 CFR Part 60, Subpart F, Standards of Performance for Portland Cement Plants compares and identifies where a more stringent rule applies to this facility. These conditions are subsumed by the Part 63 MACT standards at Section 63.1356, *Sources with multiple emissions limit or monitoring requirements,* that was promulgated on February 12, 2013. The NSPS Rule, Standards of Performances for Portland Cement Plants released on February 12, 2013, states that the source should comply with the most stringent limit, either NSPS or MACT, and is not subject to the less stringent limit. The most stringent emission limit is included in this revised permit. Other areas where permit streamlining may be applicable are very limited due to various federal state and local requirements. All federal NSPS and NESHAPS requirements are listed as permit conditions. State opacity requirements remain on the mainstack for a detached plume and are subsumed to 10% to 20% opacity limits on other sources.

Section 60.62(a)(1) - Standards for particulate matter pertaining to Portland cement kilns, limits the discharge of gases which contain particulate matter in excess of 0.30 lb/ton dry feed material. Conditions B2 and B6 ensure that this limit is complied with during all operating scenarios. The Standards of Performance revised by EPA and dated February 12, 2013, set the new particulate matter limit at 0.07 pounds per ton of clinker effective on September 9, 2015, for any kiln that has undergone a modification. The Lehigh Southwest Cement kiln was modified in 1984. The new limit subsumes the District imposed conditions for particulate matter at 0.30lb/ton dry feed material, 17. 9 pounds per hour (maximum two-hour average) during roller mill bypass and 17.2 pounds per hour (maximum two-hour average) during roller mill operation. Conditions B2 and B6 will be expanded to include the requirements at this date. The coal mill is not considered an in-line coal mill since the coal mill uses exhaust gas near the kiln heat source but upstream from any kiln exhaust gases.

Section 60.62(b)(2) – *If the kiln and clinker cooler exhaust are combined for energy efficiency purposes and sent to a single control device, the appropriate kiln PM limit may be adjusted using the procedures in Section 63.1343(b) of the NESHAP rule*.

The kiln's clinker cooler exhaust is combined into the kiln at the burner. In order to accommodate the additional particulate resulting from the use of clinker cooler exhaust gases in the kiln and to control particulate emissions from the clinker cooler gases, the EPA allows an

Alternative PM Emissions limit. This limit is calculated using equation 1 of the MACT Standard at 40 CFR Part 63.1343:

$$PM_{alt} = (0.0060 \times 1.65)(Q_k + Q_c + Q_{ab} + Q_{cm})/(7000) \quad \text{(Eq. 1)}$$

Where:

PM_{alt} = Alternative PM emission limit for commingled sources.

0.006 = The PM exhaust concentration (gr/dscf) equivalent to 0.070 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.

1.65 = The conversion factor of ton feed per ton clinker.

Q_k = The exhaust flow of the kiln (dscf/ton feed).

Q_c = The exhaust flow of the clinker cooler (dscf/ton feed).

Q_{ab} = The exhaust flow of the alkali bypass (dscf/ton feed).

Q_{cm} = The exhaust flow of the coal mill (dscf/ton feed).

7000 = The conversion factor for grains (gr) per lb.

The comingled exhaust flow volume totals 116,000 scfm. The typical kiln feed rate is 99 ton/hr.

Therefore:

PM alt = (0.0060 x 1.65) ({116,000scfmx60min/hr}/99ton/hour feed)/7000 = 0.10 lb/ton clinker.

This PM alt limit will be incorporated into Conditions B2 and B6 and become effective on September 9, 2015. This PM alt limit contains the 0.07 lb/ton of clinker limit for the cement kiln and subsumes the 0.07 lb/ton of clinker for the clinker cooler limit.

Section 60.62(a)(3) - Standard for nitrogen oxide (NOx) for Portland cement kilns that have commenced construction, reconstruction, or modification after June 16, 2008. This cement kiln has not been constructed, reconstructed or modified after June 16, 2008. The existing district NOx limit of 5,940 pounds per day and 954 tons per year at condition B5 remains in the permit.

Section 60.62(a)(4) – Standard for SO2 for Portland Cement kilns that have commenced construction, reconstruction, or modification after June 16, 2008. This cement kiln has not been constructed, reconstructed or modified after June 16, 2008. The District SO2 limit contained at Condition B4 remains in the permit. This limit is 200 lbs/hr in any block three hour average, 2160 lbs/day in any calendar day, 553 lbs/day average in a calendar quarter, and 100.9 tons/year rolling 12 month average.

Section 60.62(b) – (1) Standard for PM emissions for a clinker cooler if construction or

reconstruction of the clinker cooler commenced after June 16, 2008, or if the clinker cooler has undergone a modification is 0.02 for construction/reconstruction and 0.07 pound/ton clinker for modification. Neither construction/reconstruction after June 16, 2008, nor a modification has occurred to the clinker cooler. The clinker cooler gases are subject to a PM limit of 0.07 pounds per ton of clinker via Section 63.1343 of the NESHAPs. Clinker cooler gases exit with the main kiln exhaust through the same baghouse (S-260).
(2) If the kiln and clinker cooler exhaust are combined for energy efficiency purposes and sent to a single control device, the appropriate kiln PM limit may be adjusted using the procedures in Part 63.1343(b). The exhaust from the kiln and clinker cooler are combined and sent to a single control device and the combined exhaust limit is calculated as shown in this evaluation for section 60.62(a)(1&2).

Section 60.62(c) – Existing permit Conditions B1 and B2 limit the in-line kiln/raw mill stack emissions to 20% opacity. This citation limits any other discharge of gases from the facility to 10% opacity. The 10% opacity limit is contained in the existing Title V permit at Conditions #B2, B3, C2, C3, D2, and D3.

Section 60.62(d) - If you have an affected source subject to this subpart with a different emissions limit or requirement for the same pollutant under another regulation in title 40 of this chapter, you must comply with the most stringent emissions limit or requirement and are not subject to the less stringent requirement.

Section 60.63(b) - Requires the owner or operator of any Portland cement plant to record the daily production rates and kiln feed rates. Condition B17h requires this information to be recorded. Per section 60.63(1)(ii) Lehigh Southwest Cement measures kiln feed with a permanent weigh scale system which determines the amount of kiln feed in tons of mass per hour. Condition B17h will be updated to require monthly reconciliation of the calculate feed-to-clinker ratio based on clinker production rates determined for accounting purposes and recorded feed rates. Condition B17h has been updated to include this requirement.

Section 60.63(b)(2) – This section requires that during each quarter of operation, Lehigh Southwest Cement must determine, record and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production rate or feed rates. Quarterly feed rate accuracy must be maintained within +/-5%, calculated hourly, feed to production rate must be updated monthly with the new ratio used going forward. This requirement is incorporated into the renewal permit at Condition B25.

Section 60.63(c)(1) - Requires that an initial performance test is required by September 9, 2015, to demonstrate compliance with the PM emissions limit contained in section 60.62. Condition B19 will be modified in the revised permit to include this requirement.

Section 60.63(c)(2) – A continuous parametric monitoring system (CPMS) for particulate matter must be used to demonstrate continuous compliance with the PM emissions limit. Lehigh Southwest Cement must establish a site-specific operating limit for the particulate matter (PM)

CPMS. The PM CPMS is a separate measuring unit that provides a linear current output based on stack particulate level. A site specific limit for the PM CPMS must be calculated and reported during annual source testing as outlined in Section 60.63(c) (2) through (8). Conditions B16 and B19 has been modified.

Section 60.63(d,e&f) - These sections deal with requirements for monitoring on NOx and SO2 which do not apply to the Lehigh Southwest Cement kiln.

Section 60.63(g) - The PM CPMS must operate and collect data at all required intervals at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs, and required monitoring system quality assurance or quality control activities. Data recorded during the monitoring system malfunctions, repairs or required monitoring system quality assurance or control activities may not be used in reporting emissions or operating levels. A condition will be added (New B26) to the permit to require compliance with these PM CPMS operating and reporting requirements of Section 60.63(g).

Section 60.63(h) – This section specifies the requirements for the installation, operation, calibration, and maintenance for the instruments used to continuously measure and record the stack gas flow rate to allow determination of the PM mass emissions rate. Condition B16 will be modified to include this requirement.

Section 60.63(i) – This section allows for the operator to petition the EPA Administrator to use a site-specific monitoring plan to demonstrate compliance with applicable emissions limits. The applicant has not requested this.

Section 60.64(a&b) - Outlines test methods and procedures for determining particulate matter emissions from the kiln and clinker cooler. Condition B6 satisfies this requirement by requiring EPA Method 5 testing. Any affected sources subject to the 10% limit in section 60.62(c) must determine opacity levels using Method 9. Sources must be observed, recorded and reported using EPA Method #22 on a schedule as outlined in Conditions B21, C3, C6, and D3.

Section 60.64(c) – This section pertains to NOx and SO2 which do not apply to the Lehigh Southwest Cement kiln.

Section 60.64(d) - (1) Within 60 days after the date of completing each performance test (see §60.8) as required by this subpart you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance

tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13. This is included in New Condition B26a.

(2) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, you must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (d)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13. This is included in New Condition B27a.

(3) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run. This is included in New Condition B28a.

(4) All reports required by this subpart not subject to the requirements in paragraphs (d)(1) and (2) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraph (d)(1) and (2) of this section in paper format. This is included in New Condition B29a.

Section 60.65(a),(b), and (c) - Outlines the recordkeeping and reporting requirements in reference to excess emissions, monitoring of visible emissions, malfunction information, or incidents requiring de-energizing control equipment. Reporting requirements specified in Condition B18 satisfy and in some cases exceed the requirements of this section by requiring monthly reports for the specified information as opposed to semiannual reports required by this section.
Condition B23 contains the required 6-month excess emission reporting per 40 CFR 60.7(c).

40 CFR Part 63 Subpart A- National Emission Standards for Hazardous Air Pollutants General Provisions.

Refer to Table 1 at the end of Subpart LLL.

40 CFR Part 63 Subpart LLL- National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

This subpart was promulgated by EPA on December 20, 2006. Also on December 20, 2006, EPA published a Notice of Reconsideration for the new source standards for mercury and hydrocarbons contained in that NESHAP subpart. On January 26, 2009, EPA published notice of a proposed settlement to resolve multiple petitions from all sides regarding this regulation. This notice of proposed settlement states that EPA will take final action on the proposed NESHAP rule by March 31, 2010. On February 12, 2013, EPA published the Final Rule action in the Federal Register for the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants: Final Rule.

The Lehigh Southwest Cement Company Title V renewal permit being the subject of this evaluation will be based on the February 12, 2013, final NESHAP for Portland Cement Manufacturing.

63.1340- This section defines the applicability and designation of affected sources. The District has determined that Subpart LLL does apply to Lehigh Southwest Cement Company and has incorporated the applicable sections of this rule in the proposed Title V permit. This facility is considered to be an existing major source cement plant. Effected sources at the Lehigh plant include the cement kiln, clinker cooler, raw mill, finish mills, storage bins, cement and coal mill conveying systems, and bagging and bulk loading systems. No open clinker storage piles, as defined in §63.1341, are permitted at the facility. The Operations and Maintenance Plan Update, submitted on November 6, 2013, states that any open clinker piles will be covered with tarps.

63.1341- These definitions are incorporated into the draft of this renewal permit.

63.1342- This section states that most of the general provisions of the NESHAP are applicable to this subpart. These provisions apply to Lehigh Southwest Cement Company and have been included in the proposed Title V permit as Conditions F13, F14, F15, and G35.

63.1343 (a) and (b),- This section sets standards for all in-line kiln/raw mills at major sources. These standards apply to Lehigh Southwest Cement Company and have been included in the proposed Title V permit as Conditions B2 and D3. The standard for dioxin/furan for existing cement kilns is unchanged with this final rule except for the units have been converted to metric. The new PM standard is incorporated into the draft permit as detailed for §60.62(b)(2) to include the kiln and clinker cooler. The standards for hazardous air pollutants (Mercury, THC, HCL and work practices) will be included in the draft permit.

Opacity standards will remain unchanged from the existing permit, with the exception of the federally enforceable portion of Condition B1.

63.1343 (c) - A condition (New Condition B16) will be added to the permit that requires any outdoor clinker piles or clinker spillage be cleaned up within 3 days.

63.1344 - **Affirmative Defense for Violation of Emission Standards During Malfunction**.
The section specifies actions that must be taken by the operator to assert an affirmative defense to a claim for civil penalties for violations of the standards this section places on the following existing units: kiln, clinker cooler, raw mill, finish mills, and other storage bins, conveying systems, bagging systems, and bulk loading and unloading systems. The reporting details for the assertion of defense will be included in a New Condition (F18) in the draft permit.

63.1345 – This section limits opacity of affected storage bins, conveying systems, bulk systems and raw and finish mills to 10% opacity. These requirements are in the current permit at Conditions #A1, A2, B2, B3, B15, C2, C3, D2, and D3, and will be retained in the revised permit.

63.1346 – **Operating Limits for Kilns.**
Paragraphs (a through f): This section sets operating parameters to determine continuous compliance with the dioxin/furan limits in section 63.1343(b). This condition is in the existing permit at Condition B2 and will be retained in the renewal permit draft.

Paragraph (g): This section reads as follows:

g) During periods of startup and shutdown you must meet the requirements listed in (g)(1) through (4) of this section.

(1) During startup you must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), or ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit.

(2) Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.

(3) All air pollution control devices must be turned on and operating prior to combusting any fuel.

(4) You must keep records as specified in §63.1355 during periods of startup and shutdown.

This paragraph will be added as a condition (New Condition B17) to the draft renewal permit effective September 9, 2015.

63.1347 – **Operation and Maintenance Plan Requirements.**
Lehigh submitted an update to their Operations and Maintenance Plan on November 6, 2013, which addressed open clinker piles.
The existing Operations and Maintenance Plan remains in effect.

63.1348 – **Compliance Requirements.**
(a) Initial Performance Test Requirements.
(1) PM Compliance. EPA Method 5 or 5(I) in appendix A-3 to part 60 of Chapter 40 must be used for initial compliance. This requirement is contained in the existing permit at Condition B19. A PM continuous parametric monitoring system will be used for continuous compliance

demonstration and will be calibrated during the performance test and updated annually. This requirement will be added to Condition B19 of the renewal permit.
(2) Opacity Compliance. Method 9 of appendix A-4 to part 60 of Chapter 40 is used for initial opacity determination. Use the maximum 6-minute average opacity exhibited during the performance test period to determine whether the affected source is in compliance with the standard. The three hour test duration may be reduced to one hour if there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent for the first hour.
(3) D/F Compliance. The performance test must be done using Method 23 of appendix A-7 to 40CFR part 60. This method is specified in Condition B21 of the existing permit.
(4) THC Compliance. The operator must use CEMs in accordance with the requirements in 40CFR63.1350(i) which requires the system operate in accordance with Performance Specification 8 of 40CFR part 60 appendix B. The span value in the relative accuracy test must be 50 ppmvd as propane and the reference method for the annual RATA is Method 25A of 40CFR60 appendix A. A new condition (New Condition B28) will be added to the permit for this requirement.
Initial compliance test will consist of the first 30 kiln operating days after the compliance date of the rule, September 9, 2015.
(5) Mercury Compliance. Lehigh must operate mercury CEMs or a sorbent trap monitoring system in accordance with the requirements of 40CFR63.1350(k). The initial compliance test must be based on the first 30 kiln operating days in which the affected sources operates using a mercury CEMs or a sorbent trap after September 9, 2015. The mercury CEMs or sorbent trap must be operated as specified in 40CFR63.1350(k) including the requirements for the exhaust gas flow rate measuring and recording system in 40CFR63.1350(k)(5). A new condition (New Condition B29) will be added to the permit for this requirement.
(6) HCl Compliance. These tests must be conducted per this paragraph. If a wet scrubber, tray tower or dry scrubber is used to control HCl then a FTIR Spectroscopy method (Method 321) is used for the initial performance testing and establishment of monitoring parameters. If the source is not controlled by a wet scrubber, tray tower, or dry sorbent injection system a CEMs must be operated in accordance with the requirements of §63.1350(l)(1) which specifies operation in accordance with Performance Specification 15 of appendix B part 60. The initial compliance test must be based on the 30 kiln operating days that occur after September 9, 2015, in which the source operates using an HCl CEMs. A SO2 monitor and parametric monitoring may be substituted for CEMs if a wet scrubber, tray tower or dry scrubber is used. A condition (New Condition B30) will be added to the new permit to include this requirement.
(7) Commingled Exhaust Requirements. The coal mill exhaust is not commingled.
(b) Continuous Monitoring Requirements.
Lehigh must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§63.1350 and 63.8 for each affected source.

(1) General Requirements. Lehigh must monitor and collect data according to §63.1350 and the site specific monitoring plan required by §63.1350(p). Except for periods of startup and shutdown, monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), Lehigh must operate the

monitoring system and collect data at all required intervals at all times the affected source is operating. Lehigh may not use data recorded during monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance of careless operation are not malfunctions. Lehigh must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Lehigh must determine hourly clinker production rates according the requirements at § 63.1350(d). A new condition (New Condition 25) will be added to the permit stating these general requirements.

(2) PM Compliance. Continuous PM compliance must be demonstrated using the monitoring methods and procedures in §63.1350(b) and (d). See New Condition B26.

(3) Opacity Compliance. Lehigh must use the monitoring methods and procedures in §63.1350(f) based on the maximum 6-minute average opacity exhibited during the performance test period. Corrective actions must be initiated within one hour of detecting visible emissions above the applicable limit. See revised Condition B21.

(4) Dioxin/Furan Compliance. Lehigh will use the temperature CMS that is operated, installed and maintained to record the temperature of specified gas streams in accordance with the requirements of §63.1350(g). This requirement will be added to the existing permit Conditions B2 and B21.

(5) Activated Carbon Injection Compliance. Lehigh will not be using this control method.

(6) THC Compliance. Lehigh will be demonstrating compliance with the THC limit in §63.1343 which is the 24 ppmvd @7 percent O2 limit. They will demonstrate compliance using the monitoring methods and procedures in §63.1350(i). THC will be measured upstream of the coal mill. A condition will be added to the renewal permit (New Condition B28) for this requirement.

(7) Mercury Compliance. Lehigh will be required to use the monitoring methods and procedures in §63.1350(k) to demonstrate continuous mercury emissions compliance. Mercury will be measured upstream of the coal mill. A condition will be added (New Condition B29) to the renewal permit for this requirement.

(8) HCl Compliance. Lehigh will demonstrate compliance using the performance test methods and procedures in §63.1349(b)(6) and §63.1350(l)(1). HCl will be measured upstream of the coal mill. A condition (New Condition B30) will be added to the permit for this requirement. If dry sorbent injection is used to control HCl emissions, Lehigh may use a CMS for sorbent mass flow rate monitoring as specified in §63.1350(m)(9).

(9) Startup and Shutdown Compliance. In order to demonstrate continuous compliance during startup and shutdown the control devices must be operating.

(c) Changes in Operations. Should Lehigh plan to undertake a change in operation that may

adversely affect compliance with an applicable standard, a performance test must be conducted as specified in §63.1349(b). Written notice must be provided to the Administrator at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard. The performance test must be completed within 360 hours after the planned operational change period begins. Condition F9 of the existing permit will be changed to include the requirements of this section.
(d) General Duty to Minimize Emissions. Condition G3 of the existing permit will be expanded to include the language from this section.

63.1349 – **Performance Testing Requirements.**

(a) Lehigh must document performance test results in complete test reports that contain the information required by paragraphs (a)(1) through (10) of this section, as well as all other relevant information. As described in §63.7(c)(2)(i), Lehigh must make available to the Administrator prior to testing, if requested, the site-specific test plan to be followed during performance testing. For purposes of determining exhaust gas flow rate to the atmosphere from an alkali bypass stack or a coal mill stack, Lehigh must either install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate according to the requirements in paragraphs §63.1350(n)(1) through (10) of this subpart or use the maximum design exhaust gas flow rate. For purposes of determining the combined emissions from kilns equipped with an alkali bypass or that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS on the alkali bypass stack or coal mill stack, Lehigh may use the results of the initial and subsequent performance test to demonstrate compliance with the relevant emissions limit.

(1) A brief description of the process and the air pollution control system;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations;

(9) All data recorded and used to establish parameters for monitoring; and

(10) Any other information required by the performance test method.

A condition will be revised (Condition B21) to the renewal permit that specifies this requirement.

(b)

(1)PM Emissions Tests. Lehigh must conduct performance testing using EPA method 5 or 5l from 40CFR Part 60 and must monitor continuous performance through use of a PM continuous parameter monitoring system (PM CPMS). Lehigh shall establish a site specific operating limit as per §63.1349(b)(1) paragraphs (i) through (ix). A condition (Revised Condition B21 and New Condition B22) for the continuous monitoring requirement will be added to the renewal permit.

(2) Opacity Tests. Lehigh currently conducts opacity testing on §63.1345 sources (sources other than kilns, clinker coolers, and new raw material dryers) at the frequency required in §63.1350(f). This requirement is contained at Conditions #B2, B21, C3, C6, D3, and D8.

(3) Dioxin/Furan Testing. These requirements are the existing permit at Conditions B2 and B21. The limits will be changed to metric units. Lehigh does not inject sorbent for compliance with this limit.

(4) THC Emissions Test. Lehigh must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)1 through (m)(4) of §63.1350. This requires Lehigh to operate the THC continuous emission monitoring system in accordance with PS8A of 40CFR part 60 Appendix B and Appendix F. A performance test using Method 25A in 40CFR Part 60 appendix A is not required for the coal mill stack since kiln combustion air is not routed through it. Paragraphs (m)(1) through (m)(4) specify that the THC continuous monitoring system must be operated as a parameter monitoring system and requires the following: (1) must complete one cycle of operation for each successive 15-minute period and have a minimum of four successive cycles of operation for a valid hour of data, (2) must conduct all monitoring in continuous operation at all times that the unit is operating, (3) determine the 1-hour block average of all recorded readings, and (4) record the results of each inspection, calibration, and validation check. The initial compliance test is conducted via using the THC CEMs for the first 30 kiln operating days after the compliance (September 9, 2015). THC is measured upstream of the coal mill. A condition will be added (New Condition B28) to the renewal permit for this requirement.

(5) Mercury Emissions Tests. Lehigh must operate a mercury CEMs or a sorbent trap monitoring system in accordance with the requirements of §63.1350(k). The initial compliance must be based on the first 30 kiln operating days in which the affected source operates using mercury CEMs or a sorbent trap monitoring system after September 9, 2015. A condition (New Condition B29) will be added to the renewal permit for this requirement.

(6) HCl Emissions Tests. Lehigh must operate an HCl CEMs in accordance with the requirements of §63.1350(l)(1). If Lehigh installs a wet scrubber, tray tower, or dry scrubber for control of HCl a performance test using Method 321 of appendix A must be

conducted and used to establish specific parameter limits for continuous compliance. If the CEMs are used for compliance then the initial compliance test is to be based on the first 30 kiln operating days that occur after September 9, 2015, in which Lehigh is using the HCl CEMs. An additional permit condition (New Condition B30) will be added to the renewal permit for this requirement. This permit condition will allow for the option of using mass flow rate of sorbent inject for a CMS.

(7) Total Organic HAP emissions testing may be used instead of Total Hydrocarbons as specified in 40CFR63.1349(b)(4). This alternative testing will be allowed in an additional new permit condition (New Condition B28).

(8) HCl emissions tests with SO2 monitoring. This alternative for HCl compliance monitoring will be allowed in a new permit condition (New Condition B30) if Lehigh installs a wet scrubber, tray tower or dry scrubber.

(c) Performance Test Frequency. Lehigh conduct performance tests for PM every 12 months. Performance tests for Dioxin/Furan must be repeated every 30 months. Performance tests are not required to be repeated after the initial tests if monitored by CEMs.

(d) Performance Test Reporting Frequency.

(1) Lehigh must submit the information specified in paragraphs (d)(1) and (2) of this section no later than 60 days following the initial performance test. All reports must be signed by a responsible official. (i) The initial performance test data as recorded under paragraph (b) of this section. (ii) The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(1), (3), (6), and (7) of this section, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.

(2) As of December 31, 2011, and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically to the EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool(ERT) (see *http://www.epa.gov/ttn/chief/ert/ert_tool.html/*). A condition will be added to the renewal permit with this requirement.

(e) Conditions of Performance Tests. Conduct performance tests under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests. A condition (New Condition B23) will be added to the renewal permit with this requirement.

63.1350 – **Monitoring Requirements.**

(a)

(1) After September 9, 2015, Lehigh must demonstrate compliance with this subpart on a continuous basis by meeting the requirements this section.

(2) All continuous monitoring data for periods of startup and shutdown must be compiled and averaged separately from data gathered during other operating periods.

(3) For each existing unit that is equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests.

(4) Any instance where Lehigh fails to comply with the continuous monitoring requirements of this section is a violation. This paragraph will be added as a condition (New Condition B25) of the renewal permit.

(b) PM Monitoring Requirements. Lehigh will use a PM CPMS to establish a site specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. Exceedances and violations of the site-specific limit shall be determined by the operation of the CPMS as detailed in §63.1350(b). A condition (New Condition B26) will be added to the renewal permit that contains this requirement.

(c) Reserved.

(d) Clinker Production Monitoring Requirements. Hourly clinker production must be determined by one of two methods as listed in §63.1350(d). A condition (New Condition B27) will be added to the renewal permit that contains this requirement.

(e) Reserved.

(f) Opacity Monitoring Requirements. These requirements are as they are contained in the existing permit and will remain in the renewal permit.

(g) Dioxin/Furan Requirements. These requirements are as they are contained in the existing permit and will remain in the renewal permit.

(h) Monitoring Requirements for Sources Using Sorbent Injection. Lehigh will not use sorbent injection for control of Dioxin/Furan.

(i) THC Monitoring Requirements. Lehigh must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)1 through (m)(4) of §63.1350 to use this monitoring option. This requires Lehigh to operate the THC continuous emission monitoring system in accordance with PS8A of 40CFR part 60 Appendix B and Appendix F. A performance test using Method 25A in 40CFR Part 60 appendix A is not required for the coal mill stack since kiln combustion air is not routed through it. Paragraphs (m)(1) through (m)(4) specify that the THC continuous monitoring system must be operated as a parameter monitoring system and requires the following:

(1) Must complete one cycle of operation for each successive 15-minute period and have a minimum of four successive cycles of operation for a valid hour of data,

(2) Must conduct all monitoring in continuous operation at all times that the unit is operating,

(3) Determine the 1-hour block average of all recorded readings,

(4) Record the results of each inspection, calibration, and validation check. The initial compliance test is conducted via using the THC CEMs for the first 30 kiln operating days after the compliance (September 9, 2015). THC is measured upstream of the coal mill. A condition (New Condition B28) will be added to the renewal permit for this requirement.

(j) Total Organic HAP Monitoring Requirements. Lehigh may choose to comply with this limit instead of the Total Hydrcarbon (THC) limit. If Lehigh chooses this limit they must: continuously monitor THC according to paragraph (i)(1) and (2) or in accordance with Performance Specification 15 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of Part 63. Lehigh must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter. In addition, your must follow the monitoring requirements in paragraphs (m)(1) through (m)(4) of section 63.1350. Lehigh must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of section 63.1350.

(k) Mercury Monitoring Requirements. Lehigh must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A (PS 12A) of appendix B to part 60 of this chapter or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of appendix B to part 60 of this chapter. Lehigh must monitor mercury continuously according to paragraphs (k)(1) through (5) of this section. Lehigh must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section. Kiln combustion emissions are not vented through the coal mill so no mercury testing of the coal mill is required. The mercury testing requirements in §63.1350(k) (1) through (5) will be contained in a condition (New Condition B29) of the renewal permit.

(l) HCl Monitoring Requirements. Lehigh must monitor HCl emissions continuously according to paragraph (l)(1) or (2) and paragraphs (m)(1) through (4) of this section or, if your kiln is controlled using a wet or dry scrubber or tray tower, you alternatively may parametrically monitor SO_2 emissions continuously according to paragraph (l)(3) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section. Lehigh may choose to operate an HCl CEMs and do so in accordance with Performance Specification 15 of appendix B to part 60 of Chapter 40 or, upon promulgation, in accordance with any other performance specification for HCl CEMs in appendix B of part 60 of this chapter. A condition (New Condition B30) will be added to the renewal permit that requires the monitoring of HCl emissions in accordance with §63.1350 (l) (1) and (m)(1) trough (m)(4).

(m) Parameter Monitoring Requirements. Parameter monitoring requirements are referenced in the appropriate monitoring requirements where direct CEMs are not used. The requirements include: (1) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data, (2) You must conduct all monitoring in continuous operation at all times that the unit is operating, (3) Determine the 1-hour block average of all recorded readings, and (4) Record the results of each inspection, calibration, and validation check. See New Condition B31.

(n) Continuous Flow Rate Monitoring System. Lehigh must install, operate, calibrate and maintain instruments, according to the requirements in paragraphs (n)(1) through (n)(10) of this section, for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere from sources subject to an emissions limitation that has a pound per ton of clinker unit. This requirement will be added to the existing permit Condition B16 and New Condition B32.

(o) Alternate Monitoring Requirements Approval. Lehigh may submit an application to the Administrator for the approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (o)(1) through (6) of this section. A new condition (New Condition B33) will be added to the renewal permit to include this provision.

(p) Development and Submittal (Upon Request) of Monitoring Plans. Lehigh must develop a site specific monitoring plan according to the requirements in paragraphs (p)(1) through (4) of this section. Lehigh shall include the following CEMS and CMS in the plan:

PM CPMS

Clinker Production Monitoring Requirements

Opacity

Dioxin/Furan Monitoring

Monitoring Requirements for any Sorbent Injection

THC Monitoring Requirements

Total HAP Monitoring (if applicable)

Mercury Monitoring

HCl Monitoring

Stack Continuous Flow Rate Monitoring.

A specific condition (New Condition B34) will be added to the renewal permit to assure compliance with this rule.

63.1351 – **Compliance Dates.**

The compliance date for existing sources for all the requirements that became effective on February 12, 2013, except for the open clinker storage pile requirements will be September 9, 2015. The compliance date for existing sources with the requirements of open clinker storage piles in §63.1343(c) is February 12, 2014.

63.1352 – **Additional Test Methods.**

Testing to determine MACT applicability may use alternative methods.

63.1353 – **Notification Requirements.**

(a) The notification provisions of 40CFR part 63, subpart A that apply and those that do not apply to Lehigh are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(b) Lehigh shall comply with the notification requirements in §63.9 as follows:

> (1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
>
> (2) Notification of performance tests, as required by §§63.7 and 63.9(e).
>
> (3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).
>
> (4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.
>
> (5) Notification of compliance status, as required by §63.9(h).
>
> (6) Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of §§63.7(b) and 63.9(e) do not apply to retesting required for exceedances under this subpart.

An additional condition (New Condition B36) will be added to the renewal permit with these requirements.

63.1354 – **Reporting Requirements.**

(a) The reporting provisions of subpart A of this part that apply and those that do not apply to Lehigh are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(b) Lehigh shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

(1) As required by §63.10(d)(2), Lehigh shall report the results of performance tests as part of the notification of compliance status.

(2) As required by §63.10(d)(3), Lehigh shall report the opacity results from tests required by §63.1349.

(3) As required by §63.10(d)(4), Lehigh is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4)-(5) [Reserved]

(6) As required by §63.10(e)(2), Lehigh shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by §63.10(e)(2), Lehigh as the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).

(8) As required by §63.10(e)(3), Lehigh as the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) Lehigh shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

(i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);

(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and

(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).

(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).

(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).

(vi) For each PM, HCl, Hg, and THC CEMS or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must submit reports to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with the EPA's reporting form output format. For each reporting period, the reports must include all of the calculated 30-operating day rolling average values derived from the CEMS or Hg sorbent trap monitoring systems.

(vii) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, Lehigh shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

(c) Reporting a failure to meet a standard due to a malfunction. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, you must report the failure in the semi-annual compliance report required by §63.1354(b)(9). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1348(d), including actions taken to correct a malfunction.

An additional condition (New condition B37) will be added to the renewal permit with these requirements.

63.1355 – **Recordkeeping Requirements.**

(a) Lehigh shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

(b) Lehigh shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If Lehigh has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, Lehigh as the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) Lehigh must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) Lehigh must keep records of the daily clinker production rates and kiln feed rates.

(f) Lehigh must keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.

(g)

(1) Lehigh must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.

(2) Lehigh must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(h) For each exceedance from an emissions standard or established operating parameter limit, Lehigh must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.

An additional condition (New Condition B38) will be added to the renewal permit with these requirements.

63.1356 – **Sources with Multiple Emissions Limit or Monitoring Requirements.**

If Lehigh has a different emissions limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emissions limit or requirement and is exempt from the less stringent requirement.

This requirement is conditioned into the renewal permit for particulate as specified in §63.1343 and §60.62.

63.1357 – **Temporary, Conditioned Exemption form Particulate Matter and Opacity Standards .**

(a) Subject to the limitations of paragraphs (b) through (f) of this section, Lehigh while conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:

(1) Any PM and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and clinker coolers.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and clinker coolers to ensure compliance with any PM and opacity standards of this part or part 60 of this chapter.

(b) Lehigh must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:

(1) The number of test conditions and the number of runs for each test condition;

(2) The target particulate matter emission level for each test condition;

(3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and

(4) The anticipated normal particulate matter emission level.

(c) The Administrator will review and approve or disapprove the correlation test plan in accordance with §63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the

correlation test plan within the time period specified in §63.7(c)(3)(iii), the plan shall be considered approved, unless the Administrator has requested additional information.

(d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.

(e) The PM and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for the purposes of conducting tests to correlate PM CEMS with manual method test results, including all runs and conditions, except as described in this paragraph. Where additional time is required to correlate a PM CEMS device, a source may petition the Administrator for an extension of the 96-hour aggregate waiver of compliance with the PM and opacity standards. An extension of the 96-hour aggregate waiver is renewable at the discretion of the Administrator.

(f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

An additional condition (New Condition B39) will be added to the renewal permit with these requirements.

63.1358 – Implementation and Enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

Shasta County Air Quality Management District has been delegated implementation and enforcement authority for this subpart.

An additional condition (New Condition B40) will be added to the renewal permit listing this authority.

63.1359 – **Reserved.**

TABLE 1 TO SUBPART LLL OF PART 63—APPLICABILITY OF GENERAL PROVISIONS

Citation	Requirement	Applies to subpart LLL	Explanation
63.1(a)(1)-(4)	Applicability	Yes	
63.1(a)(5)		No	[Reserved]
63.1(a)(6)-(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved]
63.1(a)(10)-(14)	Applicability	Yes	
63.1(b)(1)	Initial Applicability Determination	No	§63.1340 specifies applicability.
63.1(b)(2)-(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved]
63.1(c)(4)-(5)	Extensions, Notifications	Yes.	
63.1(d)		No	[Reserved]
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1341.
63.3(a)-(c)	Units and Abbreviations	Yes	
63.4(a)(1)-(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved]
63.4(a)(5)	Compliance date	Yes	
63.4(b)-(c)	Circumvention, Severability	Yes	
63.5(a)(1)-(2)	Construction/Reconstruction	Yes	
63.5(b)(1)	Compliance Dates	Yes	

63.5(b)(2)		No	[Reserved]
63.5(b)(3)-(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved]
63.5(d)(1)-(4)	Approval of Construction/Reconstruction	Yes	
63.5(e)	Approval of Construction/Reconstruction	Yes	
63.5(f)(1)-(2)	Approval of Construction/Reconstruction	Yes	
63.6(a)	Compliance for Standards and Maintenance	Yes	
63.6(b)(1)-(5)	Compliance Dates	Yes	
63.6(b)(6)		No	[Reserved]
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)-(2)	Compliance Dates	Yes	
63.6(c)(3)-(4)		No	[Reserved]
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved]
63.6(e)(1)-(2)	Operation & Maintenance	No	*See* §63.1348(d) for general duty requirement. Any reference to §63.6(e)(1)(i) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1348(d).
63.6(e)(3)	Startup, Shutdown Malfunction Plan	No	Your operations and maintenance plan must address periods of startup and shutdown. See §63.1347(a)(1).
63.6(f)(1)	Compliance with Emission Standards	No	Compliance obligations specified in subpart LLL.
63.6(f)(2)-(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)-(3)	Alternative Standard	Yes	
63.6(h)(1)	Opacity/VE Standards	No	Compliance obligations specified in subpart LLL.
63.6(h)(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]
63.6(h)(4)-(h)(5)(i)	Opacity/VE Standards	Yes	

63.6(h)(5)(ii)-(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)-(14)	Extension of Compliance	Yes	
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)-(3)	Performance Testing Requirements	Yes	§63.1349 has specific requirements.
63.7(b)	Notification period	Yes	Except for repeat performance test caused by an exceedance. See §63.1353(b)(6)
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	
63.7(e)(1)	Conduct of Tests	No	*See* §63.1349(e). Any reference to 63.7(e)(1) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1349(e).
63.7(e)(2)-(4)	Conduct of tests	Yes	
63.7(f)	Alternative Test Method	Yes	
63.7(g)	Data Analysis	Yes	
63.7(h)	Waiver of Tests	Yes	
63.8(a)(1)	Monitoring Requirements	Yes	
63.8(a)(2)	Monitoring	No	§63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved]
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)-(3)	Conduct of Monitoring	Yes	
63.8(c)(1)-(8)	CMS Operation/Maintenance	Yes	Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes, except for the reference to the SSM Plan in the last sentence	
63.8(e)	Performance Evaluation for CMS	Yes	
63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Additional requirements in §63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	

63.8(g)	Data Reduction	Yes	
63.9(a)	Notification Requirements	Yes	
63.9(b)(1)-(5)	Initial Notifications	Yes	
63.9(c)	Request for Compliance Extension	Yes	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of performance test	Yes	Except for repeat performance test caused by an exceedance. See §63.1353(b)(6)
63.9(f)	Notification of VE/Opacity Test	Yes	Notification not required for VE/opacity test under §63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)-(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved]
63.9(h)(5)-(6)	Notification of Compliance Status	Yes	
63.9(i)	Adjustment of Deadlines	Yes	
63.9(j)	Change in Previous Information	Yes	
63.10(a)	Recordkeeping/Reporting	Yes	
63.10(b)(1)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(i)-(ii)	General Recordkeeping Requirements	No	*See* §63.1355(g) and (h).
63.10(b)(2)(iii)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(iv)-(v)	General Recordkeeping Requirements	No	
63.10(b)(2)(vi)-(ix)	General Recordkeeping Requirements	Yes	
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(2)-(4)		No	[Reserved]
63.10(c)(5)-(8)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved]

63.10(c)(10)-(15)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(d)(1)	General Reporting Requirements	Yes	
63.10(d)(2)	Performance Test Results	Yes	
63.10(d)(3)	Opacity or VE Observations	Yes	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	No	*See* §63.1354(c) for reporting requirements. Any reference to §63.10(d)(5) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1354(c).
63.10(e)(1)-(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
63.10(f)	Waiver for Recordkeeping/Reporting	Yes	
63.11(a)-(b)	Control Device Requirements	No	Flares not applicable.
63.12(a)-(c)	State Authority and Delegations	Yes	
63.13(a)-(c)	State/Regional Addresses	Yes	
63.14(a)-(b)	Incorporation by Reference	Yes	
63.15(a)-(b)	Availability of Information	Yes	

40 CFR Part 63 Subpart ZZZZ- National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

EPA has been developing this rule for at least the past twelve years. The regulation, as it is written in the federal register, is essentially incomprehensible. Each citation refers to other citations within this rule or elsewhere in Title 40. Additionally, EPA continues to reconsider portions of the rule and seek public comment on portions of the rule. EPA's webpage at http://www.epa.gov/ttn/atw/icengines/comply.html states that the RICE Rules are complex and offers summarizing compliance tables. This evaluation is based on these compliance tables and definitions obtained from the rule.

Lehigh operates the following affected engines:

1 Detroit Model V-71 489 hp

5 Caterpillar Model ZW3516-CAT 2132 hp with Miratech Combikat Diesel Particulate Filters

These engines operate as emergency engines. These engines will have conditions added to the renewal permit to assure they operate as emergency engines as defined in this subpart. They will also be required by these conditions to operate as outlined in the Operation and Maintenance Plan submitted by Lehigh to the District on July 5, 2013.

The summary compliance tables indicate the following:

1. No initial performance testing, operating limits or semiannual reporting is required.

2. Area Source emergency engines must Operate/Maintain engine and control device per manufacturer's instructions or owner-developed maintenance plan, may use oil analysis program instead of prescribed oil change frequency, must have hour meter and record hours of operation, keep maintenance records, and reporting and ultra-low sulfur diesel must be used for emergency demand response or local reliability.

3. Emergency engines less than 500 hp (this is the 489 hp Detroit Engine) must change oil/filter & inspect hoses/belts every 500 hours or annually; inspect air cleaner every 1,000 hours or annually.

Conditions will be added to the renewal permit (Conditions E2 and E3) to assure compliance with these requirements.

40 CFR Part 64 Compliance Assurance Monitoring

64.2 – **Applicability.**
Emissions units subject to National Emissions Standards for Hazardous Air Pollutants and less than 100 tons potential to emit are exempt. The Quarries and Crushing Department is subject to this Compliance Assurance Monitoring requirement.

64.3 – **Monitoring Design Criteria.**
Design, performance and evaluation criteria shall be incorporated into the Compliance Assurance Monitoring plan as specified in this section.

64.4 – **Submittal Requirements.**
The owner or operator shall submit to the District the following information within the plan:

1. The indicators to be monitored;
2. The ranges or designated conditions for such indicators;
3. The performance criteria for the monitoring to satisfy §64.3; and
4. If applicable, the indicator ranges and performance criteria for a CEMS, COMS or PEMS pursuant to §64.3(d).

Justification of the proposed elements of the monitoring must be included.

64.5 – **Deadlines for Submittals.**
The submittal shall be included with the renewal application for the part 70 permit.

64.6 – **Approval of Monitoring.**
The District shall be the approval authority for the submitted CAM plan.

64.7 – **Operation of Approved Monitoring.**
In response to excursions or exceedances of plan criteria, the owner or operator shall restore the operation of the emissions unit to normal operation as expeditiously as practicable.

64.8 – **Quality Improvement Plan (QIP) Requirements.**
The Administrator or the permitting authority may require the owner or operator to develop and implement a QIP.

64.9 – **Reporting and Recordkeeping Requirements**.
Reporting must be in accordance §70.6(a)(3)(iii) of Chapter 40 and included in the semi-annual reporting.

64.10 – **Savings Provisions.**
Compliance with the emissions standards must be maintained regardless of the compliance with the CAM plan.

A condition requiring the implementation of the CAM plan as submitted by Lehigh and approved by the District shall be included in the Title V permit at the Quarries and Crushing section.

Prevention of Significant Deterioration (PSD) Permitting
This regulation sets the procedures for the review of new or modifications of existing major stationary emission sources. Since Lehigh Southwest Cement Company was issued a PSD permit as the Authority to Construct for the facility, the conditions of the Authority to Construct are incorporated in the proposed Title V permit unless a specific condition was revised (or added) in subsequently issued Permits to Operate.

Risk Management Plans Preparation and Registration, 112 (r)
Section 112(r), Accidental Release Prevention and Management Program, affects facilities at which certain substances are present above the specified annual threshold. Lehigh Southwest Cement Company, is not required to submit a 112(r) Risk Management Plan.

REQUIREMENTS THAT DO NOT APPLY:

Rule 2:4 Permit to Sell or Rent (Incinerators)
This rule pertains to the selling and or use of incinerators. There are no incinerators at this facility. Therefore, this requirement is not applicable to this facility.

Rule 2:8 Agricultural Burning

This rule applies only to agricultural burning operations. This facility does not conduct agricultural operations. Therefore, this requirement is not applicable to this facility.

Rule 3:03 Gasoline Loading and Transfer

...

Rule 3:5 Agricultural Uses
This rule exempts discharges in the course of applying agricultural materials. This facility does not apply agricultural materials. Therefore, this requirement is not included in the proposed Title V permit.

Rule 3:12 Reduction of Matter of Animal Origin (Except Curing of Glue)
This rule mandates controls for reducing animal matter. Lehigh Southwest Cement Company does not reduce animal matter as part of the process. Therefore, this requirement is not included in the proposed Title V permit.

Rule 3:14 Petroleum Dry Cleaners
This rule mandates control and operating practices for dry cleaning operations. Lehigh Southwest Cement Company does not operate a dry cleaning machine at this facility. Therefore, this requirement is not included in the proposed Title V permit.

Rule 3:15 Cutback Asphalt
This rule requires that certain types of cutback asphalt not be used. Lehigh Southwest Cement Company does not apply cutback asphalt at this facility. Therefore, this requirement is not included in the proposed Title V permit.

New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation and Processing Plants
This standard applies to coal mills processing more than 200 shorts per day of coal. The Lehigh coal mill processes less than this daily amount and therefore this standard does not apply.

MACT Standards for Halogenated Solvent Cleaning Operations
This regulation requires degreasers using certain halogenated solvents to meet certain requirements. Because the degreaser does not use solvents regulated by the standard, the maximum achievable control technology (MACT) standard is not an applicable requirement for this facility. The permit is conditioned so that the permittee notify the District prior to changing the type of solvent used at the facility.