



Louisville Metro Air Pollution Control District
 850 Barret Avenue
 Louisville, Kentucky 40204-1745



Permit No.: C-0060-1053-16-V

Plant ID: 0060

Effective Date: x/xx/2016

Expiration Date: x/xx/2017

Owner/Source: Kosmos Cement Company
 15301 Dixie Highway
 Louisville, KY 40272

is authorized to install the described process equipment by the Louisville Metro Air Pollution Control District. Authorization is based on information provided with the application submitted by the company and in accordance with applicable regulations and the conditions specified herein.

Process equipment description:

One (1) airslide (U24: K-1468) to rail loading spout, make Vortex, model TBD, capacity 9,251 ft³/hr, 278 tons/hr. This airslide replaces existing airslide K-1468;

One (1) rail loading spout (U24: K-1485) to rail car or truck, make Vortex, model TBD, capacity 400 ft³/hr, 720 tons/hr. This loading spout replaces existing rail loading spout K-1485;

One (1) baghouse (U24: C-1487) controlling emissions from K-1468 and K-1485, make Vortex, model VFS-70-A-A-E77546. This baghouse replaces existing baghouse C-1487.

Applicable Regulation(s): 2.03, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.08, 40 CFR 60 Subpart F, 40 CFR 63 Subpart LLL

Control reference(s): N/A

Application No. 74812

Application Received: 1/11/2016

Permit Writer: Yiqiu Lin

Date of Public Comment 2/13/2016

{Manager1}
 Air Pollution Control Officer
 {date1}

Construction Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	C-0060-1053-16-V	0x/xx/2016	02/13/2016	Initial	Entire Permit	Initial Permit Issuance

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

- G1. The owner or operator of the affected facility covered by this permit shall notify the District of any process change, equipment change, material change, or change in method or hours of operation. This requirement is applicable to those changes (except equipment changes) that may have the potential for increasing the emission of air contaminants to a level in excess of the applicable limits or standards specified in this permit or District regulations.
- G2. The owner or operator shall obtain new or revised permits from the District in accordance with District Regulation 2.16 for Title V sources, District Regulation 2.17 for FEDOOP sources or District Regulation 2.03 for other sources including:
- a. The company relocates to a different physical address.
 - b. The ownership of the company is changed.
 - c. The name of the company as shown on the permit is changed.
 - d. Permits are nearing expiration or have expired.
- G3. The owner or operator shall submit a timely application for changes according to G2. Timely renewal is not always achievable; therefore, the company is hereby authorized to continue operation in compliance with the latest District permit(s) until the District issues the renewed permit(s).
- G4. The owner or operator shall not be authorized to transfer ownership or responsibility of the permit. The District may transfer permits after appropriate notification (Form AP-100A) has been received and review has been made.
- G5. The owner or operator shall pay the required permit fees within 45 days after issuance of the SOF by the District, unless other arrangements have been proposed and accepted by the District.
- G6. This permit allows operation 8,760 hours per year unless specifically limited elsewhere in this permit.

- G7. The owner or operator shall submit emission inventory reports as required by Regulation 1.06.
- G8. The owner or operator shall timely report abnormal conditions or operational changes, which may cause excess emissions as required by Regulation 1.07.
- G9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
- G10. If a change in the Responsible Official (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of the date the RO change occurs.

Specific Conditions

S1. Standards (Regulation 2.03, section 6.1)

a. Opacity

- i. The owner or operator shall not allow or cause the opacity from all the affected facilities to exceed 20%; (Regulation 7.08, section 3.1.1)¹
- ii. The owner or operator shall comply with all standards for this pollutant in 40 CFR 60 Subpart F. (See Appendix A)

b. PM

- i. For K-1468 the owner or operator shall not allow PM emissions to exceed 42.59 lb/hr based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)^{2,3}
- ii. For K-1485 the owner or operator shall limit the PM emissions to less than 49.60 lb/hr based on actual operating hours in a calendar day. (Regulation 7.08, section 3.1.2)²

c. HAP (40 CFR 63 Subpart LLL (MACT))

The owner or operator shall comply with all standards for this pollutant in 40 CFR 63 Subpart LLL. (See Appendix A)

d. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*. (Regulations 5.00 and 5.21)
- ii. The owner or operator shall not allow TAC emissions to exceed the TAC emission standards listed in the following table. (Regulation 5.21, section 4.2 and section 4.3)

¹ By demonstrating compliance with the 10% opacity standard in 40 CFR 60 Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulation 6.09 and 7.08.

² It has been demonstrated that the lbs/hr PM emission standard cannot be exceeded uncontrolled. Therefore there are no monitoring, record keeping, and reporting requirements with respect to this standard.

³ The uncontrolled PM/PM₁₀/PM_{2.5} emission increases for this construction project cannot exceed PSD significant emission rate. This project is not subject to PSD permitting.

Emission Points	As	Cr6	Ni	Co	Mn
	lb/12 consecutive month period				
K-1468 & K-1485 combined	3.78E-02	5.83E-02	1.08E-01	2.28E-02	8.16E-01

- iii. The owner or operator shall operate and maintain the control device at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice. (Regulation 5.00 and 5.21)⁴

S2. Monitoring and Record Keeping (Regulation 2.03, section 6.1)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. Opacity

- i. For emission points U24: K-1468 and U24: K-1485 subject to District Regulations 7.08, the owner or operator shall conduct a daily visible emissions survey during normal operation. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance.
- iii. The owner or operator shall maintain records, daily, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given day, then no visible emission

⁴ The STAR environmental acceptability demonstration for this equipment was based on controlled emissions which is less than the controlled PTE. Controlled PTE for the equipment are based on grain/dscf and the new baghouse has higher control efficiency (per application) or at least same control efficiency (District assumed same efficiency for this PTE calculation). Therefore the after-control metal TAC emissions and the risk values remain same as the previous EA Demo.

survey needs to be performed and a negative declaration shall be entered in the record.

- iv. If there is any time that a control device is bypassed or not in operation when the process is operating, then the owner or operator shall keep a record of the following for each bypass event:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) The owner or operator shall conduct a visible emissions survey during bypass event;
 - 5) If visible emissions are observed, the owner or operator shall perform or cause to be performed a Method 9;
 - 6) Summary of the cause or reason for each bypass event;
 - 7) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 8) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- v. The owner or operator shall comply with all monitoring and record keeping requirements for this pollutant in 40 CFR 60 Subpart F. (See Appendix A)

b. PM

- i. The owner or operator shall, daily, perform a visual inspection of the structural and mechanical integrity of the dust collectors for signs of damage, air leakage, corrosion, etc. and repair as needed.
- ii. The owner or operator shall keep records, daily, of the visual inspection of the structural and mechanical integrity of the dust collectors.
- iii. The owner or operator shall use the following emission factors to calculate emissions for compliance and emission inventory purposes unless a different method is approved in writing by the District:
 - 1) Uncontrolled emission factors for airside are from AP-42, 11.6, Portland Cement Manufacturing: PM/PM10/PM2.5=0.048/0.024/0.012 lb/ton.
 - 2) Uncontrolled emission factors for loading spout are from construction permit 36017-13-C: PM/PM10/PM2.5=0.098/0.049/0.025 lb/ton.
 - 3) Controlled emissions are calculated based on air flow rate (dscf) and emission rate (gr/dscf) at the outlet of the baghouse.

c. **HAP** (40 CFR 63 Subpart LLL (MACT))

The owner or operator shall comply with all monitoring and record keeping requirements for this pollutant in 40 CFR 63 Subpart LLL. (See Appendix A)

d. **TAC**

i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS/SDS, analysis of emissions, and/or modeling results.

ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis* at the time of the change.

iii. The owner or operator shall maintain daily records of any periods of time where the process equipment was operating and any associated control device was not operating or a declaration that the control devices were operated at all times that day when the process was operating.

iv. If there is any time that a control device is bypassed or not in operation when the process is operating, then the owner or operator shall keep a record of the following for each bypass event:

- 1) Date;
- 2) Start time and stop time;
- 3) Identification of the control device and process equipment;
- 4) Emissions for each TAC (As, Cr6, Ni, Co, and Mn) during the bypass in lb/hr and lb/12 consecutive month period;
- 5) Summary of the cause or reason for each bypass event;
- 6) Corrective action taken to minimize the extent or duration of the bypass event; and
- 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

S3. **Reporting** (Regulation 2.03, section 6.1)

The owner or operator shall submit semi-annual compliance reports that include the information in this section. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. The compliance reports shall be postmarked within 60 days following the end of each reporting period. All compliance reports shall include the following certification statement per Regulation 2.16, section 3.5.11.

- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete”.
- Signature and title of the responsible official of the company.

The compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 st through June 30 th	August 29 th
July 1 st through December 31 st	March 1 st

a. **Opacity**

i. The owner or operator shall report the following information regarding normal operation in the semi-annual compliance reports:

- 1) Emission unit ID number and emission point ID number
- 2) The date, time, and result of each Method 9 and Method 22 conducted (or a negative declaration if none)
- 3) The number of surveys where visible emissions were observed
- 4) Description of any corrective action taken for each exceedance;
- 5) The owner or operator shall comply with all reporting requirements for this pollutant in 40 CFR 60 Subpart F. (See Appendix A)

ii. The owner or operator shall report the following information regarding By-Pass Activity in the semi-annual compliance reports:

- 1) Number of times of the by-pass activities;
- 2) Duration of each by-pass to the atmosphere;
- 3) The date, time, and result of each Method 9 conducted (or a negative declaration if none)
- 4) Description of any corrective action taken for each exceedance;
- 5) The owner or operator shall comply with all reporting requirements for this pollutant in 40 CFR 60 Subpart F. (See Appendix A)

b. **PM**

There are no routine reporting requirements for this equipment.

c. **HAP** (40 CFR 63 Subpart LLL (MACT))

The owner or operator shall comply with all reporting requirements for this pollutant in 40 CFR 63 Subpart LLL. (See Appendix A)

d. TAC

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months after a change of a raw material.
- iv. The owner or operator shall report the following information regarding TAC By-Pass Activity in the semi-annual compliance reports:
 - 1) Number of times of the by-pass activities;
 - 2) Duration of each by-pass to the atmosphere;
 - 3) Calculated TAC emissions for each by-pass, in lb/hr and lb/12 consecutive month period;
 - 4) A negative declaration if no by-passes occurred.

Fee Comment

The construction permit fees are based on the construction fee for a Title V source (\$2582.58), STAR fees (\$1549.55 + \$516.55), (subject to a MACT (\$1,033.03), and subject to a NSPS (\$1033.03). The total permit fees are \$6714.74.

Appendix A – 40 CFR 63 Subpart LLL & 40 CFR 60 Subpart F for Emission Points (U24: K-1468 and U2: K-1485)**S1. Standards** (Regulation 2.03, section 5.1)**a. Opacity**

The owner or operator shall not allow or cause the opacity from each raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems to exceed 10%. (40 CFR 60.62(c))

b. HAP (40 CFR 63 Subpart LLL (MACT))

- i. The owner or operator shall not allow or cause the opacity from each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; bulk loading or unloading system; raw and finish mills; and each existing raw material dryer to exceed 10%. (40 CFR 63.1345)
- ii. The owner or operator of each Portland cement plant shall prepare for each affected source subject to the provisions of 40 CFR 63 Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a part 70 permit and shall include the following information: (40 CFR 63.1347(a))
 - 1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of 40 CFR 63.1343 through 63.1348; and (40 CFR 63.1347(a)(1))
 - 2) Corrective actions to be taken when required by 40 CFR 63.1350(f)(3). (40 CFR 63.1347(a)(2))

S2. Monitoring and Record Keeping (Regulation 2.03, section 5.1)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. Opacity

See S2.b. HAP (40 CFR 63 Subpart LLL (MACT))

b. HAP (40 CFR 63 Subpart LLL (MACT))

- i. If you are subject to the limitations on opacity under 40 CFR 63.1345, you must demonstrate compliance with the opacity emissions standards by using the performance test methods and procedures in 40 CFR 63.1349(b)(2). 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. (40 CFR 63.1348(a)(2))
- ii. If you are subject to the limitations on opacity under 40 CFR 63.1345, you must demonstrate compliance using the monitoring methods and procedures in 40 CFR 63.1350(f) based on the maximum 6-minute average opacity exhibited during the performance test period. You must initiate corrective actions within one hour of detecting visible emissions above the applicable limit. (40 CFR 63.1348(b)(3) Opacity Compliance.)
 - 1) If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a COMS such that it is installed, operated, and maintained in accordance with the requirements of 40 CFR 63.1350(f)(4)(i). (40 CFR 63.1348(b)(3)(i) COMS.)
 - 2) Bag leak determination system (BLDS). If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a BLDS that is installed, operated, and maintained in accordance with the requirements of 40 CFR 63.1350(f)(4)(ii). (40 CFR 63.1348(b)(3)(ii))
- iii. The owner or operator shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the District which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review or operation and maintenance records, and inspection of the source. (40 CFR 63.1348(d))
- iv. If you are subject to a limitation on opacity under 40 CFR 63.1345, the owner or operator shall conduct required opacity monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (vii) of this section of the cited federal regulation and in accordance with your monitoring plan developed under 40 CFR 63.1350(p). (40 CFR 63.1350(f))
 - 1) The owner or operator shall conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method

22 of Appendix A-7 to 40 CFR 60. The test shall be conducted while the affected source is in operation. (40 CFR 63.1350(f)(1)(i))

- 2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from **monthly to semi-annually** for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. (40 CFR 63.1350(f)(1)(ii))
- 3) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from **semi-annually to annually** for that affected source. If visible emissions are observed during any annual test, the owner or operator shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. (40 CFR 63.1350(f)(1)(iii))
- 4) If visible emissions are observed during any Method 22 test, the owner or operator must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The Method 9 performance test, of appendix A-4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions. (40 CFR 63.1350(f)(1)(iv))
- 5) Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. (40 CFR 63.1350 (f)(1)(v))
- 6) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of 40 CFR 63.1352(f)(1)(i) through (f)(1)(iv) of this section of the cited federal regulation for each such conveying system transfer point located within the building, or for the building itself, according to 40 CFR 63.1350(f)(1)(vii) of this section of the cited federal regulation. (40 CFR 63.1350(f)(1)(vi))

- 7) If visible emissions from a building are monitored, the requirements of paragraphs 40 CFR 63.1350(f)(1)(i) through (f)(1)(iv) apply to the monitoring of the building, and the owner or operator shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes. (40 CFR 63.1350(f)(1)(vii))
- v. The owner or operator 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. (40 CFR 63.1355(a))
- vi. The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3) of this part of the Federal Regulation; (40 CFR 63.1355(b)) and
 - 1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9; (40 CFR 63.1355(b)(1))
 - 2) All records of applicability determination, including supporting analyses; (40 CFR 63.1355(b)(2)) and
 - 3) If the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. (40 CFR 63.1355(b)(3))
- vii. In addition to the recordkeeping requirements in paragraph (b) of this section of the Federal Regulation, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by 40 CFR 63.10(c). (40 CFR 63.1355(c))
- viii. The owner or operator shall 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. (40 CFR 63.1355(g)(1))

- ix. The owner or operator shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 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. (40 CFR 63.1355(g)(2))
- x. For each exceedance from an emissions standard or established operating parameter limit, the owner or operator shall 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. (40 CFR 63.1355(h))

S3. Reporting (Regulation 2.03, section 5.1)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports. If no deviations from permit requirements occur during a reporting period, the owner or operator shall submit a negative declaration stating that no permit deviations occurred during the reporting period.

a. Opacity

See S3.b. HAP (40 CFR 63 Subpart LLL (MACT))

b. HAP (40 CFR 63 Subpart LLL (MACT))

i. Notification requirements in 40 CFR 63 Subpart LLL. (40 CFR 63.1353)

- 1) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart 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 of the federal regulation for that notification. (40 CFR 63.1353(a))
- 2) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in 40 CFR 63.9 as follows: (40 CFR 63.1353(b))
 - (a) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial

notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 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. (40 CFR 63.1353(b)(1))

- (b) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e). (40 CFR 63.1353(b)(2))
- (c) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f). (40 CFR 63.1353(b)(3))
- (d) Notification of compliance status, as required by 40 CFR 63.9(h). (40 CFR 63.1353(b)(5))

ii. Reporting requirements in 40 CFR 63 Subpart LLL. (40 CFR 63.1354)

- 1) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart 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 of the federal regulation for that report. (40 CFR 63.1354(a))
- 2) The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of this part 63, subpart A as follows: (40 CFR 63.1354(b))
 - (a) As required by 40 CFR 63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status. (40 CFR 63.1354(b)(1))
 - (b) As required by 40 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349. (40 CFR 63.1354(b)(2))

- (c) The owner or operator shall submit a summary report semiannually which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include: (40 CFR 63.1354(b)(9))
 - (d) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a). (40 CFR 63.1354(b)(9)(v))
 - (e)))
 - (f) 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. (40 CFR 63.1354(b)(9)(vii))
- 3) 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, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report. (40 CFR 63.1354(b)(10))
- 4) 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, the owner or operator shall report the failure in the semi-annual compliance report required by 40 CFR 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 40 CFR

63.1348(d), including actions taken to correct a malfunction. (40 CFR 63.1354(c))

S4. Testing (Regulation 2.03, section 5.1)

a. Opacity

See S4.b. HAP (40 CFR 63 Subpart LLL (MACT))

b. HAP (40 CFR 63 Subpart LLL (MACT))

i. Performance testing requirements. (40 CFR 63.1349)

1) Opacity tests. (40 CFR 63.1349(b)(2))

If you are subject to limitations on opacity under this subpart, you must conduct opacity tests in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section of the federal regulation apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating. (40 CFR 63.1349(b)(2))

(a) There are no individual readings greater than 10 percent opacity; (40 CFR 63.1349(b)(2)(i))

(b) There are no more than three readings of 10 percent for the first 1-hour period. (40 CFR 63.1349(b)(2)(ii))

ii. Performance Test Reporting Requirements. (40 CFR 63.1349(d))

1) You must submit the information specified in paragraphs (d)(1) and (2) of this section of the federal regulation no later than 60 days following the initial performance test. All reports must be signed by a responsible official. (40 CFR 63.1349(d)(1))

(a) The initial performance test data as recorded under paragraph (b) of this section of the federal regulation. (40 CFR 63.1349(d)(1)(i))

(b) The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(1), (3), (6), and (7) of this section of the federal regulation, as

applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test. (40 CFR 63.1349(d)(1)(ii))

- iii. 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. (40 CFR 63.1349(e))
- iv. The owner or operator shall construct all equipment in such a manner that the following testing requirements can be performed.
 - 1) The test shall be performed at 90% or higher of maximum capacity, or allowable/permitted capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test, at maximum capacity, allowable/permitted capacity, or at a level of capacity which resulted in the greatest emissions, may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit.
 - 2) If a control device is used for the pollutant, the owner or operator shall perform an EPA Reference Method performance test on the inlet and outlet of the control device or emission point. In lieu of the control efficiency test, the owner or operator may submit a signature guarantee from the control device manufacture stating the control device efficiency.
 - 3) The owner or operator shall submit written compliance test plans (protocol) for the performance test. They shall include the EPA test methods that will be used compliance testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators (e.g. pressure drop, minimum combustion chamber temperature) that will be monitored during the performance test. The compliance test plans shall be furnished to the District at least 30 days prior to the actual date of the performance test. Attached to the permit is a Protocol Checklist for Performance Test for the information to be submitted in the protocol.
 - 4) The owner or operator shall be responsible for obtaining and analyzing audit samples when the EPA Reference Method is used to analyze samples to demonstrate compliance with the source's

emission regulation. The audit samples shall be available for verification by the District during the onsite testing.

- 5) The owner or operator shall provide the District at least 10 days prior notice of any performance test to afford the District the opportunity to have an observer present.
- 6) The owner or operator shall furnish the District with a written report of the results of the performance test within 60 days following the actual date of completion of the performance test.

Appendix B - Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers that are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Tentative test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. The type and manufacturer of the control equipment, if any;
- 16. The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including:
 - Sample identification and chain-of-custody procedures
 - If audit samples are required for this test method, audit sample provider and number of audit samples to be used
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack diameter is >12"
 - Method 1a if stack diameter is greater than or equal to 4" and less than 12"
 - Alternate method of determination for <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.
- 21. The Stack Test Review fee shall be submitted with each stack test protocol.