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

Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: 27843-14-F Plant ID: 1293

Effective Date: Click here to enter a date. Expiration Date: Click here to enter a date.

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Ernst Kentucky, LLC – Downtown Plant
4121 Algonquin Parkway
Louisville, KY 40211

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant: PM_{10}
Tons/year: 25 tn/yr

Application No.:	19371	Application Received:	3/22/2010
	62811		3/03/2014

Permit Writer: Bob Wesely

Public Notice Date: 9/13/2014

Proposed Permit Date: 9/13/2014

{manager1}
Air Pollution Control Officer
{date1}

Table of Contents

Permit Revisions/Changes

Revision No.	Issue Date	Public Notice Date	Type	Page No.	Description
Initial	__/__/14	9/13/14	Initial Issuance	All	Initial Permit Issuance

Acronyms and Abbreviations

AP-42	- AP-42, Compilation of Air Pollutant Emission Factors, published by USEPA
APCD	- Louisville Metro Air Pollution Control District
BAC	- Background Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
FEDOOP	- Federally Enforceable, District Origin Operating Permit
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- hour
in.	- inches
lbs	- pounds
l	- liter
LMAPCD	- Louisville Metro Air Pollution Control District
mm_{Hg}	- millimeters of mercury column height
MM	- million
NAICS	- North American Industry Classification System
NO_x	- Nitrogen oxides
PM	- Particulate Matter
PM_{10}	- Particulate Matter less than 10 microns
$PM_{2.5}$	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- pounds per square inch absolute
QA	- Quality Assurance
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO_2	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- water column
year	- any period of twelve consecutive months, unless "calendar year" is specified
yr	- year, or any 12 consecutive-month period, as determined by context

Preamble

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. Any permit shall be considered invalid if timely payment of applicable fees is not made after receipt of the statement of fees (SOF). 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

1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.

2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.

3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-0.

5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.

6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.

7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.

8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or an anticipated noncompliance shall not alter any permit requirement.

9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter PM_{10}, sulfur dioxide, carbon monoxide, photochemical oxidants, hydrocarbons, nitrogen oxides, lead, gaseous fluorides, or Volatile Organic Compounds (VOC) as listed in District Regulation 3.04; any pollutant subject to any standard in District Regulation 7.02; any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA; or any combination of greenhouse gasses whose combined global warming potential equals or exceeds 100,000 tons CO_2-equivalent, as defined in 40 CFR 98 (except that prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include biogenic carbon dioxide emissions defined in 40 CFR 52.21(b)(49)(ii)(a)). Fugitive emissions shall be included in these limits.

11. 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.

12. Unless specified elsewhere in this permit, the owner or operator shall submit annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. 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 or a declaration that there were no such deviations. All annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company. The report must be postmarked no later than March 1 of the year following the calendar year covered in the annual report.

13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting

Regulation	Title
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.17	Federally Enforceable District Origin Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.

16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.

17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745

Emission Unit U1

U1 (Hansen ID: 27843)

U1 Unit Description: Concrete Dry Mix Batch Plant

One (1) Johnson Ross portable truck mix ready-mix concrete batch plant, model Rustler II, maximum rated dry capacity of 240 tn/hr (120 yd^3/hr), with one (1) cement silo with baghouse dust collector, one (1) flyash silo with baghouse dust collector, one (1) outside conveyor for filling overhead bins, four (4) overhead aggregate/sand bins, aggregate/sand weigh hopper, batch transfer conveyor, cement/flyash weigh hopper with baghouse dust collector, truck loadout with baghouse dust collector, and 2.1 mmbtu/hr hot water heater. [1]

U1 Applicable Regulations

Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	All
2.17	Federally Enforceable District Origin Operating Permit	All
7.08	Standards of Performance for New Process Operations	1, 2, 3 and 5

U1 Equipment

Emission Point ID	Description Make/Model	Maximum Capacity	Applicable Regulation	Control ID	Stack ID	Application Date
E1	Aggregate stockpiles	NA	1.14, 2.17, 7.08	None	Fugitive	9/16/09
E2	Sand stockpile	NA		None	Fugitive	9/16/09
E3	Aggregate handling	NA		None	Fugitive	9/16/09
E4	Sand handling	NA		None	Fugitive	9/16/09
E5	Overhead aggregate bins loading	NA		None	Fugitive	9/16/09
E6	Overhead sand bin loading	NA		None	Fugitive	9/16/09
E7	Cement silo	50 tn		C1	S1	9/16/09
E8	Flyash silo	50 tn		C2	S2	9/16/09
E9	Aggregate Weigh Hopper	198 tn/hr		None	Fugitive	9/16/09
E10	Cement/Flyash Weigh Hopper	34.0 tn/hr		C3	S3	9/16/09
E11	Truck loadout	240 tn/hr		C4	S4	9/16/09

[1] Truck mix batch plant equipment previously permitted by construction permit 266-09-C.

U1 Controls

Control ID	Description	Make/Model	Maximum Capacity	Pollutant Controlled	Application Date
C1	Baghouse	Johnson Ross, model 6CP-500	1,771 cfm	PM/PM_{10}	9/16/09
C2	Baghouse	Johnson Ross, model 6CP-500	1,586 cfm	PM/PM_{10}	9/16/09
C3	Baghouse	Johnson Ross, model 1CP-H	196 cfm	PM/PM_{10}	9/16/09
C4	Baghouse	Besser, model DC5-260	1,596 cfm	PM/PM_{10}	9/16/09

Baghouse C1 control cement silo filling emissions. [2]
Baghouse C2 controls flyash silo filling emissions.
Baghouse C3 controls cement/flyash weigh hopper emissions.
Baghouse C4 controls truck loadout emissions.

One (1) truck mix (dry) ready-mix concrete batch plant, with a maximum rated capacity of 240 tn/hr (120 yd^3/hr), consisting of the components listed in the above table, which are described in more detail below, in addition to the central dust collection system listed above:

One (1) exterior aggregate/sand handling conveyor loading hopper
One (1) exterior aggregate/sand handling conveyor from outside conveyor loading hopper to the four (4) exterior overhead aggregate/sand bins.
Four (4) overhead aggregate/sand bins for aggregates and sand
One (1) aggregate/sand weigh hopper (single compartment) located below the aggregate/sand overhead bins.
One conveyor belt that transfers material from the aggregate/sand weigh hopper to the truck loadout chute.
One (1) cement storage silo, 50 tn capacity, with a 30 tn/hr fill rate
One (1) flyash storage silo, 50 tn capacity, with a 30 tn/hr fill rate
One (1) cement/flyash weigh hopper, located above the truck loadout chute.

[2] Dust collection baghouses previously permitted by construction permit 232-09-C.

U1 Specific Conditions

S1. **Standards (Regulation 2.17, section 5.1)**

a. **PM/PM_{10}**

i. The owner or operator shall not allow the plant-wide emissions of the pollutant PM_{10} to equal or exceed twenty-five (25.0) tons per twelve (12) consecutive month period. [3,4] (Reg. 2.17, Section 5.1)

ii. The owner or operator shall not allow any materials to be handled, transported or stored; or access roads to and from the plant site, roads on the plant site property and the on-site work areas of the plant site, to be used without taking reasonable precautions to prevent particulate matter from becoming airborne beyond the work site. (Reg. 1.14, section 2.1)

iii. The owner or operator shall not allow the emissions of the pollutant PM emitted from the aggregate transfer conveyor to equal or exceed 37.04 lb/hr, based on actual operating hours on a calendar day. [5] (Permit 226-09-C)

iv. The owner or operator shall not allow the emissions of the pollutant PM emitted from the sand transfer conveyor to equal or exceed 35.49 lb/hr, based on actual operating hours on a calendar day. [5] (Permit 226-09-C)

v. The owner or operator shall not allow the emissions of the pollutant PM emitted from the aggregate/sand weigh hopper to equal or exceed 40.56 lb/hr, based on actual operating hours on a calendar day. [5] (Reg. 7.08, Section 3.1.2)

vi. The owner or operator shall operate the controls at all times that transit/mix truck loading is performed, so that the emissions of the pollutant PM emitted from the transit/mix truck loading do not equal or exceed 30.59 lb/hr, based on actual operating hours on a calendar day. [6] (Permit 226-09-C)

vii. The owner or operator shall not allow the emissions of the pollutant PM emitted from the cement silo filling to equal or exceed 29.57 lb/hr, based on actual operating hours on a calendar day. [5] (Reg. 7.08, Section 3.1.2)

viii. The owner or operator shall not allow the emissions of the pollutant PM emitted from the flyash silo filling to equal or exceed 29.57 lb/hr, based on actual operating hours on a calendar day. [5] (Reg. 7.08, Section 3.1.2)

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[3] The source requested the total plant-wide limits of the criteria pollutants PM_{10} < 25 tn/yr, Total HAPs < 12.5 tn/yr and largest single HAP < 5.0 tn/yr to be FEDOOP STAR Exempt source as defined by Regulation 5.00, section 1.13.5, on 2/28/14.

[4] The Source is not major for Green House Gases.

[5] Emission calculations used emission factors from AP-42, table 11.12-2 and table 11.12-8. Uncontrolled emissions for the pollutant PM do not exceed the standard.

[6] Emission calculations used emission factors from AP-42, table 11.12-2 and table 11.12-8. Uncontrolled emissions for the pollutant PM can exceed the standard.

b. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed twenty percent (20%) opacity. (Reg. 7.08, section 3.1.1)

S2. **Monitoring and Record Keeping (Regulation 2.17, section 5.2)**

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

a. **PM/PM_{10}**

i. The owner or operator shall monthly, perform a visual inspection of the structural and mechanical integrity of the process equipment for signs of damage, air leakage, corrosion, etc. and repair shall be performed as needed. The emissions points to be surveyed shall include at least the emission points listed below:

1) Aggregate/sand bin loading conveyor fill hopper

2) Aggregate/sand bin loading conveyor

3) Aggregate/sand weigh hopper

4) Aggregate/sand transfer conveyor

5) Cement/flyash weigh hopper

6) Cement silo filling

7) Flyash silo filling

8) Mix/transit truck loadout

ii. The owner or operator shall keep records, monthly of the visual inspection of the structural and mechanical integrity of the process equipment.

iii. The owner or operator shall maintain records monthly of the below listed items:

1) Monthly amount of cubic yards of concrete produced and the twelve (12) consecutive month period total of cubic yards of concrete produced.

2) The owner or operator shall calculate and record, during the first week of the following month, the monthly total and the twelve (12) consecutive month total emissions of the pollutant PM_{10}, to demonstrate ongoing compliance with the PM_{10} emission limit listed in S1.a.i. All totals shall include PM_{10} emitted during control bypasses.

3) The owner or operator shall use the below listed AP-42, Concrete Batching, emission factors when calculating the controlled plant-

wide emissions for the pollutant PM_{10}, or other emission factors that become available, as approved by District. [7]

Equipment	AP-42 Emission Factor, Controlled lb PM_{10}/tn	Controlled PM_{10} Emission Factor converted to lb PM_{10}/yd^3 dry concrete
Aggregate Transfer	0.0033	0.0031
Sand Transfer	0.00099	0.0007
Weight hopper (Agg+Sand)[a]	0.00014	0.00023
Truck loading (cement+flyash)[b]	0.0263	0.0074
Cement silo filling	0.00034	0.00008
Flyash silo filling	0.0049	0.0002
Aggregate ground storage	NA	0.0031
Sand ground storage	NA	0.0007
Aggregate hopper loading	NA	0.0031
Sand hopper loading	NA	0.0007

4) The owner or operator shall use the below listed AP-42, Concrete Batching, emission factors when calculating the uncontrolled plant-wide emissions for the pollutant PM_{10}, or other emission factors that become available, as approved by District. [7]

Equipment	AP-42 Emission Factor Uncontrolled (lb PM_{10}/tn)	Uncontrolled PM_{10} Emission Factor converted to lb PM_{10}/yd^3 dry concrete mix
Aggregate Transfer	0.0033	0.0031
Sand Transfer	0.00099	0.0007
Weight hopper (Agg+Sand)[a]	0.0028	0.0046
Truck loading (cement+flyash)[b]	0.310	0.0874
Cement silo filling	0.47	0.1152
Flyash silo filling	1.10	0.0402
Aggregate ground storage	NA	0.0031
Sand ground storage	NA	0.0007
Aggregate hopper loading	NA	0.0031
Sand hopper loading	NA	0.0007

[a]The unit for weigh hopper emission factor is lb of pollutant per ton of aggregate and sand, AP-42, table 11.12-2, footnote e.

[b]The unit for truck loading emission factor is lb of pollutant per ton of cement and flyash, AP-42, table 11.12-2, footnote f.

iv. The owner or operator shall maintain daily records of any periods of time where the process was operating and the control device was not operating

[7] The PM/PM_{10} emissions factors are from or were derived from AP-42, Chapter 11.12, Concrete Batching, tables 11.12-2 and 11.12-8, and the standard concrete mix proportions listed in AP-42, Chapter 11.12.

or a declaration that the control device operated at all times that day when the process was operating.

v. For truck loadout, E11, if there is any time that the control devices are bypassed or not in operation when the process is operating, the owner or operator shall keep a record of the following for each bypass event:

1) Date;

2) Start time and stop time;

3) Emission point E11 throughput during the hours the control is bypassed;

4) Identification of the control device and the uncontrolled emission point(s);

5) PM emissions in lb/hr during the bypass;

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.

b. **Opacity**

i. The owner or operator shall conduct a monthly 1-minute visible emissions survey, during normal operation, of the emission points. 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. The emission points to be surveyed shall include at least the emissions points listed below:

1) Aggregate/sand bin loading conveyor fill hopper

2) Aggregate/sand bin loading conveyor

3) Aggregate/sand weigh hopper

4) Aggregate/sand transfer conveyor

5) Cement/flyash weigh hopper

6) Cement silo

7) Flyash silo

8) Mix/transit truck loadout

ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight (8) hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 test, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

iii. The owner or operator shall maintain records, monthly, 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 month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

S3. **Reporting (Regulation 2.17, section 5.2)**

The owner or operator shall submit 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 2.17, section 3.5.

- "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 Annual Compliance Report is due on or before the following date of each calendar year: [8]

Reporting Period	Report Due Date
January 1st through December 31st	March 1st

The Annual Compliance Certification is due on or before the following date of each calendar year: [9]

Reporting Period	Report Due Date
January 1st through December 31st	April 15th

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 following the date a change in the designated RO occurs for this facility.

a. **PM/PM_{10}**

i. The owner or operator shall report the monthly totals and the monthly twelve (12) consecutive month period totals of plant-wide emissions of the

[8] The Annual Compliance Report is due each year and shall include all emissions and throughput data required to be reported by the permit to show compliance with the standards of the permit.
[9] The Annual Compliance Certification is due each year and shall include the information required in the FEDOOP Annual compliance Certification for 9440-O.

pollutant PM_{10}. All totals shall include PM_{10} emitted during control bypasses.

ii. The owner or operator shall report the following information regarding each emission point E11 PM By-Pass Activity in the annual compliance reports:

1) Emission point at which the by-pass occurred;

2) Date and duration (including the start and stop time) during which a bypass occurred:

3) The average PM lb/hr emitted during the bypass;

4) Summary information on the cause or reason for the by-pass activity

5) Corrective action taken to minimize the extent and duration of each bypass event;

6) Measures implemented to prevent reoccurrence of the situation that resulted in by-pass emissions; or

7) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.

b. **Opacity**

i. The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration.

ii. The date, time and results of each Method 9 test conducted. If there were no Method 9 tests performed during the reporting, the owner or operator may submit a negative declaration.

iii. Description of any corrective action taken for each exceedance of the opacity standard.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all the conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

There are no Off-Permit Documents associated with this permit.

Alternative Operating Scenario

The company requested no alternative operating scenario in its FEDOOP Application.

Insignificant Activities

Equipment	Quantity	Location	PTE (tn/yr)	Basis for Exemption
2.1 mmbtu/hr natural gas fueled hot water heater	1	Plant	0.9 NO_x	Regulation 1.02
Fixed or mobile internal combustion engine	1	Plant	2.5 NO_x	Regulation 1.02, Appendix A
Brazing, soldering or welding equipment	1	Plant	0.41 PM	Regulation 1.02, Appendix A

Equipment	Quantity	Location	PTE (tn/yr)	Basis for Exemption
Emergency generator (See IA1)	1	Plant	< 5.0 NO_x	Regulation 1.02[10,11,12,13,14,15,16]
One (1) 2,000 gallon and one (1) 500 gallon diesel fuel tanks are deleted from the Insignificant Activities list due to their trivial emissions (PTE combined < 0.0015 tn/yr VOC)				

[10] Insignificant Activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.

[11] Insignificant Activities identified in District regulation 1.02, Appendix A, shall comply with generally applicable requirements.

[12] Activities identified in Regulation 1.02, Appendix A may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.

[13] Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.

[14] In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant activities table, as the annual emission for each piece of equipment.

[15] The Insignificant activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.

[16] The owner or operator shall submit an updated list of Insignificant Activities whenever changes in equipment located at the facility occur that cause changes to the plant wide emissions.

Emission Unit IA1

IA1 (Hansen ID: 27843)

IA1 Unit Description: Emergency Generator(s)[17,18]

IA1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
40 CFR 63, Subpart ZZZZ[19]	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	§63.6603, 6604, 6605, 6625, 6640, 6645, 6655
40 CFR 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	§60.4200 - 4219
40 CFR 80, Subpart I	Motor Vehicle Diesel Fuel; Nonroad, Locomotive, and Marine Diesel Fuel; and ECA Marine Fuel	§80.510
40 CFR 89, Subpart B	Emission Standards and Certification Provisions	§89.112, 89.113
40 CFR 1039, Subpart B	Emission Standards and Related Requirements	§1039.101, 1039.102, 1039.104, 1039.105

IA1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
IA1[20]	Emergency diesel generators are manufactured after April 1, 2006, with a maximum engine power less than or equal to 500 HP and located at an area source of HAP.	40 CFR 63, Subpart ZZZZ, 40 CFR 60, Subpart IIII	N/A	N/A

[17] This insignificant emission unit allows the companies to install emergency engines that meet the description without submitting construction applications.

[18] Potential emissions for the permitted operation(s) in this emission unit are greatest for nitrogen oxides (NO_x). Based on AP-42 Emission Factors and 500 hours per year for an emergency generator, as defined by the EPA, the potential NO_x emissions for each permitted operation in this emission unit are less than 5 tons per year.

[19] This unit is subject to 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, because it involves a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions. The proposed new stationary RICE meets the definition in 40 CFR §63.6675 of an emergency stationary RICE, which, per 40 CFR §63.6590(b)(1)(i), does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A.

[20] The associated diesel fuel storage tank is exempt from District permitting requirements in accordance with Regulation 1.02, Appendix A.

IA1 Specific Conditions

S1. **Standards** (**Regulation 2.17, section 5.2**)

a. **Unit Operation**

i. The owner or operator of a pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines shall comply with the emission standards in Table 1 to this subpart. (40 CFR §60.4205(a)) (See Table 1)

Table 1 Emission standards for Pre-2007 model (40 CFR 60, Subpart IIII)

Maximum Engine Power	Emission Standards in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
kW < 8 (hp < 11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8 ≤ kW < 19 (11 ≤ hp < 25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19 ≤ kW < 37 (25 ≤ hp < 50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37 ≤ kW < 56 (50 ≤ hp < 75)			9.2 (6.9)		
56 ≤ kW < 75 (75 ≤ hp < 100)			9.2 (6.9)		
75 ≤ kW < 130 (100 ≤ hp < 175)			9.2 (6.9)		
130 ≤ kW < 225 (175 ≤ hp < 300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225 ≤ kW < 375 (300 ≤ hp < 500)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

ii. The owner or operator of a 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that is not a fire pump engine shall comply with the emission standards (Table 2) obtained from 40 CFR 89.112, Table 1 for Tier 1 – 3 engines and 40 CFR 1039.101, Table 1 for Tier 4 engines, or the family emission limits (Table 3) obtained from 40 CFR §89.112, Table 2 for Tier 1 – 3 engines and 40 CFR §1039.101, Table 2 for Tier 4 engines, and smoke emission standards (Table 4) obtained from 40 CFR §89.113(a) for Tier 1-3 engines and 40 CFR §1039.105(b) for Tier 4 engines, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR §60.4205(b)) (40 CFR §60.4202)

Table 2 EPA Tier 1-4 Nonroad Diesel Engine Emission Standards[a], g/kW-hr (g/bhp-hr)

Maximum Engine Power	Tier	Model Year[b]	NO_x	HC	NMHC +NO_x	CO	PM
kW < 8 (hp < 11)	Tier 2/Tier 3	2005	-	-	7.5 (5.6)	8.0 (6.0)	0.8 (0.6)
	Tier 4	2008	-	-	7.5 (5.6)	8.0 (6.0)	0.4[c] (0.3)
8 ≤ kW < 19 (11 ≤ hp < 25)	Tier 2/Tier 3	2005	-	-	7.5 (5.6)	6.6 (4.9)	0.8 (0.6)
	Tier 4	2008	-	-	7.5 (5.6)	6.6 (4.9)	0.4 (0.3)
19 ≤ kW < 37 (25 ≤ hp < 50)	Tier 2/Tier 3	2004	-	-	7.5 (5.6)	5.5 (4.1)	0.6 (0.45)
	Tier 4	2008	-	-	7.5 (5.6)	5.5 (4.1)	0.3 (0.22)
		2013	-	-	4.7 (3.5)	5.5 (4.1)	0.03 (0.022)
37 ≤ kW < 56 (50 ≤ hp < 75)	Tier 2	2004	-	-	7.5 (5.6)	5.0 (3.7)	0.4 (0.3)
	Tier 3	2008	-	-	4.7 (3.5)	5.0 (3.7)	0.3[d] (0.22)
	Tier 4	2013	-	-	4.7 (3.5)	5.0 (3.7)	0.03 (0.022)
56 ≤ kW < 75 (75 ≤ hp < 100)	Tier 2	2004	-	-	7.5 (5.6)	5.0 (3.7)	0.4 (0.3)
	Tier 3	2008	-	-	4.7 (3.5)	5.0 (3.7)	0.4 (0.3)
	Tier 4	2012-2014[e]	0.4 (0.3)	0.19 (0.14)	-	5.0 (3.7)	0.02 (0.015)
75 ≤ kW < 130 (100 ≤ hp < 175)	Tier 2	2003	-	-	6.6 (4.9)	5.0 (3.7)	0.3 (0.2)
	Tier 3	2007	-	-	4.0 (3.0)	5.0 (3.7)	0.3 (0.2)
	Tier 4	2012-2014[e]	0.4 (0.3)	0.19 (0.14)	-	5.0 (3.7)	0.02 (0.015)
130 ≤ kW < 225 (175 ≤ hp < 300)	Tier 2	2003	-	-	6.6 (4.9)	3.5 (2.6)	0.2 (0.15)
	Tier 3	2006	-	-	4.0 (3.0)	3.5 (2.6)	0.2 (0.15)
	Tier 4	2011-2014[f]	0.4 (0.3)	0.19 (0.14)	-	3.5 (2.6)	0.02 (0.015)
225 ≤ kW ≤ 375 (300 ≤ hp ≤ 500)	Tier 3	2006	-	-	4.0 (3.0)	3.5 (2.6)	0.2 (0.15)
	Tier 4	2011-2014[f]	0.4 (0.3)	0.19 (0.14)	-	3.5 (2.6)	0.02 (0.015)

[a] Emission standards from 40 CFR §89.112 Table 1 for Tier 1-3 engines and 40 CFR §1039.101 Table 1 for Tier 4 engines.

[b] The model years listed indicate the model years for which the specified tier of limits take effect.

[c] Hand-startable, air-cooled, direct injection engines may be certified to Tier 2 standards through 2009 and to an optional PM standard of 0.6 g/kW-hr starting in 2010

[d] 0.4 g/kWh (Tier 2) if manufacturer complies with the 0.03 g/kW-hr standard from 2012

[e] PM/CO: full compliance from 2012; NO_x/HC: Option 1 (if banked Tier 2 credits used) – 50% engines shall comply in 2012-2013; Option 2 (if no Tier 2 credits claimed) – 25% engines shall comply in 2012-2014, with full compliance from 2014.12.31

[f] PM/CO: full compliance from 2011; NO_x/HC: 50% engines shall comply in 2011-2013

Table 3 EPA Tier 1-4 Nonroad Diesel Engine Family Emission Limits, g/kW-hr (g/bhp-hr)

Maximum Engine Power	Tier	Model Year[a]	NO_x	NMHC +NO_x	PM
kW < 8 (hp < 11)	Tier 2/Tier 3	2005	-	10.5 (7.8)	1.0 (0.7)
	Tier 4	-	-	10.5 (7.8)	0.8 (0.6)
8 ≤ kW < 19 (11 ≤ hp < 25)	Tier 2/Tier 3	2005	-	9.8 (7.3)	0.8 (0.6)
	Tier 4	-	-	9.5 (7.1)	0.8 (0.6)
19 ≤ kW < 37	Tier 2/Tier 3	2004	-	9.5 (7.1)	0.8 (0.6)

Maximum Engine Power	Tier	Model Year[a]	NO_x	NMHC +NO_x	PM
(25 ≤ hp < 50)	Tier 4	-	-	7.5 (5.6)	0.05 (0.037)
37 ≤ kW < 56 (50 ≤ hp < 75)	Tier 2	2004	-	11.5 (8.6)	1.2 (0.9)
	Tier 3	2008	-	7.5 (5.6)	1.2 (0.9)
	Tier 4	-	-	7.5 (5.6)	0.05 (0.037)
56 ≤ kW < 75 (75 ≤ hp < 100)	Tier 2	2004	-	11.5 (8.6)	1.2 (0.9)
	Tier 3	2008	-	7.5 (5.6)	1.2 (0.9)
	Tier 4	-	0.8 (0.6)	-	0.04 (0.03)
75 ≤ kW < 130 (100 ≤ hp < 175)	Tier 2	2003	-	11.5 (8.6)	1.2 (0.9)
	Tier 3	2007	-	6.6 (4.9)	1.2 (0.9)
	Tier 4	-	0.8 (0.6)	-	0.04 (0.03)
130 ≤ kW < 225 (175 ≤ hp < 300)	Tier 2	2003	-	10.5 (7.8)	0.54 (0.04)
	Tier 3	2006	-	6.6 (4.9)	0.54 (0.4)
	Tier 4	-	0.8 (0.6)	-	0.04 (0.03)
225 ≤ kW ≤ 375 (300 ≤ hp ≤ 500)	Tier 3	2006	-	6.4 (4.8)	0.54 (0.4)
	Tier 4	-	0.8 (0.6)	-	0.04 (0.03)

Table 4 EPA Tier 1-4 Smoke Emission Standards

Maximum Engine Power	Tier	Smoke Emission Standards
0 < kW ≤ 375 (0 < hp ≤ 500)	Tier 1	(1) 20% during the acceleration mode (2) 15% during the lugging mode; or (3) 50% during the peaks in either the acceleration or lugging modes.
	Tier 2	
	Tier 3	
	Tier 4	

iii. The owner or operator of an emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conducts performance tests in-use shall meet the NTE standards as indicated in the Testing section of this permit. (40 CFR §60.4205(e))

iv. The owner or operator of any modified or reconstructed emergency stationary CI ICE subject to this subpart shall meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in Table 2, Table 3, or the Testing section of this permit. (40 CFR §60.4205(f))

v. The owner or operator that is required comply with the emission standards specified in 40 CFR 60, Subpart IIII shall do all of the following: (40 CFR §60.4211(a))

1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; (40 CFR §60.4211(a)(1))

2) Change only those emission-related settings that are permitted by the manufacturer; (40 CFR §60.4211(a)(2))

vi. For a pre-2007 model year stationary CI internal combustion engine that shall comply with the emission standards specified in Table 1, the owner or operator shall demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section. (40 CFR §60.4211(b))

1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications. (40 CFR §60.4211(b)(1))

2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test shall have been conducted using the same methods specified in this subpart and these methods shall have been followed correctly. (40 CFR §60.4211(b)(2))

3) Keeping records of engine manufacturer data indicating compliance with the standards. (40 CFR §60.4211(b)(3))

4) Keeping records of control device vendor data indicating compliance with the standards. (40 CFR §60.4211(b)(4))

5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in the Testing section of this permit, as applicable. (40 CFR §60.4211(b)(5))

vii. For a 2007 model year and later stationary CI internal combustion engine that shall comply with the emission standards specified in Table 2 and Table 3, the owner or operator shall purchase an engine certified to the emission standards in Table 2 and Table 3, as applicable for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications. (40 CFR §60.4211(c))

viii. For a modified or reconstructed stationary CI internal combustion engine that shall comply with the emission standards specified in Table 2, Table 3, or the Testing section of this permit, the owner or operator shall demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section. (40 CFR §60.4211(e))

1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in Table 2, Table 3, or the Testing section of this permit, as applicable. (40 CFR §60.4211(e)(1))

2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in the Testing section of this permit, as appropriate. The test shall be conducted within 60 days after the engine commences operation after the modification or reconstruction. (40 CFR §60.4211(e)(2))

ix. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If the owner or operator does not operate the engine according to the requirements below, the engine will not be considered an emergency engine under this subpart and shall meet all requirements for non-emergency engines. (40 CFR §60.4211(f))

1) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR §60.4211(f)(1))

2) The owner or operator may operate the emergency stationary ICE for any combination of the purposes specified in 60 CFR §60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 60 CFR §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. (40 CFR §60.4211(f)(2)).

(a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (40 CFR §60.4211(f)(2)(i))

(b) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. (40 CFR §60.4211(f)(2)(ii))

(c) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. (40 CFR §60.4211(f)(2)(iii))

3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR §60.4211(f)(2). Except as provided in 40 CFR §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR §60.4211(f)(3))

(a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: (40 CFR §60.4211(f)(3)(i))

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; (40 CFR §60.4211(f)(3)(i)(A))

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. (40 CFR §60.4211(f)(3)(i)(B))

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. (40 CFR §60.4211(f)(3)(i)(C))

(4) The power is provided only to the facility itself or to support the local transmission and distribution system. (40 CFR §60.4211(f)(3)(i)(D))

(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. (40 CFR §60.4211(f)(3)(i)(E))

b. **Fuel Requirements**

Beginning October 1, 2010, the owner or operator of a stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that uses diesel fuel shall use diesel fuel that meets the requirements of 40 CFR §80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise

obtained) prior to October 1, 2010, may be used until depleted: (40 CFR 60.4207(b))

1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel. (40 CFR §80.510(b)(1)(i))

2) A minimum cetane index of 40; or (40 CFR §80.510(b)(2)(i))

3) A maximum aromatic content of 35 volume percent. (40 CFR §80.510(b)(2)(ii))

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

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. **Unit Operation**

i. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines shall install a non-resettable hour meter prior to startup of the engine. (40 CFR §60.4209(a))

ii. The owner or operator is not required to submit an initial notification. Starting with the model years in Table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the reason the engine was in operation during that time. (40 CFR §60.4214(b))

Table 5 Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

Engine Power	Starting Model Year
$19 \leq kW < 56$ ($25 \leq hp < 75$)	2013
$56 \leq kW < 130$ ($75 \leq hp < 175$)	2012
$130 \leq kW \leq 375$ ($175 \leq hp \leq 500$)	2011

b. **Fuel Requirements**

The owner or operator shall maintain records of the fuel MSDS sheets and receipts showing dates, amounts of fuel purchased, sulfur content of fuel purchased and supplier's name and address, to show compliance with Specific Condition S1.b.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

If there are one or more emergency diesel generators that meet the description provided in this emission unit installed at the facility, the owner or operator shall submit compliance reports that include the information in this section. If there are no emergency diesel generators that meet the description provided in this emission unit installed at the facility, the owner or operator shall submit a negative declaration for Emission Unit IA-EG, to be included in the compliance report.

a. **Unit Operation**

i. The owner or operator is not required to submit an initial notification. (40 CFR §60.4214(b))

ii. The owner or operator shall identify all periods of exceeding the hour limits specified in Specific Condition S1.a.ix during the reporting period. The compliance report shall include the following:

1) Identification of all periods during which a deviation occurred;

2) A description, including the magnitude, of the deviation;

3) If known, the cause of the deviation;

4) A description of all corrective actions taken to abate the deviation; and

5) If no deviations occur during a reporting period, the report shall contain a negative declaration.

iii. For an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in S1.a.ix.2)(b) and S1.a.ix.2)(c), or that operates for the purposes specified in S1.a.ix.3)(a), the owner or operator shall submit an annual report according to the requirements in the following paragraphs: (40 CFR §60.4214(d))

1) The report shall contain the following information: (40 CFR §60.4214(d)(1))

(a) Company name and address where the engine is located. (40 CFR §60.4214(d)(1)(i))

(b) Date of the report and beginning and ending dates of the reporting period. (40 CFR §60.4214(d)(1)(ii))

(c) Engine site rating and model year. (40 CFR §60.4214(d)(1)(iii))

(d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. (40 CFR §60.4214(d)(1)(iv))

(e) Hours operated for the purposes specified in 40 CFR §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes

specified in 40 CFR §60.4211(f)(2)(ii) and (iii). (40 CFR §60.4214(d)(1)(v))

(f) Number of hours the engine is contractually obligated to be available for the purposes specified in 40 CFR §60.4211(f)(2)(ii) and (iii). (40 CFR §60.4214(d)(1)(vi))

(g) Hours spent for operation for the purposes specified in 40 CFR §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR §60.4211(f)(3)(i). The report shall also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. (40 CFR §60.4214(d)(1)(vii))

2) The first report shall cover the calendar year 2015 and shall be submitted no later than March 31, 2016. Subsequent reports for each calendar year shall be submitted as required by your operating permit. (40 CFR §60.4214(d)(2))

3) The report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4. (40 CFR §60.4214(d)(3))

b. **Fuel Requirements**

There are no routine compliance reporting requirements for this equipment.

S4. **Testing (Regulation 2.16, section 4.1.9.3)**

a. **Testing Requirements (40 CFR 60, Subpart IIII)**

The owner or operator of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart shall do so according to the following paragraphs: (40 CFR §60.4212)

i. The performance test shall be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder. (40 CFR §60.4212(a))

ii. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 shall not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR §1039.101(e) and 40 CFR

§1039.102(g)(1), except as specified in 40 CFR §1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039. (40 CFR §60.4212(b))

iii. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in Table 2 or Table 3, as applicable, shall not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in Table 2 or Table 3, determined from the following equation: (40 CFR §60.4212(c))

NTE requirement for each pollutant = (1.25) × (STD) (Eq. 1)

Where:
STD = The standard specified for that pollutant in Table 2 or Table 3.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in Table 2 or Table 3 may follow the testing procedures specified in 40 CFR §60.4213 of this subpart, as appropriate.

iv. Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in Table 1 shall not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in Table 1, determined from the following equation: (40 CFR §60.4212(d))

Where:
STD = The standard specified for that pollutant in Table 1.

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in Table 1 may follow the testing procedures specified in 40 CFR §60.4213, as appropriate.

v. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 shall not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR §1042.101(c). (40 CFR §60.4212(e))

b. **General Testing Requirements**

The owner or operator shall construct all equipment in such a manner that the following testing requirements can be performed.

i. 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.

ii. The owner or operator shall submit written compliance test plans (protocol) for the test. They shall include the EPA test methods that will be used for 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.

iii. 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.[21]

iv. 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.

v. 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.

FEDOOP Fee Comment

On May 15, 2013, the Board approved revisions to Regulation 2.08, which implemented a new fee structure. As a result, Ernst Kentucky, LLC – Downtown Plant will be required to pay the initial issuance fee as well as annual fees.

The initial issuance fee for a FEDOOP is $2,542.40 in accordance with the Schedule of Fees table, Regulation 2.08, section 12. This fee shall be paid to the District prior to the issuance of the permit.

[21] Per an EPA rule change ("Restructuring of the Stationary Source Audit Program." Federal Register 75:176 (September 13, 2010) pp 55636-55657), sources became responsible for obtaining the audit samples directly from accredited audit sample suppliers, not the regulatory agencies.

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.

End of operating permit