

Missouri Department of Natural Resources Air Pollution Control Program

PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number: OP2010-114 Expiration Date: NOV 0 1 2015 Installation ID: 183-0076 Project Number: 2003-07-038

Installation Name and Address

General Motors Corporation Wentzville Assembly 1500 East Route A Wentzville, MO 63385 St. Charles County

Parent Company's Name and Address

General Motors Corporation 300 Renaissance Center MC 482 629 B24 Detroit, MI 48265-3000

Installation Description:

As part of the overall vehicle assembly process, additional supporting operations are required at the General Motors LLC Wentzville Assembly plant. One of these operations is the Powerhouse Operations, which provides process and building steam/heat to the plant. Four boilers are located in the powerhouse. They provide process and building steam/heat to the Wentzville Assembly plant. These boilers exhaust through one common stack (ST-700) and are primarily fueled by coal.

NOV 0 2 2010 Effective Date

Director or Designee

Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

As part of the overall vehicle assembly process, additional supporting operations are required at the General Motors LLC Wentzville Assembly plant. One of these operations is the Powerhouse Operations, which provides process and building steam/heat to the plant. Four boilers are located in the powerhouse. They provide process and building steam/heat to the Wentzville Assembly plant. These boilers with particulate controlled by baghouse filters exhaust through one common stack (ST-700) and are primarily fueled by coal. This stack is equiped with in-situ NO_x , O_2 , SO_2 , and opacity continuous monitors. Coal for use in the boilers is received by trucks or rail cars and is stored outdoors in a coal pile that is located at the southeast corner of the powerhouse building structure. When coal is received by truck, it is unloaded in an open area. When received by railcar, it is bottom unloaded inside an enclosed building. The unloaded coal is then transferred by means of an enclosed conveyor to either the boilers or the outdoor coal storage pile. To transport the coal to an individual boiler, the coal is conveyed via an enclosed belt conveyor system to a coal elevator at the powerhouse building which deposits the coal into the overhead coal bunker. The coal is then fed via an enclosed conveyor to the individual boilers upon demand. Ash is generated as part of the coal combustion process and is deposited in ash hoppers located in the basement of the powerhouse. This ash material is conveyed via an enclosed conveyor to an ash silo located on the top floor of the powerhouse building for storage until it is transported off-site for disposal. As part of the ash silo system, a baghouse controls particulate matter emissions released from the displacement of air in the ash silo as the ash is deposited.

Reported Air Pollutant Emissions, tons per year							
	Particulate			Volatile			Hazardous
	Matter	Sulfur	Nitrogen	Organic	Carbon		Air
	<u><</u> Ten Microns	Oxides	Oxides	Compounds	Monoxide	Lead	Pollutants
Year	(PM-10)	(SO_x)	(NO_x)	(VOC)	(CO)	(Pb)	(HAPs)
2009	2.64	314.01	197.60	0.90	69.98	0.21	37.92
2008	3.98	447.06	264.10	1.20	93.04	0.30	50.82
2007	4.07	417.89	262.98	1.20	93.12	0.30	50.60
2006	5.30	431.83	265.96	1.21	93.69	0.31	51.18
2005	6.08	547.75	304.92	1.39	107.42	0.35	39.27

The reported actual emissions for the past five years for the power house are listed below:

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0010	Boiler #1 – 82.5 MMBtu/hr
EU0020	Boiler #2 – 248 MMBtu/hr
EU0030	Boiler #3 - 248 MMBtu/hr
EU0040	Boiler #4 – 248 MMBtu/hr

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source Coal Storage Pile Coal Conveying System Ash Hoppers and Ash Silo

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

None

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 through EU0040 – Four Coal Fired Boilers (Powerhouse) Equipped with CEMS for NO _X				
Emission	Description	Manufacturer/	2009 EIQ	
Unit	Description	Model #	Reference #	
EU0010	Boiler #1 – Spreader Stocker with fly ash reinjection,	Zurn Two Drum	EPN-8	
	82.5 MMBtu/hr, Installed 1982	Open Pass		
	Supplemental fuel – Natural Gas			
EU0020	Boiler #2 - Spreader Stocker with fly ash reinjection,	Zurn Two Drum	EPN-8	
	248 MMBtu/hr, Installed 1982	Open Pass		
EU0030	Boiler #3 - Spreader Stocker with fly ash reinjection,	Zurn Two Drum	EPN-8	
	248 MMBtu/hr, Installed 1982	Open Pass		
EU0040	Boiler #4 - Spreader Stocker with fly ash reinjection,	Zurn Two Drum	EPN-8	
	248 MMBtu/hr, Installed 1982	Open Pass		

Permit Condition EU0010-001 through EU0040-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit Number 0580-003

U.S. EPA Prevention of Significant Deterioration (PSD) Permit (May 14, 1980) as Revised July 22, 1986.

40 CFR Part 64

Compliance Assurance Monitoring (CAM)

Emission Limitation:

- 1) General Motors LLC shall not cause to be discharged into the atmosphere from the subject power plant any gases which exceed the following BACT emission limits based on a 30-day rolling average:
 - a) $SO_2 1.2$ lbs/MMBtu of heat input;
 - b) NOx 0.6 lbs/MMBtu of heat input;
 - c) PM 0.03 lbs/MMBtu of heat input; and
 - d) CO 0.16 lbs/MMBtu of heat input.
 - [Condition 6 of PSD Permit]
- No stack or exhaust vent shall exhibit visible emissions of greater than 20 percent opacity, except for one six-minute period per hour of not more than 27 percent opacity. [Condition 7 of PSD Permit]

<u>Monitoring:</u>

 Continuous monitoring systems shall be installed on the power plant to continuously monitor emissions of SO₂, NO_x and opacity. The continuous monitoring system must meet the continuous monitoring Performance Specifications of Appendix B to 40 CFR 60. [Condition 10 of PSD Permit] a) SO₂ Monitoring:

With respect to SO₂ emission limit specified in Emission Limitation 1 and the SO₂ continuous monitoring system, General Motors LLC is required, as a condition of receiving the PSD permit, to demonstrate compliance as described in 40 CFR 60.46a(e) of the NSPS regulations (1980), attached hereto (Attachment B). The emission monitoring requirements of 40 CFR 60.47a (1980), attached hereto (Attachment B) shall apply, and reporting of the determination of continuous compliance shall be in accordance with 40 CFR 60.47a (1980). [Condition 12 of PSD Permit]

b) NO_x and Opacity Monitoring:

With respect to NO_x and opacity, the continuous monitoring system, General Motors LLC is required, as a condition of receiving the PSD permit, to meet notification, recordkeeping, and monitoring requirements identified to those set forth in 40 CFR 60.13 of the federal NSPS regulations. These requirements include, but are not limited to, the following:

- i) submission of written reports of excess emissions,
- ii) the keeping of records of any periods during which a continuous monitoring system or monitoring device is inoperative, verification of operational status prior to the performance tests,
- iii) written report of the continuous monitoring system performance evaluations, zero and span drift checks, and minimum frequency of operational requirements.
- [Condition 11 of PSD Permit]
- 2) PM Monitoring (CAM):

The Department of Natural Resources, Air Pollution Control Program, Compliance/Enforcement Section has approved a Compliance Assurance Monitoring (CAM) Plan provided by the facility (see Attachment A). The CAM approach is as follows:

a) The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1 of Attachment A. The CAM performance indicator is opacity.

<u>Recordkeeping/Reporting:</u>

- 1) With respect to SO₂, the permittee shall report the determination of continuous compliance in accordance with 40 CFR 60.47a (1980).
- 2) With respect to NO_x and opacity, the permittee shall submit written reports of excess emissions, the keeping of records of any periods during which a continuous monitoring system or monitoring device is inoperative, written report of continuous monitoring system performance evaluations, zero and span draft checks, and minimum frequency of operation requirements.

Permit Condition EU0010-002 through EU0040-002

10 CSR 10-6.260¹

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- 1) During the months of October, November, December, January, February, and March of every year, no person shall burn or permit the burning of any coal containing more than two percent (2%) sulfur or of any fuel oil containing more than two percent (2%) sulfur in any installation having a capacity of less than two thousand million (2,000 MM) Btus per hour.
- 2) During the remainder of the year, no person shall burn or permit the burning of any coal or fuel oil containing more than four percent (4%) sulfur in any installation having a capacity of less than two thousand million (2,000 MM) Btus per hour.
- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. The installation shall maintain records of the amount of fuel burned and verify the sulfur content. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) If the requirements of condition 1 can not be met, then compliance shall be determined using the following :
 - a) For sulfur content of coal, samples of each type of coal shall be taken at the beginning of each month or upon the first delivery to the installation by the vendor during the month. The first fifteen loads of coal each month from each vendor shall be sampled and composited into one sample for analysis (ASTM: D4239 and D5016 for percent sulfur). Weighted average percent sulfur concentrations in coal shall be calculated monthly.
 - b) The methods specified in 10 CSR 10-6.040 shall be used for measuring ambient sulfur compound concentrations.
- 3) Other methods approved by the permitting agency in advance may be used to verify compliance.

<u>Reporting:</u>

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certifications to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 as required by 10 CSR 10-6.065(6)(C)1.C.(III).

¹ 10 CSR 10-6.260(3)(B) is state-only requirement.

Permit Condition EU0010-003 through EU0040-003

10 CSR 10-5.510

Control of Emissions of Nitrogen Oxides

Emission Limitation:

No owner or operator of a boiler with a maximum rated heat input capacity of one hundred (100) MMBtu per hour or greater shall allow the unit to emit NO_x in excess of 0.5 pounds of NO_x per MMBtu for stoker boilers firing coal as measured pursuant to Section (5) of 10 CSR 10-5.510. [10 CSR 10-5.510(3)(A)]

Monitoring:

- 1) Emissions Averaging The permittee may comply with the emission limitations by averaging between two or more similar emission units provided they are located in the St. Louis ozone nonattainment area and provided that both units are required to comply with 10 CSR 10-5.510(3)(A).
 - a) Compliance shall be based on the weighted average of actual NO_x emissions from the units on a monthly basis. The averaged emissions rate for the units must be equal to or less than the allowable emissions rate for the units as defined in 10 CSR 10-5.510. The permittee who elects to comply with an average NO_X emission limit shall use the following equation to determine compliance.

$$\sum \left(ER_{Actual} \times HI_{Actual} \right) \leq \sum \left(ER_{Allowable} \times HI_{Actual} \right)$$

Where:

ER_{Actual} = actual NOx emission rate from each unit;

HI_{Actual} = actual monthly heat input from each unit; and

 $ER_{Allowable} =$ allowable NOx emission rate from each unit

- b) NO_x emission rates shall be calculated from actual data from continuous emissions monitoring system (CEMS).
- 2) As an alternative to the compliance testing required under 10 CSR 10-5.510(5)(A) for units subject to 10 CSR 10-5.510(3)(A), the permittee of an emission unit may install, calibrate, maintain and operate a CEMS approved by the Director and the U.S. Environmental Protection Agency (EPA). For units operating CEMS for estimating NO_x emissions, the following requirements shall apply:
 - a) Compliance shall be measure on a 30-day rolling average;
 - b) All valid data shall be used for calculating NO_X emission rates;
 - c) The procedures under 40 CFR 60.13(d), (e) and (f) and 40 CFR Part 60, Appendix B, Performance Specification 2 shall be followed, or other procedures approved by the Director; for the installation, evaluation and operation of CEMS.
 - d) Quarterly accuracy and daily calibration drift test shall be performed in accordance with 40 CFR Part 60, Appendix F, or other tests approved by the Director; and
 - e) CEMS installed, certified and operated in accordance with 40 CFR Part 75 are deemed to be approved by the Director to meet the monitoring and quality assurance requirements of 10 CSR 10-5.510(5)(B).

Recordkeeping:

1) Subject to 10 CSR 10-5.510(3)(A) –The permittee shall maintain records of the following:

- a) All data collected by the CEMS necessary to convert the monitoring data to the units of the applicable emission limitation;
- b) All performance evaluations conducted in the past year;
- c) All CEMS or monitoring device calibration checks;
- d) All monitoring system, monitoring device and performance testing measurements;
- e) Records of adjustments and maintenance performed on monitoring systems and devices; and
- f) A log identifying each period during which the CEMS was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 2) All records must be kept on-site for a period of five years and made available to the Department upon request.

<u>Reporting:</u>

Subject to 10 CSR 10-5.510(3)(A) –The permittee shall submit for each NO_X emissions unit that uses a CEMS to demonstrate compliance, an annual report containing the date, time and emissions rate in pounds NO_X per MMBtu of all thirty (30)-day rolling averages greater than the emission rates allowed under Section (3) of this rule.

Permit Condition EU0010-004 through EU0040-004

10 CSR 10-5.570

Control of Sulfur Emissions from Stationary Boilers

The permittee shall be in compliance with this rule no later than December 31, 2010.

Emission Limitation:

Except as otherwise provided in Section (3) of 10 CSR 10-5.570, no installation shall cause or allow the emission of sulfur dioxide (SO₂) into the atmosphere exceeding one (1.0) pound (lb) of SO₂ per MMBtu of actual heat input in any thirty (30)-day period from any facility with applicable units. [10 CSR 10-5.570(3)(A)1.]

Measurements:

Measurement for Multi-Unit and Multi-fuel Installations. For sources not controlling SO_2 emissions by flue gas desulphurization equipment or by sorbent injection, the following alternate compliance method may be used: [10 CSR 10-5.570(3)(C)]

1) SO₂ emission rates for a single boiler that burns different fuels. The owner or operator of an affected facility shall determine the SO₂ emission rate of a large boiler which burns multiple fuels separately, according to the following formula: [10 CSR 10-5.570(3)(C)1.]

$$E_{s} = \frac{\sum_{i=1}^{q} (Ka_{q}) + \sum_{i=1}^{r} (Kb_{r}) + \sum_{i=1}^{s} (Kc_{s})}{H_{T}}$$

Where:

 E_{S} = unit SO₂ emissions in lb per MMBtu heat input;

- Ka = solid fuel sample monthly composite SO_2 emission rate in lbs;
- Kb = liquid fuel sample monthly composite SO₂ emission rate in lbs;
- Kc = gaseous fuel sample monthly composite SO_2 emission rate in lbs;
- q = number of different liquid fuels used including the number of batches of coal;

- r = number of different liquid fuels used;
- s = number of different gaseous fuels used; and
- H_T = total heat content for all fuels in any month period.
- 2) Averaging SO₂ emissions among different boilers.
 - a) To meet the requirements of paragraphs (3)(A)1. of this rule, if there is more than one (1) existing boiler located at a installation, compliance may be demonstrated by emission averaging according to the procedures in this paragraph. [10 CSR 10-5.570(3)(C)2.A.]
 - b) For a group of two (2) or more existing boilers that each vent to a separate or common stack, SO₂ emissions may be averaged to demonstrate compliance with the limits in paragraphs (3)(A)1. of this rule. [10 CSR 10-5.570(3)(C)2.B.]
 - c) Compliance with the limit in paragraph (3)(A)1. of this rule must be demonstrated on a monthly rolling average. The first period begins on the compliance date. For each monthly period, the following equation must be used to calculate the monthly rolling average weighted emission rate using the actual heat capacity for each existing boiler participating in the emissions averaging option. [10 CSR 10-5.570(3)(C)2.C.]

Avg Weighted Emissions =
$$\frac{\sum_{i=1}^{n} (Er \times Hb)}{\sum_{i=1}^{n} Hb}$$

Where:

Avg Weighted Emissions = monthly average weighted emission level for SO_2 , in units of lbs per MMBtu of heat input;

Er = Emission rate, in units of lbs per MMBtu of heat input;

Hb = The average heat input for each monthly period of boiler, i, in units of MMBtu; and

n = Number of boilers participating in the emissions averaging option.

<u>Monitoring:</u>

The permittee shall use CEMS to monitor SO_2 emissions as required by the PSD Permit in Permit Condition EU0010-001 through EU0040-001.

<u>Record keeping:</u>

The owner or operator subject to this rule shall maintain all records necessary to demonstrate compliance with this rule for a period of five (5) years at the plant at which the unit is located. The records shall be made available to the Director upon request. The owner or operator shall maintain records of the following information for each day the unit is operated:

- 1) The identification number of each unit and the name and address of the plant where the unit is located for each unit subject to this rule;
- 2) The calendar date of record;
- 3) The number of hours the unit is operated each day including start-ups, shutdowns, malfunctions, and the type and duration of maintenance and repair;
- 4) The date and results of each emissions inspection;
- 5) A summary of any emissions corrective maintenance taken;
- 6) The results of all compliance tests;

7) CEMS –

- a) The identification of time periods during which SO₂ standards are exceeded, the reason for exceedance, and action taken to correct the exceedance and prevent similar future exceedances; and
- b) The identification of the time periods for which operating conditions and pollutant data were not obtained, including reasons for not obtaining sufficient data, and a description of corrective actions taken;
- 8) The total heat input for each fuel used per emissions unit on a monthly basis;
- 9) The amount of each fuel consumed per emissions unit on a monthly basis;
- 10) The average heat content for each fuel used per emissions unit on a monthly basis;
- 11) The average percent sulfur for each fuel used per emissions unit on a monthly basis;
- 12) The emission rate in lbs per MMBtu for each unit on a monthly basis for those units complying with the limit in paragraph (3)(A)1. of this rule; and
- 13) Any other reports deemed necessary by the Director.

<u>Reporting:</u>

The owner or operator subject to this rule shall—

- Submit the calculation and record keeping procedure based upon correlations with ASTM and 40 CFR Part 60, Appendix A operating parameters, promulgated as of December 23, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions;
- 2) By February 15 of every year following the initial compliance period, submit monthly reports for the previous calendar year unless the affected unit is subject to an NSPS. The monthly reports shall document:
 - a) For units equipped with CEMS, both the total heat input in MMBtu and the SO₂ emission rate in lbs per MMBtu for the unit; and
- Excess emissions: Units maintaining a CEMS, shall submit an excess emissions monitoring system performance report by February 15 following the end of the initial compliance period and by February 15 for each year thereafter unless the affected unit is subject to an NSPS, in accordance with
 - a) 40 CFR 60.7(c), promulgated as of February 12, 1999, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions.; and
 - b) 40 CFR 60.13, promulgated as of June 13, 2007, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions.

IV. Core Permit Requirements

The installation shall comply with each of the following requirements as applicable. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.045 Open Burning Restrictions

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
 - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
 - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - b) Yard waste, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 - Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
 - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the Department Director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) General Motors LLC Wentzville Assembly may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if General Motors LLC Wentzville Assembly fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245 60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245 60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;

- i) Measures taken to mitigate the extent and duration of the excess emissions; and
- j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.

3) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the Director.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

10 CSR 10-5.120 Information on Sales of Fuels to be Provided and Maintained

Every delivery of coal or residual fuel oil when first delivered to a consumer or wholesaler in the St. Louis metropolitan area must be accompanied by a ticket prepared in triplicate and containing at least the name and address of the seller and the buyer; the grade of fuel; ash content of coal, the source of the fuel, which must be an approved source, and such other information as the Air Conservation Commission may require. One copy of each ticket shall be kept by the person delivering the fuel and be retained for one year; one copy is to be given to the recipient of the fuel to be retained for one year; and, upon request, within 30 days after delivery of the fuel, the delivering party shall mail one copy to the Air Conservation Commission.

10 CSR 10-5.130 Certain Coals to be Washed

The permittee shall not import, sell, offer for sale, expose for sale, exchange, deliver or transport for use and consumption in the St. Louis metropolitan area or use or consume in the said area any coal which as mined containing in excess of 2.0% sulfur or 12.0% ash calculated as described in 10 CSR 10-5.110, unless it has been cleaned by a process known as "washing" so that it shall contain no more than 12.0% ash on a dry basis. The term "washing" is meant to include purifying, cleaning, or removing impurities from coal by mechanical process, regardless of cleaning medium used.

10 CSR 10-5.160 Control of Odors in the Ambient Air

No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

- 1) Residential, recreational, institutional, retail sales, hotel or educational premises.
- 2) Industrial premises when air containing odorous matter is diluted with 20 or more volumes of odor-free air; or
- 3) Premises other than those in 1. and 2 above when air containing odorous matter is diluted with four or more volumes of odor-free air.

The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when 30% or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy; the sample size to be at least 20 people or 75% of those exposed if fewer than 20 people are exposed. **This requirement is not federally enforceable.**

10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from theses sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- 2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the Department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from

the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to \$82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to \$82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to \$82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to \$82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozonedepleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) Records of required monitoring information that include the following:
 - i) The date, place as defined in the permit, and time of sampling or measurements;
 - ii) The date(s) analyses were performed;
 - iii) The company or entity that performed the analyses;
 - iv) The analytical techniques or methods used;
 - v) The results of these analyses; and
 - vi) The operating conditions as existing at the time of sampling or measurement.
 - b) Retention of records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings when used for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated

through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit certification of compliance with the terms and conditions of this permit that are federally enforceable, including emissions limitations, standards, or work practices. These

certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:

- a) The identification of each term or condition of the permit that is the basis of the certification;
- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The application requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technologybased emissions limitations or requirements in this permit, and

- d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

- a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
- b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by the Plant Manager, who by delegation of authority is the duly authorized Responsible Official for the operation. This delegation of authority includes without limitation the authority of the Plant Manager to represent and bind the installation in environmental permitting affairs. The permittee shall assure that the delegation of authority remains current for the duration of this permit.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment A – CAM Plan

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN for GENERAL MOTORS LLC, WENTZVILLE ASSEMBLY CENTER BOILERS

A. Background

1. <u>Emissions Unit</u>:

Description:	Four (4) Coal-fired Spreader Stoker Boilers
Identification:	EPN-8 (BLR 1 through 4)
Permit ID:	183-0076-0001
Facility:	General Motors LLC, Wentzville Assembly Center, Powerhouse Operations Wentzville, Missouri

2. Applicable Regulation, Emissions Limit, and Monitoring Requirements:

Regulation:	Title V permit (includes PSD construction permit limitations and applicable state rules
Emission Limits:	
PM:	0.03 lb/MMBtu
Monitoring Requirements:	Continuous opacity monitoring system (COMS)
Control Technology:	Fabric Filter Bag House

B. Monitoring Approach

3.

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1 below. The CAM performance indicator is the opacity.

TABLE (1) General Motors LLC, Wentzville Assembly center, Wentzville, MO CAM Monitoring Approach for Four Coal-fired Spreader Stoker Boilers that Comprise Emission Point EPN-8			
Particul	ate Matter (PM) Compliance Indicator		
Indicator	Opacity		
Measurement Approach	Continuous Opacity Monitoring System (COMS)		
Indicator Range	The indicator range is a 1-hour average opacity less than or equal to 10%. An excursion is defined as a 1-hour average opacity greater than 10%. Excursions trigger an inspection, corrective action, and a reporting requirement.		
	Performance Criteria		
Data Representativeness	Each boiler discharges through a dedicated baghouse and then to a common stack. Each boiler is equipped with emergency bypass capabilities. If the boiler were to go to bypass, the event would be monitored since the opacity meter (COM) in the stack would register increased opacity. The common stack is equipped with a COMS that complies with the applicable version of 40 CFR Part 60, Appendix B, Performance Specification 1 (PS-1) located downstream of a baghouse for PM control.		
Verification of Operational Status	Not applicable since the selected monitoring approach utilizes existing COMS that were initially installed and evaluated per the applicable version of PS-1.		
QA/QC Practices and Criteria	Perform a daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in applicable version of PS-1.		
Monitoring Frequency	Continuous [i.e., the COMS is to complete a minimum of one cycle		
Data Collection Procedure	(i.e., sampling, analyzing, and data recording) for each successive 10- second period].		
Averaging Period	The data acquisition system is to reduce the 10-second data points to 6-minute averages. Ten consecutive 6 minute periods will be used as the 1-hour block average.		
Reporting	Summary information on the number, duration, and cause for any excursions and COMS downtime will be reported on a semiannual basis as part of the Part 70 permit Semi-annual Monitoring Reports.		

Attachment B - 40 CFR §§60.46a(e) and 60.47a (1980 ed)

40 CFR §§60.46a(e) and 60.47a (CFR, 1980 ed. pp214 – 216 from HeinOnline)

§ 60.46a

electrical generation capacity for all commercial demonstration plants may not exceed 15,000 MW.

Technology	Pollutant	Equivalent electrical capacity (MW electrical output)	
Solid solvent relined coal			
(SHC I)	5O,	6,000-10,000	
(atmospheric)	so,	400-3,000	
(prossuringd)	SO.	400-1.200	
Coal Iquification	NO,	750-10,000	
Total allowable for all		10 004	

\$ 60.46a Compliance provisions.

(a) Compliance with the particulate matter emission limitation under $\frac{1}{5}60.42a(a)(1)$ constitutes compliance with the percent reduction requirements for particulate matter under $\frac{1}{5}60.42a(a)(2)$ and (3).

(b) Compliance with the nitrogen oxides emission limitation under \S 60.44a(a) constitutes compliance with the percent reduction requirements under \S 60.44a(a)(2).

(c) The particulate matter emission standards under § 60.42a and the nitrogen oxides emission standards under § 60.44a apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standards under § 60.43aapply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the procedures under paragraph (d) of this section are implemented.

(d) During emergency conditions in the principal company, an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

(1) Operating all operable flue gas desulturization system modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,

(2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable

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of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and

(3) Designing, constructing, and operating a spare flue gas desulfurization system module for an affected facility larger than 365 MW (1,250 million Btu/hr) heat input (approximately 125 MW electrical output capacity). The Administrator may at his discretion require the owner or operator within 60 days of notification to demonstrate spare module capability. To demonstrate this capability, the owner or operator must demonstrate compliance with the appropriate requirements under paragraph (a), (b), (d), (e), and (i) under § 60.43a for any period of operation lasting from 24 hours to 30 days when:

(i) Any one flue gas desulfurization module is not operated,

(ii) The affected facility is operating at the maximum heat input rate,

(iii) The fuel fired during the 24hour to 30-day period is representative of the type and average sulfur content of fuel used over a typical 30-day period, and

(iv) The owner or operator has given the Administrator at least 30 days notice of the date and period of time over which the demonstration will be performed.

(e) After the initial performance test required under § 60.8, compliance with the sulfur dioxide emission limitations and percentage reduction requirements under § 60.43a and the nitrogen oxides emission limitations under § 60.44a is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.

(f) For the initial performance test required under § 60.8, compliance with the sulfur dioxide emission limitations and percent reduction requirements under § 60.43a and the nitrogen oxides emission limitation under § 60.44a is based on the average emission rates

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for sulfur dioxide, nitrogen oxides, and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(g) Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO₂ and NO₂ for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO₂ only), or emergency conditions (SO₂ only). Compliance with the percentage reduction requirement for SO₂ is determined based on the average inlet and average outlet SO₂ emission rates for the 30 successive boiler operating days.

(h) If an owner or operator has not obtained the minimum quantity of emission data as required under \S 60.47a of this subpart, compliance of the affected facility with the emission requirements under \S 60.43a and 60.44a of this subpart for the day on which the 30-day period ends may be determined by the Administrator by following the applicable procedures in sections 6.0 and 7.0 of Reference Method 19 (Appendix A).

§ 60.47a Emission monitoring.

(a) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere, except where gaseous fuel is the only fuel combusted. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide

control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator).

(b) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions, except where natural gas is the only fuel combusted, as follows:

(1) Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device.

(2) For a facility which qualifies under the provisions of § 60.43a(d), sulfur dioxide emissions are only monitored as discharged to the atmosphere.

(3) An "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19 (Appendix A) may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required under paragraph (b)(1) of this section.

(c) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.

(d) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored.

(e) The continuous monitoring systems under paragraphs (b), (c), and (d) of this section are operated and data recorded during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

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§ 60.47a

§ 60.47e

(f) When emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using other monitoring systems as approved by the Administrator or the reference methods as described in paragraph (h) of this section to provide emission data for a minimum of 18 hours in at least 22 out of 30 successive boiler operating days.

(g) The 1-hour averages required under paragraph § 60.13(h) are expressed in ng/J (lbs/million Btu) heat input and used to calculate the average emission rates under § 60.46a. The 1-hour averages are calculated using the data points required under § 60.13(b). At least two data points must be used to calculate the 1-hour averages.

(h) Reference methods used to supplement continuous monitoring system data to meet the minimum data requirements in paragraph § 60.47a(f) will be used as specified below or otherwise approved by the Administrator.

(1) Reference Methods 3, 6, and 7, as applicable, are used. The sampling location(s) are the same as those used for the continuous monitoring system.

(2) For Method 6, the minimum sampling time is 20 minutes and the minimum sampling volume is 0.02 dscm (0.71 dscf) for each sample. Samples are taken at approximately 60-minute intervals. Each sample represents a 1hour average.

(3) For Method 7, samples are taken at approximately 30-minute intervals. The arithmetic average of these two consective samples represent a 1-hour average.

(4) For Method 3, the oxygen or carbon dioxide sample is to be taken for each hour when continuous SO_x and NO, data are taken or when Methods 6 and 7 are required. Each sample shall be taken for a minimum of 30 minutes in each hour using the integrated bag method specified in Method 3. Each sample represents a 1hour average.

(5) For each 1-hour average, the emissions expressed in ng/J (lb/million Btu) heat input are determined and used as needed to achieve the

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minimum data requirements of paragraph (f) of this section.

(i) The following procedures are used to conduct monitoring system performance evaluations under \$ 60.13(c) and calibration checks under \$ 60.13(d).

(i) Reference method 6 or 7, as applicable, is used for conducting performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems.

(2) Sulfur dioxide or nitrogen oxides, as applicable, is used for preparing calibration gas mixtures under performance specification 2 of appendix B to this part.

(3) For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides is determined as follows:

Fossii fuel	Span value for nitrogen oxides (ppm)	
Gas	500	
Liquid	500	
Sold.	1,000	
Combination	500 (x+y)+1,000z	

where:

x is the fraction of total heat input derived from gaseous fossil fuel.

y is the fraction of total heat input derived from liquid fossil fuel, and

s is the fraction of total heat input derived from solid fossil fuel.

(4) All span values computed under paragraph (b)(3) of this section for burning combinations of fossil fuels are rounded to the nearest 500 ppm.

(5) For affected facilities burning fossil fuel, alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

(Sec. 114, Clean Air Act as amended (42 U.S.C. 7414).)

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STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Renewal Application, received July 1, 2003;
- 2) Initial Part 70 Operating Permit Number OP1999-0004, issued June 14, 1999;
- 3) 2009 Emissions Inventory Questionnaire;
- 4) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 5) Construction Permit No. 0580-003 0580-004, issued May 18, 1980, for the construction and operation of an automobile assembly line in Wentzville;
- 6) Construction Permit No. 0294-015, issued February 3, 1994, for the rearrangement and replacement of existing equipment in order to allow the production of full size vans;
- 7) Construction Permit No. 0387-007, temporary permit to construct and operate a temporary gasoline recovery operation;
- 8) Construction Permit No. 0396-011 issued February 27, 1996, for the construction of a new building and install two transfer press lines;
- 9) Construction Permit No. 092001-007 issued August 2, 2001, temporary permit to operate a portable compressor; and
- 10) Construction Permit No. 1089-003 issued October 13, 1989, for the construction of two dual paint booths.
- 11) U.S. EPA Prevention of Significant Deterioration (PSD) Permit (May 14, 1980) as Revised July 22, 1986.

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-5.510, Control of Emissions of Nitrogen Oxides

This rule applies to all installations located in the counties of Franklin, Jefferson, St. Charles and St. Louis and the City of St. Louis with the potential to emit one hundred (100) tons or greater per year of nitrogen oxides.

This rule had not been created at the time of the issuance of the initial operating; however, it has been determined to be applicable to the installation and, therefore, has been included in the this operating permit.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

As it is a possible option of the permittee to change the ownership of the powerhouse, they requested the permit for the powerhouse be separated from the larger facility. The regulations that are required for the larger facility do not in all cases apply to the Powerhouse and the regulations for the Powerhouse do not apply in all cases to the rest of the facility. The permits are expected to be stand alone permits.

Construction Permit Revisions

10 CSR 10-6.060, Construction Permits Required

When a Construction Permit is incorporated into the Operating Permit, all aspects of the Construction Permit relating to emissions are to be maintained for an installation to be in compliance. According to 10 CSR 10-6.060, *Construction Permits Required* the Construction Permit consists of both the issued permit and Construction Permit application.

10 CSR 10-6.060 (6)(E)3. – "Any owner or operator who constructs, modifies or operates an installation not in accordance with the application submitted and the permit issued, including any terms and conditions made a part of the permit, or any owner or operator of an installation who commences construction or modification after May 13, 1982, without meeting the requirements of this rule, is in violation of this rule;"

Any installation that does not comply with the issued permit and Construction Permit application as it relates to emissions would be considered to be in violation of 10 CSR 10-6.060.

The Construction Permit application consists of numerous parameters that are not included in either the Construction Permit or the Operating Permit. Some examples of the criteria necessary for the application are site information; descriptions; plans; control efficiencies; flow parameters; design specifications; and drawings showing the design of the installation, the nature and amount of emission of each pollutant, and the manner in which emission units will be operated and controlled. These values submitted in the Construction Permit application define the criteria the regulatory agencies use to evaluate potential emissions and determine the ambient air quality of the surrounding area. It is essential the installation operate and construct the emission units according to the criteria related to emissions in the Construction Permit application, since the criteria are the basis behind the limitations established in the Construction Permit. If any of the parameters relating to emissions should change, the installation would be required to request and obtain a modification to their Construction Permit.

While an installation must adhere to their Construction Permit application, it is not necessary for the installation to certify and monitor each application parameter to show compliance. The installation is only required to monitor those parameters defined in specific State or Federal requirements or identified as Special Conditions in the Construction Permit. When construction permits are placed in Plant-wide and Emission Unit permit conditions in the Operating Permit, the installation is required to certify compliance with the parameters (monitoring, performance testing, record keeping and reporting) identified in the Plant-wide and Emission Unit permit conditions of the Operating Permit. However, the various parameters detailed in the Construction Permit application are still applicable to the installation, even though the criteria are not specifically listed in the Operating Permit. Since the entire Construction Permit is not integrated into the Operating Permit, it is necessary to establish that the installation is to operate according to the entire issued Construction Permit and Construction Permit application. To accomplish this action, it is essential for the agency does not intend for the installation to monitor each criteria, but rather for the installation to realize they are required to construct and operate within the boundaries submitted in the Construction Permit application as well as the issued Construction Permit.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, New Source Performance Regulations

40 CFR Part 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971.

The provisions of this subpart apply to each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed or modified after August 17, 1971 and not covered under Subpart Da.

The powerhouse boilers are rated at less than 250 MMBtu/hr each, therefore, boiler 6 is not subject to this subpart.

40 CFR Part 60, Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is commenced After September 18, 1978.*

The provisions of this subpart apply to each electric utility fossil-fuel-(either alone or in combination with any other fuel) fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed or modified after September 18, 1978. None of the boilers are electric utility steam generating units as defined in this subpart, therefore this subpart does not apply to this installation.

40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

The provisions of this subpart apply to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

Boiler 2 (EU0020), Boiler 3 (EU0030) and Boiler 4 (EU0040) rated at greater than 100 MMBtu/hr commenced construction in 1982, prior to the applicability date of this subpart, therefore the boilers are not subject to this subpart.

40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

This subpart applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

Boiler 1 (EU0010) rated at 82.5 MMBtu/hr was constructed in 1982 prior to the applicability date of this subpart, therefore is not subject to this subpart.

40 CFR Part 60, Subpart Y, Standards of Performance for Coal Preparation Plants.

The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day and commenced construction or modification after October 24, 1974: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.

General Motors Wentzville Assembly operates coal-processing units where coal for use in the boilers is received by trucks or rail cars and is stored outdoors in a coal pile. When coal is received by truck, it is unloaded in an open area. When received by railcar, it is bottom unloaded inside an enclosed building. The unloaded coal is then transferred by means of an enclosed conveyor to either the boilers or the outdoor coal storage pile. To transport the coal to an individual boiler, the coal is conveyed via an enclosed belt conveyor system to a coal elevator at the powerhouse building which deposits the coal into the overhead coal bunker. The coal is then fed via an enclosed conveyor to the individual boilers upon demand.

According to EPA's determination (Applicability Determination Control Number: Y001 of October 4, 1976), in order for a facility to be subject to Subpart Y, it must perform one or more of the processes listed in the definition for coal preparation plants. Only sources which break, crush, screen, clean, or dry large amounts of coal were intended to be covered.

GM's Wentzville plant processes coal without performing any of the processes listed in the definition of coal preparation plants, therefore the installation is not subject to Subpart Y.

Maximum Achievable Control Technology (MACT) Applicability

None

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)* The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

Because the installation's boilers use a common control device to achieve compliance with an emission limitation and the pre-control emissions are greater than the major source threshold level, 40 CFR Part 64 is applicable to the boilers and CAM requirements are included in the permit.

CAM Monitoring Approach Justification

1) Background

The pollutant-specific emissions unit (PSEU) consists of a three (3) coal-fired spreader stoker boilers with a heat input of 248 MMBtu per hour (each controlled with a fabric filter baghouse) and (1) coal-fired spreader stoker boiler with a heat input of 82.5 MMBtu per hour controlled by a fabric filter baghouse. All four boiler discharge into a common stack which contains a continuous opacity monitor (COM). The boilers were put into service in 1982 and currently burn western bituminous coal.

2) <u>Rationale for Selection of Performance Indicators</u>

The CAM indicator selected is opacity. Opacity was selected as the performance indicator because,

as the opacity emissions increase, it can be reasonably assumed that PM emissions increase. This single indicator was selected since prior tests have indicated that the stack PM emissions are almost a factor of 10 below the permit emission limit of 0.03 pounds of PM per MMBtu and the plant will be performing stack testing annually or tri-annually pursuant to the boiler MACT (40 CFR 63 Subpart DDDDD).

3) Rationale for Selection of Indicator Ranges

The indicator range selected for opacity is an hourly average opacity of less than 10 percent. All hourly average opacities outside the opacity indicator range will be documented. Semi-annual summary information of any excursions outside the opacity indicator range will be submitted as part of the Title V semi-annual monitoring reports, however, no reporting requirement or corrective action relative to the PM limit is triggered by an opacity outside the indicator range.

The boiler MACT (40 CFR 63 Subpart DDDDD) establishes opacity as the appropriate indicator for the PM limitations. This is a post 90 regulation which contains monitoring requirements that are presumptive CAM. For existing sources, an opacity indicator of 20 percent on a 6 minute average is required to indicate continuous compliance to a PM limit is 0.07 pounds per MMBtu. For new sources, an opacity indicator of 10 percent (1 hour block average) is required to indicate continuous compliance with a PM limit of 0.025 pounds per MMBtu.

The current Wentzville permit contains a PSD limit is 0.03 pounds per MMBtu. Therefore an opacity indicator range of 10 percent over a 1 hour block average is proposed as CAM for emission unit EPN-8 since the 0.03 pounds of PM per MMBtu emission limit is essentially the same as the 0.025 pounds of PM per MMBtu established for new sources under the Boiler MACT.

Other Regulatory Determinations

1) 10 CSR 10-5.030, *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*, compliance determination.

The maximum allowable particulate emission rate for new sources (constructed after February 15, 1979 as defined in 10 CSR 10-5.030) in an installation of indirect heating sources with a heat input rate equal to or greater than ten (10) million BTU per hour and less than or equal to five thousand (5000) million BTU per hour is determined by the following equation: $E = 0.80(Q)^{-0.301}$

where; E = the maximum allowable particulate emission rate in pounds per million Btu of heat input, rounded off to two (2) decimal places, and Q = the installation heat input in millions of Btu per hour.

$$Q(Boiler \# 1, \# 2, \# 3, and \# 4) = \left(82.5 \frac{MMBtu}{hr}\right) + \left(3 \times 248 \frac{MMBtu}{hr}\right) = 826.5 \frac{MMBtu}{hr}$$

$$E = 0.8(826.5)^{-0.301} = 0.11 \frac{lbs}{MMBtu}$$

This requirement is applicable; however, it is not included in this operating permit since the installation demonstrating compliance with the more stringent PSD permit particulate matter requirement, they will also be demonstrating compliance with this rule.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1. The specific pollutant regulated by that rule is not emitted by the installation;
- 2. The installation is not in the source category regulated by that rule;
- 3. The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4. The installation does not contain the type of emission unit which is regulated by that rule;
- 5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

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