WEST VIRGINIA

SECRETARY OF STATE

KEN HECHLER

ADMINISTRATIVE LAW DIVISION

FORM #2

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OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF A COMMENT PERIOD ON A PROPOSED RULE

AGENCY: Division of Environmental Protection, Office of Air Quality TITLE NUMBER: 45

RULE TYPE: Interpretive ; CITE AUTHORITY

AMENDMENT TO AN EXISTING RULE: YES ____ NO X

IF YES, SERIES NUMBER OF RULE BEING AMENDED: ____

TITLE OF RULE BEING AMENDED: ____

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: 45CSR10A

TITLE OF RULE BEING PROPOSED: "Testing, Monitoring, Recordkeeping, and Reporting Requirements"

IN LIEU OF A PUBLIC HEARING, A COMMENT PERIOD HAS BEEN ESTABLISHED DURING WHICH ANY INTERESTED PERSON MAY SEND COMMENTS CONCERNING THESE PROPOSED RULES. THIS COMMENT PERIOD WILL END ON JANUARY 2, 2001 AT 5:00 PM .

ONLY WRITTEN COMMENTS WILL BE ACCEPTED AND ARE TO BE MAILED TO THE FOLLOWING ADDRESS.

Edward L. Kropp, Chief

Office of Air Quality

7012 MacCorkle Avenue, SE

Charleston, WV 25304-2943

THE ISSUES TO BE HEARD SHALL BE LIMITED TO THIS PROPOSED RULE.

Carrie J. Chambers

$440

Executive Office
#10 McJunkin Road
Nitro, WV 25143-2506
Telephone No: (304)759-0575
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West Virginia Bureau of Environment

Cecil H. Underwood
Governor

Michael C. Castle
Commissioner

November 17, 2000

Ms. Judy Cooper
Director, Administrative Law Division
Secretary of State's Office
Capitol Complex
Charleston, WV 25305

RE: 10A - "Testing, Monitoring, Record Keeping and Reporting Requirements"

Dear Ms. Cooper:

This letter will serve as my approval to file the above-referenced Interpretive Rule as "Notice of a Comment Period on a Proposed Rule."

If you should have any questions or require additional information, please call Carrie Chambers in my Office at 759-0515.

Sincerely,

Michael C. Castle
Commissioner

MCC:cc

Attachment

cc: Karen Watson
Carrie Chambers

BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION

BRIEFING DOCUMENT

RULE TITLE: 45CSR10A - "Testing, Monitoring, Recordkeeping, and Reporting Requirements"

A. AUTHORITY: W.Va. Code §§22-5-1 et seq.and WV 45CSR10

B. SUMMARY OF RULE:

45CSR10A "Testing, Monitoring, Recordkeeping, and Reporting Requirements" provides guidance on OAQ's testing, monitoring, recordkeeping and reporting requirements for the owner/operators of fuel burning units, manufacturing process sources, and combustion sources subject to 45CSR10.

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:

45CSR10 "To Prevent and Control Air Pollution from the Emission of Sulfur Oxides" is a legislative rule which establishes weight emission standards for fuel burning units and other standards for manufacturing process sources and combustion sources operated in West Virginia. The legislative rule authorizes the Director to require sources to demonstrate compliance with these standards by testing and monitoring their emissions, keeping records of such testing and monitoring and submitting the results to the Director. 45CSR10 provides the Director will specify the exact manner and frequency of testing, monitoring, recordkeeping and reporting. It is through the adoption of this interpretive rule that the Director will prescribe the specific requirements for testing, monitoring, recordkeeping and reporting which are applicable to a source, depending upon its size and nature. The proposed interpretive rule is the result of a thorough review in a stakeholder process that was inclusive of the Office of Air Quality, representatives of the regulated community, concerned citizens and the environmental community.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 45CSR10A - "Testing, Monitoring, Recordkeeping, and Reporting Requirements"

Type of Rule: _____ Legislative ____X____ Interpretive _____ Procedural

Agency: Office of Air Quality

Address: 7012 MacCorkle Avenue, SE

Charleston, WV 25304

1. Effect of Proposed Rule	Annual		Fiscal Year		
Estimated Total Cost	Increase	Decrease	Current	Next	There-after
	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-
Personal Services	-0-	-0-	-0-	-0-	-0-
Current Expense	-0-	-0-	-0-	-0-	-0-
Repairs and Alterations	-0-	-0-	-0-	-0-	-0-
Equipment	-0-	-0-	-0-	-0-	-0-
Other	-0-	-0-	-0-	-0-	-0-

2. Explanation of above estimates: The adoption of 45CSR10A will have minimal effect on the costs to the Office of Air Quality and implementation will be absorbed into the existing work environment. Costs are covered under previous budget estimates.

3. Objectives of these rules: The objective of this rule is to provide guidance and clarification on OAQ's testing, monitoring, recordkeeping and reporting requirements for sources covered by 45CSR10 "To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides," which is part of the West Virginia State Implementation Plan approved by the USEPA for attainment and maintenance of attainment of the National Ambient Air Quality Standards for sulfur oxides.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

See Section 2.

B. Economic Impact on Political Subdivisions; Specific Industries; Specific groups of Citizens.

1. The rule proposed herein may have some minimal effect on the costs to covered sources due to additional testing, monitoring, recordkeeping and reporting requirements. It is possible that several manufacturing and combustion sources may have to install continuous emission monitoring systems (CEMS); however, the rule allows alternative monitoring methods for good cause, making any cost estimates uncertain at this time.

2. In some cases there may be reduced costs to sources due to additional flexibility provided by the revisions.

C. Economic Impact on Citizens/Public at Large.

The proposed rule will have no economic impact on citizens or the public at large.

Date: 11/17/2000

Signature of Agency Head or Authorized Representative

Carrie J. Clarke

TITLE 45
INTERPRETIVE RULE
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

SERIES 10A
TESTING, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

§45-10A-1. General.

1.1. Scope. -- Series 10A provides guidance and clarification for complying with the testing, monitoring, recordkeeping and reporting requirements of 45CSR10 "To Prevent and Control Air Pollution from the Emission of Sulfur Oxides." This rule is an interpretive rule, not a legislative rule, as those terms are defined under W. Va. Code §29A-1-2.

1.2. Authority.-- W. Va. Code §§22-5-1 et seq. and WV 45CSR10.

1.3. Filing Date. --

1.4. Effective Date. --

§45-10A-2. Definitions.

2.1. "ASTM approved" means test methods and procedures approved and published by the American Society for Testing and Materials.

2.2. " Allowable sulfur content" means the maximum sulfur content of coal, expressed in percent by weight, that can be burned in a fuel burning unit, allowing the unit to meet the weight emission standard set forth in section 3 of 45CSR10. The allowable sulfur content is calculated using the following formula:

$$\% S = [(F * HV)/ K] * 100$$

Where,

%S = Allowable sulfur content of coal, in % by weight

F = Factor from 45CSR10, subsection 3.1, 3.2 or 3.3, in lb SO_2/mmBTU

HV = Heating value of coal being burned, in mmBTU/lb of coal

K = 2 lb SO_2/lb Sulfur

2.1. "Combustion Source" means a source(s) subject to the standards set forth in section 5 of 45CSR10.

2.2. "Continuous Emission Monitoring System" or "CEMS" means all equipment required for the determination of gas concentration or emission rate, installed, calibrated, operated and maintained as specified in 40 CFR Part 75, or 40 CFR Part 60, Appendix B, Performance Specification 2 or Performance Specification 7 and 40 CFR Part 60, Appendix F. CEMS conforming to the specifications of 40 CFR Part 75 shall use unbiased, unsubstituted data to demonstrate compliance with the provisions of 45CSR10.

2.3. "Excursion" means operating parameters outside the range set forth in an approved monitoring plan, which may or may not result in measured emissions exceeding the applicable standards set forth in sections 3, 4, and 5 of 45CSR10. Excursion also means

measured emissions exceeding the applicable standards set forth in sections 3, 4, and 5 of 45CSR10.

2.4. "Fuel Quality Analysis" means the sulfur content and the BTU content.

2.5. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in WV CSR §45-10-2 or W. Va. Code § 22-5-1 et seq.

§45-10A-3. Applicability.

3.1. This rule applies to any fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR10, except as follows:

3.1.a. fuel burning unit(s) with a design heat input of less than 10 million BTU's per hour.

3.1.b. fuel burning unit(s) which combust natural gas, wood or distillate oil, alone or in combination.

3.1.c. manufacturing process source operation(s) which have the potential to emit less than 500 pounds per year of sulfur oxides.

§45-10A-4. Fuel Burning Unit(s)--Registration of Allowable Emission Rates for Individual Stacks.

4.1. In accordance with subdivision 3.4.a. of 45CSR10, the owner or operator of each fuel burning unit(s) shall register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B, except where:

4.1.a. The owner or operator of a source utilizes CEMS or daily ASTM method sampling and analysis to demonstrate compliance with the plant-wide emission limit and the provisions of subdivision 3.4.a. of 45CSR10; or

4.1.b. The Director has approved a petition for an alternative individual stack allowable emission rate, filed by the owner or operator in accordance with subdivision 3.4.b of 45CSR10.

§45-10A-5. Testing Requirements.

5.1. Fuel Burning Unit(s)

5.1.a. The owner or operator shall conduct or have conducted, weight emission tests to determine the compliance of each fuel burning unit with the weight emission standards set forth in section 3 of 45CSR10 at a frequency established in the following table. Weight emission tests shall be conducted in accordance with 40CFR Part 60, Appendix A, Method 6 or other equivalent EPA testing method approved by the Director. If weight emission testing is required, the initial weight emission test shall be conducted within a time period starting twelve (12) months prior to, and ending twelve (12) months after, the effective date of this rule for existing units and within one hundred eighty (180) days of start-up for new unit(s).

% of Allowable Sulfur Content	Testing Frequency
≤50% of Allowable Sulfur Content	No stack testing required
between 50% and 90% of Allowable Sulfur Content	Once/5 years
≥90% of Allowable Sulfur Content	Once/ year

5.1.b. The owner or operator of a fuel burning unit(s), with a DHI greater than or equal to 10 million BTU's per hour

(mmBTU/hr) but less than 100 mmBTU/hr, may petition the Director for an alternative to weight emission testing.

5.1.c.The owner or operator of a fuel burning unit may petition for alternatives to the testing requirements of subsection 5.1 for units that are infrequently used or for infrequently used fuels.

5.2. Manufacturing Process Source(s)

5.2.a. The owner or operator shall conduct or have conducted, compliance tests to determine the compliance of each manufacturing process source with the emission standards set forth in section 4 of 45CSR10. Compliance tests shall be conducted in accordance with 40CFR Part 60, Appendix A, Method 6 or other equivalent EPA testing method approved by the Director. The initial compliance test shall be conducted within a time period starting twelve (12) months prior to and ending twelve (12) months after the effective date of this rule for existing units and within one hundred eighty (180) days of start-up for new unit(s). The results of the initial test shall be a consideration in establishing a compliance testing frequency. Compliance tests shall be conducted at a frequency established in the approved monitoring plan.

5.2.b. Manufacturing process source(s) utilizing a flare as a control device shall be exempt from the compliance testing requirements of subdivision 5.2.a.

5.2.c. The owner or operator of a manufacturing process source(s) may for good cause petition the Director for an alternative to compliance testing, which may include, but not be limited to, process gas sampling for percent sulfur by weight. To determine the emission rate of sulfur dioxide the manufacturing process source(s) shall assume 100% conversion to sulfur dioxide of all unrecovered sulfur compounds.

5.3. Combustion Source(s)

5.3.a. The owner or operator shall conduct or have conducted, compliance tests to determine the compliance of each combustion source with the standards set forth in section 5 of 45CSR10. Compliance tests shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 15 or other equivalent EPA testing method approved by the Director. The initial compliance test shall be conducted within a time period starting twelve (12) months prior to and ending twelve (12) months after the effective date of this rule for existing units and within one hundred eighty (180) days of start-up for new unit(s). The results of the initial test shall be a consideration in establishing a compliance testing frequency. Compliance tests shall be conducted at a frequency established in the approved monitoring plan.

5.4. The owner or operator of a fuel burning unit(s), manufacturing process unit(s), or combustion unit(s) employing CEMS to meet the requirements of section 6 shall be exempt from the testing requirements of subsections 5.1, 5.2 and 5.3.

5.5. The Director reserves the right to require testing pursuant to subsection 8.1 of 45CSR10.

§45-10A-6. Monitoring Plan Requirements.

6.1. Fuel Burning Unit(s)

6.1.a. The owner or operator of a fuel burning unit(s) shall submit, to the Director for approval, a monitoring plan for each fuel burning unit(s) that describes the method the owner or operator will use to monitor

compliance with the weight emission standard set forth in section 3 of 45CSR10. The owner or operator of a fuel burning unit(s) may use CEMS, which shall satisfy all of the requirements of an approved monitoring plan, or a monitoring plan as specified in subsection 6.4, in accordance with the provisions of this section.

6.1.b. The owner or operator of a type 'a' fuel burning unit(s) shall use a CEMS to satisfy the requirements of an approved monitoring plan.

6.1.c. The owner or operator of a type 'b' or type 'c' fuel burning unit(s) which burns fuel with a sulfur content greater than or equal to 90% of the allowable sulfur content shall:

6.1.c.1. Use a CEMS to satisfy the requirements of an approved monitoring plan; or

6.1.c.2. Conduct daily "as burned" fuel analysis per appropriate ASTM approved procedures and test methods.

6.1.c.3. CEMS, if required, shall be installed within twelve (12) months of the date of monitoring plan approval or within twelve (12) months of triggering the 90% threshold, whichever is later.

6.1.d. CEMS shall be used to satisfy the requirements of an approved monitoring plan if any other rule, permit or order requires the use of CEMS for the fuel burning unit(s). If not yet installed, the CEMS shall be installed by the date required in the other rule, permit or order.

6.2. Manufacturing Process Source(s)

6.2.a. The owner or operator of a manufacturing process source(s) shall submit, to the Director for approval, a monitoring plan for each manufacturing process source(s) that describes the method the owner or operator will use to monitor compliance with the mass emission standard set forth in section 4 of 45CSR10. The owner or operator of a manufacturing process source(s) may use CEMS, which shall satisfy all of the requirements of an approved monitoring plan, or a monitoring plan as specified in subsection 6.4, in accordance with the provisions of this section.

6.2.b. The owner or operator of a manufacturing process source(s) with a potential to emit 100 tons per year(tpy) of sulfur dioxide and with the potential to emit sulfur dioxide at a rate greater than or equal to 90% of the applicable emission standard shall use CEMS to satisfy the requirements of an approved monitoring plan.

6.2.b.1. The owner or operator of a manufacturing process source(s) may for good cause petition the Director for an alternative to CEMS.

6.2.b.2. CEMS, if required, shall be installed within twelve (12) months of the date of monitoring plan approval, within twelve (12) months of the receipt of denial of a petition under paragraph 6.2.b.1 or within twelve (12) months of triggering the 100 tpy and 90% thresholds in subdivision 6.2.b, whichever is later.

6.2.c. CEMS shall be used to satisfy the requirements of an approved monitoring plan if any other rule, permit or order requires the use of CEMS for the manufacturing process source(s).

6.3. Combustion Source(s)

6.3.a. The owner or operator of a combustion source(s) shall submit, to the Director for approval, a monitoring plan for

each combustion source(s) that describes the method the owner or operator will use to monitor compliance with the standard set forth in section 5 of 45CSR10. The owner or operator of a combustion source(s) may use CEMS, which shall satisfy all of the requirements of an approved monitoring plan, or a monitoring plan as specified in subsection 6.4, in accordance with the provisions of this section.

6.3.b. The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan.

6.3.b.1. The owner or operator of a combustion source(s) may for good cause petition the Director for an alternative to CEMS.

6.3.b.2. CEMS, if required, shall be installed within twelve (12) months of the date of monitoring plan approval, within twelve (12) months of the receipt of denial of a petition under paragraph 6.3.b.1, or within twelve (12) months of triggering the 45 grains per cubic feet threshold in subdivision 6.3.b, whichever is later.

6.3.c. CEMS shall be used to satisfy the requirements of an approved monitoring plan if any other rule, permit or order requires the use of CEMS for the combustion source(s).

6.4. An approved monitoring plan shall contain, at a minimum, the following items:

6.4.a. a list of parameters to be monitored;

6.4.b. the monitoring method and frequency for each parameter to be monitored;

6.4.c. the compliance range for each parameter to be monitored;

6.4.d. an explanation of how the parameters to be monitored were chosen, and how they are indicative of compliance;

6.4.e. an explanation of how the compliance ranges were established;

6.4.f. a response plan to be implemented during excursions; and

6.4.g. a proposed compliance testing schedule for manufacturing process source(s) and combustion source(s).

6.5. In addition to other actions taken by the Director, the Director may require the monitoring plan to be revised when the Director has reason to believe that the ranges established for operating parameters in the monitoring plan are no longer indicative of compliance or when the Director has reason to believe that excursions are excessive.

6.6. Notwithstanding any other provisions of this rule, the Director reserves the right to require the installation of CEMS pursuant to subdivision 8.2.a. of 45CSR10, in any case where the Director deems it necessary to determine compliance with the standards in 45CSR10.

§45-10A-7. Recordkeeping and Reporting Requirements.

7.1. Recordkeeping

7.1a. Fuel burning units - The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quality and quantity of fuel burned in each

unit. Such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis, and a periodic fuel quality analysis as set forth in the following table:

Fuel quality	Frequency of Analysis
≥90% of compliance limit	Daily
< 90% of compliance limit	per shipment

7.1.a.1. The owner or operator shall provide in the monitoring plan a quality control and quality assurance program for the fuel analysis. If a certified independent lab is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory.

7.1.b. Combustion source(s) - The owner or operator of a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit. Such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis, and a periodic fuel quality analysis. The frequency of periodic fuel quality analysis shall be established in an approved monitoring plan.

7.1.c. The owner or operator of a fuel burning unit or combustion source which utilizes CEMS shall be exempt from the provisions of subdivision 7.1.a. or 7.1.b, respectively.

7.1.d. For fuel burning units, manufacturing process sources, and combustion sources, records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

7.2. Exception Reporting

7.2.a. CEMS - Each owner or operator employing CEMS for an approved monitoring plan, shall submit a "CEMS Summary Report" and/or a "CEMS Excursion and Monitoring System Performance Report" to the Director quarterly; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A unless otherwise specified by the Director.

7.2.a.1. If the total duration of excursions for the reporting period is less than four percent (4%) of the total source operating time for the reporting period and the total monitoring method downtime for the reporting period is less than five percent (5%) of the total source operating time for the reporting period, only the CEMS Summary Report shall be submitted; the CEMS Excursion and Monitoring System Performance report shall be maintained on-site and shall be submitted to the Director upon request.

7.2.a.2. If the total duration of excursions for the reporting period is four percent (4%) or greater of the total operating time for the reporting period or the total monitoring method downtime for the reporting period is five percent (5%) or greater of the total operating time for the reporting period, the CEMS Summary Report and the CEMS Excursion and Monitoring System Performance Report shall both be submitted to the Director.

7.2.a.3. The CEMS Excursion and Monitoring System Performance Report shall be in a format approved by the Director and shall include the following information:

7.2.a.3.A. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion.

7.2.a.3.B. Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility.

7.2.a.3.C. The nature and cause of any malfunction (if known), and the corrective action taken and preventative measures adopted.

7.2.a.3.D. The date and time identifying each period during which quality-controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system.

7.2.a.3.E. When no excursions have occurred or there were no periods of quality-controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report.

7.2.b. Non-CEMS Based Monitoring - Each owner or operator employing monitoring pursuant to subsection 6.4 shall submit a "Monitoring Summary Report" and an "Excursion and Monitoring Plan Performance Report" to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The Monitoring Summary Report shall contain the information and be in a format approved by the Director.

7.2.b.1. If the total number of excursions for the reporting period is less than four percent (4%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report shall be submitted to the Director; the Excursion and Monitoring Plan Performance Report shall be maintained on-site and shall be submitted to the Director upon request.

7.2.b.2. If the number of excursions for the reporting period is four percent (4%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report and the Excursion and Monitoring Plan Performance Report shall both be submitted to the Director.

7.2.b.3. The Excursion and Monitoring Plan Performance Report shall be in the format specified in an approved monitoring plan and shall include, but not be limited to, the following information:

7.2.b.3.A. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion.

7.2.b.3.B. Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility.

7.2.b.3.C. The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any).

7.2.b.3.D. The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken.

7.2.b.3.E. When no excursions have occurred or there were no periods of data unavailability, such information shall be stated in the report.

Appendix A - CEMS Summary Report

Pollutant SO_2

Company _____

_____

Emission Limitation

Regulation	Limit	Units	Period
45 CSR 10			

Reporting Period: Calendar Quarter _____ to _____

Monitor Manufacturer: _____

Model Number: _____

Date of Last Certification or Audit: _____

Process Unit(s) Description: _____

_____

Emissions Data Summary

1. Duration of excess emissions in reporting period due to:

	45 CSR 10	
a. Malfunctions due to Control Equipment Problems	_____	hours
b. Malfunctions due to Process Problems	_____	hours
c. Other Known Causes	_____	hours
d. Unknown Causes	_____	hours
2. Total Duration	_____	hours
3. Percent Excess Emissions	_____	%

% Excess Emissions = 100 * (Total Duration / Total source Operating Time)

CEMS Performance Summary

1. CEMS Downtime in reporting period due to:

a. Monitor Equipment Malfunction	_____	hours
b. Other Equipment Malfunction	_____	hours
c. Quality Assurance Calibration	_____	hours
d. Other Known Causes	_____	hours
e. Unknown Causes	_____	hours
2. Total CEMS Downtime	_____	hours
3. Percent CEMS Downtime	_____	%

Please Note:

1. Separate Summary Reports are required for each process in the system when it has separate monitoring equipment.
2. Total source operating time means the total time which the affected source is operating, including all periods of start-up, shut-down, malfunction, or CEMS downtime as those times are defined under the rule.
3. All times for SO_2 emissions are to be reported in hours.
4. On a separate page describe any changes since the last reporting period to the CEMS process or controls.
5. Other reports may be necessary to meet requirements.

Appendix B - Registration

Table 1 - Sum of Design Heat Inputs for Similar Units					
Type 'a'		**Type 'b'**		**Type 'c'**	
(A) Unit ID	**(B) DHI (mmBTU)**	**(C) Unit ID**	**(D) DHI (mmBTU)**	**(E) Unit ID**	**(F) DHI (mmBTU)**
Sum of DHI for all Type 'a' units	0	Sum of DHI for all Type 'b' units	0	Sum of DHI for all Type 'c' units	0

Table 2 - Weight Emission Limits for Similar Units			
(A)	**(B) Total Design Heat Input (mmBTU)**	**(C) Factor from 45CSR10, Section 3 (lb/mmBTU)**	**(D) Weight Emission Rate (lb/hr)[1,2] [B * C = D]**
Sum of DHI for all Type 'a' units			0
Sum of DHI for all Type 'b' units			0
Sum of DHI for all Type 'c' units			0

Table 3 - Registration of Standard Individual Stack Emission Rates					
(A) Stack ID	(B) Identify each unit venting thru stack	(C) Sum of DHI for all units vent-ing thru stack (mmBTU)	(D) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU)	(E) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU)	(F) Stack Emission Rate (lb/hr) [(C/D) *E = F]
			1		0
			1		0
			1		0
			1		0
			1		0
			1		0
Sum of Standard Stack Allowable Emission Rates (lb/hr)					0

The owner or operator may register individual stack allowable emission rates, differing from those calculated above, as provided for in 45CSR10, Subsection 3.4.

Table 4 - Registration of Alternative Stack Emisson Rates		
(A) Stack ID	(B) Identify each unit venting thru stack	(C) Alternative Stack Emission Rate (lb/hr)
Sum of Alternative Stack Emission Rates (lb/hr)[1]		0

[1] The sum of the Alternative stack emission rates for similar units shall not exceed the weight emission rates for similar units in Table 2, Column D.