

**WEST VIRGINIA  
SECRETARY OF STATE  
JOE MANCHIN, III  
ADMINISTRATIVE LAW DIVISION**

Form #5

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2001 DEC 26 A 10:14

OFFICE WEST VIRGINIA  
SECRETARY OF STATE

**NOTICE OF AGENCY ADOPTION OF A PROCEDURAL OR INTERPRETIVE RULE  
OR A LEGISLATIVE RULE EXEMPT FROM LEGISLATIVE REVIEW**

AGENCY: WV DEP - Division of Air Quality TITLE NUMBER: 45

CITE AUTHORITY: W.Va. Code §22-5-4; 45CSR10

RULE TYPE: PROCEDURAL \_\_\_\_\_ INTERPRETIVE X

EXEMPT LEGISLATIVE RULE \_\_\_\_\_

CITE STATUTE(S) GRANTING EXEMPTION FROM LEGISLATIVE REVIEW  
\_\_\_\_\_

AMENDMENT TO AN EXISTING RULE: YES X NO \_\_\_\_\_

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 10A

TITLE OF RULE BEING AMENDED: "Testing, Monitoring, Recordkeeping, and Reporting  
Requirements Under 45CSR10"

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: \_\_\_\_\_

TITLE OF RULE BEING PROPOSED: \_\_\_\_\_

THE ABOVE RULE IS HEREBY ADOPTED AND FILED WITH THE SECRETARY OF STATE. THE  
EFFECTIVE DATE OF THIS RULE IS January 25, 2002

  
\_\_\_\_\_  
Authorized Signature

\$10.00

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OFFICE OF THE SECRETARY OF STATE  
WEST VIRGINIA

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

SERIES 10A  
TESTING, MONITORING, RECORDKEEPING AND REPORTING  
REQUIREMENTS UNDER 45CSR10

**§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. -- December 26, 2001.

1.4. Effective Date. -- January 25, 2002.

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

2.3. "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.

2.4. "Excursion" means: (1) measured emissions exceeding the applicable standards set

forth in sections 3, 4, and 5 of 45CSR10; or (2) 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.

2.5. "Factor," in  $\text{lbSO}_2/\text{mmBTU}$ , means the number, indicated in 45CSR10, subsection 3.1, 3.2, or 3.3, as appropriate, to be multiplied by the TDHI to calculate the maximum amount of sulfur dioxide permitted to be discharged to the atmosphere from all stacks located at one plant, expressed in units of pounds per hour.

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

2.7. "Pipeline Quality Natural Gas" means, for purposes of this rule only, natural gas with a sulfur content less than or equal to 20 grains per 100 dry standard cubic feet (dscf).

2.8. 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 (DHI) of less than 10 million BTUs per hour ( $\text{mmBTU/hr}$ );

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; or

3.1.d. Manufacturing operations in which the process is to partially combust wood during the manufacture of charcoal.

**§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 fuel burning unit 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 Secretary 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 40 CFR Part 60, Appendix A, Method 6 or other equivalent EPA testing method approved by the Secretary. If weight emission testing is required, the initial weight emission test shall be conducted within a

time period starting March 15, 2000, and ending March 15, 2002, for existing units and within one hundred eighty (180) days of start-up for new unit(s).

Percent of Factor	Testing Frequency
≤50% of Factor	No stack testing required
Between 50% and 90% of Factor	Once every 5 years
≥90% of Factor	Once every year

5.1.b. The owner or operator of a fuel burning unit(s), with a DHI greater than or equal to 10 mmBTU/hr but less than 100 mmBTU/hr, may petition the Secretary 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 40 CFR Part 60, Appendix A, Method 6 or other equivalent EPA testing method approved by the Secretary. The initial compliance test shall be conducted within a time period starting March 15, 2000, and ending March 15, 2002, 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 Secretary 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). -- 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 Secretary. The initial compliance test shall be conducted within a time period starting March 15, 2000, and ending March 15, 2002, 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 Secretary 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 Secretary 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 be deemed to 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.b.1. CEMS conforming to the specifications of 40 CFR Part 75 shall use unbiased, unsubstituted data to demonstrate compliance with the provisions of 45CSR10.

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 that equates to 90% or greater of the factor 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 in accordance with applicable ASTM procedures and test methods.

6.1.d. CEMS, if required, shall be installed, operational and certified 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.e. 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 Secretary for approval, a monitoring plan for each manufacturing process source(s) that

## 45CSR10A

describes the method the owner or operator will use to monitor compliance with the applicable emission standard set forth in section 4 of 45CSR10. The owner or operator of a manufacturing process source(s) may use CEMS, which shall be deemed to 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 Secretary for an alternative to CEMS.

6.2.b.2. CEMS, if required, shall be installed, operational and certified 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). If not yet installed, the CEMS shall be installed by the date required in the other rule, permit or order.

### 6.3. Combustion Source(s).

6.3.a. The owner or operator of a combustion source(s) shall submit, to the Secretary 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

be deemed to 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 Secretary for an alternative to CEMS.

6.3.b.2. CEMS, if required, shall be installed, operational and certified 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 100 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). If not yet installed, the CEMS shall be installed by the date required in the other rule, permit or order.

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

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 schedule for installation and operation of any additional monitoring equipment installed for purposes of complying with this rule, or a schedule for implementation of any additional procedure(s) required for purposes of complying with this rule;

6.4.g. A response plan to be implemented during excursions; and

6.4.h. A proposed compliance testing schedule for manufacturing process source(s) and combustion source(s), as applicable.

6.5. Monitoring plans, pursuant to subdivisions 6.1.a, 6.2.a, and 6.3.a, shall be submitted to the Secretary for approval no later than February 28, 2001, as specified in paragraph 8.2.c.2 of 45CSR10.

6.5.a. Approval or denial of such plans shall be issued no later than August 31, 2001, or 6 months after submittal, whichever is later, as specified in paragraph 8.2.c.2 of 45CSR10, provided that the owner or operator may presume approval of a monitoring plan if the Secretary has neither approved nor denied the plan by the date specified in this subdivision.

6.5.b. Monitoring plans shall become effective upon approval.

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

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

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

7.1. Recordkeeping.

7.1.a. 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 Factor	Daily
< 90% of Factor	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, as applicable.

7.1.d. For fuel burning units, manufacturing process sources, and combustion sources, records of all required monitoring data as established in an approved monitoring plan 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 Secretary quarterly; the Secretary may, on a case-by-case basis, require more frequent reporting if the Secretary deems it necessary to accurately assess the compliance status of the source. All reports shall be postmarked no later than forty-five (45) days 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 Secretary.

7.2.a.1. Submittal of 40 CFR Part 75 data in electronic data reporting (EDR) format to the Secretary shall be deemed to satisfy the requirements of subdivision 7.2.a.

7.2.a.2. 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 Secretary upon request.

7.2.a.3. 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 Secretary.

7.2.a.4. The CEMS Excursion and Monitoring System Performance Report shall be in a format approved by the Secretary and shall include the following information:

7.2.a.4.A. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion;

7.2.a.4.B. Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility;

7.2.a.4.C. The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted;

7.2.a.4.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; and

7.2.a.4.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 Secretary on a quarterly basis, to the extent required under paragraphs 7.2.b.1 through 7.2.b.4; the Secretary may, on a case-by-case basis, require more frequent reporting if the Secretary 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 Secretary.

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 Secretary; the Excursion and Monitoring Plan Performance Report shall be maintained on-site and shall be submitted to the Secretary 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 Secretary.

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 preventive 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; and

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.

7.2.b.4. The Monitoring Summary Report and the Excursion and Monitoring Plan Performance Report described in subdivision 7.2.b shall not be required to be submitted for any manufacturing process source or combustion source where the only source of sulfur dioxide emissions results from the combustion of pipeline quality natural gas, wood or distillate oil, alone or in combination. The Secretary may also exempt any manufacturing process source or combustion source from the requirement to submit the two reports referenced in this paragraph provided the Secretary is satisfied that sufficient information has been submitted to demonstrate the following:

7.2.b.4.A. The only source of sulfur dioxide emissions results from the combustion of fuel having a similar ratio of sulfur content to heating value as the other fuels mentioned in this paragraph;

7.2.b.4.B. Maximum emissions from the combustion of such fuel will be well below the applicable standard; and

7.2.b.4.C. Any other site-specific information identified by the Secretary has been addressed.

# Appendix A - CEMS Summary Report

Pollutant SO<sub>2</sub>

Company \_\_\_\_\_

Regulation	Limit	Units	Period
45 CSR 10			

Emission Limitation \_\_\_\_\_

Total Source Operating Time \_\_\_\_\_ minutes

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:

a. Startup/Shutdown \_\_\_\_\_ hours

b. Malfunctions due to Control Equipment Problems \_\_\_\_\_ hours

c. Malfunctions due to Process Problems \_\_\_\_\_ hours

d. Other Known Causes \_\_\_\_\_ hours

e. 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 \_\_\_\_\_ %

% Downtime = 100 \* (Total CEMS Downtime / Total Source Operating Time)

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<sub>2</sub> 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		Sum of DHI for all Type 'b' units		Sum of DHI for all Type 'c' units	

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) <sup>1,2</sup> [B * C = D]
Sum of DHI for all Type 'a' units			
Sum of DHI for all Type 'b' units			
Sum of DHI for all Type 'c' units			

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

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

<b>Table 4 - Registration of Alternative Stack Emission Rates</b>		
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Alternative Stack Emission Rate (lb/hr)</b>
<b>Sum of Alternative Stack Emission Rates (lb/hr)<sup>1</sup></b>		

<sup>1</sup> 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.

**American Electric Power  
Service Corporation**  
1 Riverside Plaza  
Columbus, OH 43215  
614 223 1000



**AMERICAN  
ELECTRIC  
POWER**

**FAX**  
Original to Follow

Post-it* Fax Note	7671	Date	12/10/2001	# of pages	2
To	John Benedict	From	Greg Wooten		
Co./Dept.	DAQ	Co.	AEP		
Phone #		Phone #	614-223-1262		
Fax #	304-926-3637	Fax #	614-223-1252		

December 10, 2001

Mr. John A. Benedict  
Deputy Chief  
Division of Air Quality  
West Virginia Department of Environmental Protection  
7012 MacCorkle Avenue SE  
Charleston, West Virginia 25304-2943

**RE: 45 CSR 10A Comments**

Dear Deputy Chief Benedict:

The operating companies of the American Electric Power System, including Ohio Power Company and Appalachian Power Company, (collectively referred to as "AEP") offer the following comments on the proposed revisions to the interpretive rule establishing testing, monitoring, recordkeeping and reporting requirements under 45 CSR 10.

The proposed revisions to interpretive rule 45 CSR 10A developed by the Division of Air Quality (DAQ) provide necessary clarification to the original interpretive rule and we commend the DAQ on this work. The interpretive rule provides guidance and clarification that will be especially important as the agency and affected companies embark upon the process to draft Title V permits.

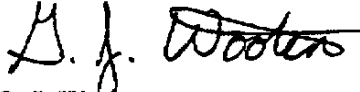
In addition to the brief comments submitted by the Chamber, AEP is requesting the DAQ also consider revising the submittal deadline for CEMS reports found in 45 CSR 10A.7.2.a. The current submittal deadline is 30 days after the end of the quarter. AEP is proposing that the deadline be extended to 45 days. As the agency may be aware, the electronic submittal deadline under 40 CFR 75 is also 30 days (with extensions of the deadline also possible). Because submittal of the 45 CFR 75 reports to the DAQ must be done via the postal service on diskette or CDs, AEP believes it would be appropriate to have a lag time between the date the 40 CFR 75 reports are due to USEPA and the date that copies of these same reports are due to the DAQ.

Specifically, in AEP's case, the final QA/QC of the 40 CFR 75 reports is performed at the corporate level. However, it would be helpful if additional time was available to burn CDs and mail them to the affected plants such that all 45 CSR 10A and 2A compliance reports could be submitted by the responsible facility. Otherwise, AEP would be forced to shorten the 30-day 40 CFR 75 deadline by up to 1 week to ensure the submittal to DAQ can meet the 30-day postmark deadline under 45 CSR 10A. As currently written, the 45 CSR 10A interpretive rule would effectively be driving down the submittal date of quarterly reports under the acid rain program.

This revision should not be viewed as a controversial change, as it will not impact the amount or type of data to be sent to DAQ. It will simply provide sufficient time for the affected sources to prepare and mail the reports otherwise required under 40 CFR 75.

AEP appreciates the opportunity to comment on this interpretive rule and encourages DEP to move forward with making appropriate revisions as soon as possible so that they can be applied to all qualifying facilities.

Sincerely,



G. J. Wooten  
Environmental Service Division

cc: F. E. Blake/J. P. Novotny – Environmental Services, IRP  
T. P. Mallan – Environmental Affairs, Charleston  
M. R. Robida – Environmental Services, IRP  
File: West Virginia Regulatory Development – Comments

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# Columbia Gas Transmission

A NiSource Company

November 27, 2001

1700 MacCorkle Ave SE  
Charleston WV 25314

PO Box 1273  
Charleston WV 25325-1273

304 357 2000

Mr. John A. Benedict, Deputy Chief  
Division of Air Quality  
7012 MacCorkle Avenue, SE  
Charleston, WV 25304-2943

**RE: Comments on Proposed Revisions to Interpretive Rule 45 CSR10A**

Dear Mr. Benedict,

Attached are Columbia Gas Transmission's comments on the proposed revisions to the interpretive rule, 45CSR10A, "Testing, Monitoring, Recordkeeping, and Reporting Requirements Under 45 SCSR10" for your consideration.

Should you have any questions or require any additional information on the attached, please do not hesitate to contact me at (304) 357-2079. Thank you for considering our comments.

Sincerely,



Gregory Lago  
Environmental Health & Safety Coordinator

Attachment

**Columbia Gas Transmission Corporation**  
**Comments on Revisions to Interpretative Rule -- 45CSR10A**  
**Testing, Monitoring, Recordkeeping, and Reporting Requirements under 45 CFR 10**

**Introduction**

This document provides Columbia Gas Transmission Corporation's comments on the proposed revision to West Virginia Air Quality Regulations at 45CSR10A.

**45 CSR 10A-2 Definitions**

The proposed definition at 45CSR10A-2.7 defines "Pipeline Quality Natural Gas" as natural gas with a sulfur content of less than "4.2 grains per 1,000 standard cubic feet". The sulfur content of natural gas is usually measured in grains per hundred standard cubic feet. The 4.2 grains/1000 dscf would equate to 0.42 grains/100 dscf of natural gas which is a relatively small concentration of sulfur.

Is the proposed definition meant to be 4.2 grains per 100 scf instead of per 1000 scf?

What is the basis for the 4.2 grains per 1000 (or 100) standard cubic feet of sulfur in the "Pipeline Quality Natural Gas" definition? Calculations performed show that the exhaust concentration of SO<sub>2</sub> from burning natural gas fuel with a sulfur concentration of 20 grains/100 scf would yield less than 10 percent of the allowable exhaust gas concentration of SO<sub>2</sub> for natural gas fired compressor engines. If the basis for the sulfur concentration in the definition of "Pipeline Quality Natural Gas" is such that the concentration can be revised upward (up through 20 grains/100 scf) we request that this be considered.

**45CSR10A-7.2.b.4**

We are in support of the addition of Section 7.2.b.4 eliminating the reporting requirements for sources burning relatively "clean" fuel.

**WEIRTON**  
STEEL CORPORATION

Mark Vignovic  
Director, Environmental Control  
Phone (304) 797-4276

December 10, 2001

John A. Benedict, Deputy Chief  
Division of Air Quality  
7012 MacCorkle Avenue, SE  
Charleston, WV 25304-2943  
Via Facsimile 304-926-3637

Re: Comments on Revised Interpretive Rule 45CSR10A

Dear Mr. Benedict:

Weirton Steel Corporation (WSC) appreciates the opportunity to supply comments on the revised interpretive rule for testing, monitoring, recordkeeping and reporting for sources of sulfur emissions (45CSR10A) and is pleased the Division of Air Quality included exemptions for clean burning fuels in the revised rule. The exemptions are for sources that burn natural gas, distillate oil or wood. (§45-10A-3)

However, the rule should be made equitable for those sources that burn other fuels with similar sulfur concentrations. Distillate oil, specifically No. 2 fuel oil, has the highest concentration of sulfur of these fuels at 0.25 pounds per million Btu's based upon the industry standard specification of 0.5% sulfur.

WSC recommends that all sources that burn fuels below this concentration should be exempt from 45CSR10A and should be noted in the rule.

An alternative would be to add additional exempt fuels to the regulation. For WSC, process gas generated from blast furnace operations, or blast furnace gas should be added. The blast furnace gas generated at WSC typically has 0.06 pounds per million Btu's of sulfur. It compares favorably with distillate oil and therefore should be included as an exempt fuel.

A final means for equitable application of the rule would be to provide a mechanism for review of fuels by the Division of Air Quality. The source owner could request an exemption from 45CSR10A based upon sulfur concentration. The Division of Air Quality could then grant an exemption by comparing the fuel's sulfur concentration with the current exempt fuels in the rule.

WSC would like to thank you for your thoughtful consideration of our comments. If you have any questions concerning this issue, please contact either Clark Francy, Environmental Control Department Technical Services Manager at (304) 797-3908 or Joseph McCay Senior Staff Environmental Engineer at (304) 797-4258.

Sincerely,



Mark Vignovic  
Director of Environmental Control

MV:JM

12/10/2001 8:53

**Sulfur Content Comparison****Natural Gas**

4.2 grains sulfur per 1,000 DSCF as defined in the regulation  
7,000 grains per lb  
0.0006 lbs sulfur per 1,000 DSCF  
1,000 Btu's per DSCF  
6.00E-07 lbs sulfur per MMBtu's

**No. 2 Oil**

1 gallon of # 2 fuel oil (not low sulfur)  
7 lbs/gallon  
0.50% % sulfur - Platts Oil Guide to Specifications  
0.035 lbs sulfur per gallon # 2 fuel oil  
138,690 Btu's per gallon # 2 fuel oil  
0.25 lbs sulfur per MMBtu's

**No. 2 Oil Low Sulfur**

1 gallon of # 2 fuel oil (not low sulfur)  
7 lbs/gallon  
0.050% % sulfur - Platts Oil Guide to Specifications  
0.0035 lbs sulfur per gallon # 2 fuel oil  
138,690 Btu's per gallon # 2 fuel oil  
0.025 lbs sulfur per MMBtu's

**Blast Furnace Gas**

0.114 # SO<sub>2</sub>/ MM Btu - From internal testing  
16 molecular weight of Oxygen  
32 molecular weight of Sulfur  
0.5 Ratio sulfur to SO<sub>2</sub> produced (mass)  
0.057 # Sulfur to MMBtu of Blast Furnace Gas



December 10, 2001

BY FACSIMILE AND U.S. MAIL

Mr. John A. Benedict, Deputy Chief  
Division of Air Quality  
7012 MacCorkle Avenue, SE  
Charleston, West Virginia 25304-2943

**RE: Comments of Independent Oil & Gas Association of West Virginia on Revisions to 45 CSR 10A, "Testing, Monitoring, Recordkeeping and Reporting Requirements under 45 CSR 10"**

Dear Mr. Benedict:

The Independent Oil & Gas Association ("IOGA"), is pleased to provide comments on proposed revisions to interpretive rule 45 CSR 10A, titled "Testing, Monitoring, Recordkeeping and Reporting Requirements under 45 CSR 10." ("the Proposed Rule"). IOGA, formed in 1959, is West Virginia's largest oil and gas trade association with more than 350 corporate members. IOGA's purpose is to promote and protect the oil and natural gas producing industry through a variety of objectives. As an initial matter, IOGA reasserts its position that 45 CSR 10 ("Regulation 10") does not apply to gas compressors because such compressors are not "manufacturing processes" as defined in 45 C.S.R. 10, § 2.11, and thus the provisions of the Proposed Rule are not applicable to gas compressors. IOGA's position on this issue was set forth in a June 11, 2001 letter to Ms. Karen Watson of the Division of Air Quality ("DAQ"), which is attached hereto for your convenience and incorporated by reference into these comments. Additional comments to the Proposed Rule are as follows:

1. Section 2.7: Definition of Pipeline Quality Natural Gas. The units used to express the sulfur content of pipeline quality natural gas is not expressed in the standard units used by the oil and gas industry, which is grains per 100 dry standard cubic feet (dscf). Please clarify whether the sulfur content of pipeline quality natural gas is 0.42 grains per 100 dscf. Moreover, if the sulfur content is 0.42 grains per 100 dscf, please provide a basis and rationale for selecting this number. Is it the DAQ's position that this is a representative sulfur content for natural gas found in West Virginia? Without such a basis and rationale, IOGA cannot comment on whether the sulfur content is valid. IOGA reserves its comments on the proposed definition of pipeline quality natural gas until such information is provided.

**INDEPENDENT OIL & GAS ASSOCIATION OF WEST VIRGINIA**

405 Capitol Street, Suite 507 Charleston, WV 25301 Phone (304) 344-9867 Fax (304) 344-5836

Mr. John A. Benedict  
December 10, 2001  
Page Two

2. Initial Compliance Testing Deadline. The revisions to the initial compliance testing requirements set forth in sections 5.1.a, 5.2.a, and 5.3 should be deleted to permit the testing to be completed within one year from the effective date rule. This would allow regulated sources adequate time to establish and implement the appropriate testing methodology.

3. Section 7.2.b.4, Exemption for Reporting Requirements. Although this provision provides minor relief, in the form of reduced reporting requirements, to manufacturing process and combustion sources where the only sulfur dioxide emissions result from the combustion of pipeline quality natural gas, it provides no relief to the Oil and Gas Industry under the DAQ's current interpretation of manufacturing process. If the DAQ maintains its position that a natural gas compressor is a manufacturing process, then operators of gas compressors would still be required to perform compliance testing, submit a monitoring plan and maintain records. As discussed above, a compressor is not a manufacturing process source and thus should not be regulated sources under 45 C.S.R. 10.

4. Section 3, Definition of Manufacturing Process

In addition to the above comments IOGA proposes that the DAQ include a provision in the Applicability section of the rule, i.e. section 3, that clarifies the scope of Regulation 10's definition of manufacturing process, such as:

"Manufacturing Process" shall not include the operation of a compressor(s) that have the sole purpose of increasing the pressure of air, natural gas, or any other gas where the only source of sulfur dioxide emissions results from the combustion of pipeline quality natural gas, wood or distillate oil, alone or in combination.

Such a provision is appropriate for inclusion in an interpretative rule in light of the uncertainty with the definition of manufacturing process as set forth in 45 C.S.R. 10 §2.11. As discussed in IOGA's June 11, 2001 letter to the DAQ, the definition of manufacturing process is limited to those processes that convert raw materials into products and that Regulation 10 is applicable to only those manufacturing processes which result in the separation of air pollutants from process materials or in the conversion of process materials into air pollutants. By contrast, in its July 20, 2001 reply, the DAQ offers its position that a manufacturing process includes "all business activities with a potential to emit sulfur dioxide above a certain de minimis level." Letter from Karen Watson to Joseph M. Dawley, July 20, 2001. These varying interpretations of Regulation 10's definition of manufacturing process demonstrate the need for formal clarification on the definition through an interpretative rule rather than an opinion letter, such as the DAQ's July 20, 2001 letter. As defined by the West Virginia Administrative Procedures Act, an interpretative rule is a rule "adopted by an agency independently of any delegation of legislative power which is intended by the agency to provide information or guidance to the public regarding the agency's interpretations, policy or opinions upon the law enforced by it or

Mr. John A. Benedict  
December 10, 2001  
Page Three

administered by it . . . .” W.Va. Code § 29A-1-2(c). Therefore, because the purpose of an interpretative rule is to provide information or guidance as to the DAQ’s interpretations, policies or opinions on the provisions of the law that it administers and enforces, IOGA strongly requests that the DAQ reissue the Proposed Rule to include clarification on Regulation 10’s definition of manufacturing process, such as the provision suggested above. Such a provision is consistent with the Administrative Procedures Act and will provide regulatory certainty.

Thank you for the opportunity to comment on the Proposed Rule.

Sincerely,

  
Jeffrey R. Stevens, Chair  
Environmental Committee

Enclosure

cc: Micheal Herron (w/enclosure)  
M. Ann Bradley, Esq. (w/o enclosure)

**LAW OFFICES**  
**SPILMAN THOMAS & BATTLE, PLLC**

RECEIVED  
OFFICE OF AIR QUALITY  
SINCE 1864

990 ELMER PRINCE DRIVE, SUITE 205  
MORGANTOWN, WEST VIRGINIA 26505  
TELEPHONE (304) 599-8175

417 GRAND PARK DRIVE, SUITE 203  
PARKERSBURG, WEST VIRGINIA 26101  
TELEPHONE (304) 422-6700

SPILMAN CENTER  
300 KANAWHA BOULEVARD, EAST  
POST OFFICE BOX 273  
CHARLESTON, WEST VIRGINIA 25321-0273

RECEIVED  
TELEPHONE (304) 340-3800  
FACSIMILE (304) 340-3801

333 FENCO ROAD, SUITE A  
WEIRTON, WEST VIRGINIA 26062  
TELEPHONE (304) 723-6980

WRITER'S DIRECT DIAL NO.  
(304) 340-3843  
e-mail: jdawley@spilmanlaw.com

June 11, 2001

**VIA FACSIMILE**

Ms. Karen G. Watson  
Division of Air Quality  
West Virginia Department of Environmental Protection  
7012 MacCorkle Avenue, S.E.  
Charleston, WV 25304

**Re: Applicability of 45 C.S.R. 10 to Wellhead Gas Compressors**

Dear Ms. Watson:

On behalf of the Independent Oil and Gas Association of West Virginia ("IOGA"), I appreciate the opportunity to present IOGA's position on the applicability of 45 C.S.R. 10 ("Regulation 10") to gas compressors located at wellheads. At the May 10, 2001 meeting between representatives of the oil and gas industry and the Division of Air Quality ("DAQ"), the DAQ stated its position that natural gas compressors were subject to Regulation 10 because such compressors fall within the regulation's definition of "manufacturing process." In that meeting, IOGA presented its position that Regulation 10 does not apply to gas compressors because increasing the wellhead pressure for the purpose of transporting the gas into a higher pressure pipeline is not a manufacturing activity. This letter describes in detail the IOGA's position on the regulatory meaning of "manufacturing process source operation" and the applicability of Regulation 10 to the wellhead gas compressors.

**A. Overview of Regulation 10 And the Definition of Manufacturing Process Source Operation.**

The purpose of Regulation 10 is to prevent and control air pollution from the emission sulfur oxides from fuel burning units, manufacturing process source operations, and the combustion of refinery or process gas streams. 45 C.S.R. 10 §§ 1.1, 3, 4, and 5. Section 4 of the regulation establishes a limitation in terms of concentration for the emissions of sulfur dioxide from "Manufacturing Process Source Operations." 45 C.S.R. 10 § 4. This section provides:

***SPILMAN THOMAS & BATTLE, PLLC***

Mrs. Karen G. Watson

June 11, 2001

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No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

45 C.S.R. 10 § 4.1 (emphasis added).<sup>1</sup> The regulation defines a "source operation" as

[t]he last operation in a manufacturing process preceding the emission of air pollutants which operation:

- a. results in the separation of the air pollutant from the process materials or in the conversion of process materials into air pollutants; and
- b. is not an air pollution abatement operation.

45 C.S.R. 10 § 2.19. The regulation defines "manufacturing process" as

Any action, operation or treatment embracing chemical, industrial or manufacturing efforts, and employing, for example, heat-treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and non-ferrous foundries, kilns, stills, pipe stills, reformers, furnaces associated with manufacturing processes, dryers, crushers, grinders, roasters, and all other methods or forms of manufacturing or processing that may emit sulfur dioxide or sulfur compounds.

45 C.S.R. 10 § 2.11. Therefore, in reading the definitions of manufacturing process and source operation together, a source operation is a manufacturing process, which is not an air pollutant abatement operation, that results in the separation of air pollutants from the process materials or results in the conversion of process materials into air pollutants.

**B. Wellhead Gas Compressors Are Neither Source Operations Nor Manufacturing Processes And Thus Are Not Subject To Regulation Under Regulation 10.**

Wellhead gas compressors are neither source operations nor manufacturing processes and thus are not within the scope of Regulation 10. Wellhead gas compressors are simply used to increase the pressure of the wellhead gas to facilitate transportation of the gas from the gathering lines (i.e. low-pressure pipelines connected to the wellheads) to the transmission lines, (i.e. high-pressure pipelines). Wellhead gas compressors are not manufacturing processes because these

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<sup>1</sup> As this letter is limited the threshold question concerning the definition of "manufacturing process source operation," the exemptions to the emission limitation are not discussed at this time.

## ***SPILMAN THOMAS & BATTLE, PLLC***

Mrs. Karen G. Watson

June 11, 2001

Page 3 of 4

devices only change a physical characteristic of a material, i.e. increasing the pressure. Increasing the pressure of a gas is not a manufacturing activity within either the traditional usage or regulatory usage of the term "manufacturing." In the traditional sense, "manufacture" is defined as the action or process of making something into a product from raw materials. See *Merriam-Webster's Collegiate Dictionary*, Tenth Edition. Clearly, compressing wellhead gas is not the conversion of raw materials into product and therefore is not a manufacturing activity. Similarly, compressing wellhead gas is not an activity that falls within the regulatory definition of "manufacturing process." First, compressing wellhead gas is not an "action, operation or treatment embracing chemical, industrial or manufacturing efforts." See 45 C.S.R. 10 § 2.11. The regulation provides examples of the types of such actions, operations, or treatments that are within the regulatory meaning of manufacturing processes. *Id.* These include processes that fall within traditional manufacturing activities, i.e. conversion of raw materials into usable products, such as furnaces, kilns, foundries, driers, cupolas, crushers and roasters. *Id.* While these categories of manufacturing activities are not exhaustive of the types of activities that fall within the definition of manufacturing process, they are representative of the classes of activities that are within the scope of manufacturing processes. Under the *ejusdem generis* rule of statutory construction, the general words will be construed as applying only to things of the same general class as those enumerated. See *Ohio Cellular RSA Limited Partnership v. Board of Public Works of the State of West Virginia*, 198 W. Va. 416, 421-422 (1996). Therefore, physical activities that do not result in any conversion of a raw material into a product are not manufacturing processes.

Moreover, a wellhead gas compressor is not a source operation because the physical act of compressing gas does not result in the separation of air pollutants from the process material. The act of compression is a physical process that simply raises the pressure of the gas and there are no pollutants stripped, or separated, from the gas during the compression. Similarly, a wellhead gas compressor does not fall within the second category of source operation because compressing gas does not result in the conversion of process materials into air pollutants. Again, only the pressure of the gas is increased and there is no conversion of the gas into air pollutants.

Lastly, the internal combustion engine that drives the compressor does not fall within the definition source operation or manufacturing process. First, an internal combustion engine is not a manufacturing activity because there is no conversion of raw materials into products. Second, if the Legislature intended Regulation 10 or the definition of "manufacturing process" to include internal combustion engines, it is likely that the regulation would expressly include internal combustion engines, which it does not.

Nor is an internal combustion engine a source operation. First, as discussed above, an internal combustion engine is not a manufacturing process. A source operation is defined as the last manufacturing process preceding the emission of air pollutants. 45 C.S.R. § 2.19. Second, an internal combustion engine does not result in the separation of air pollutants from the process

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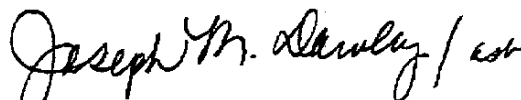
Mrs. Karen G. Watson  
June 11, 2001  
Page 4 of 4

material or result in the conversion of the process materials into air pollutants because the natural gas used to fire the internal combustion is a fuel rather than a process material.

In summary, because neither compressors nor internal combustion engines are "manufacturing process source operations" or manufacturing processes, Regulation 10 does not apply to the operation of wellhead gas compressors. Moreover from a policy perspective, it is impracticable to regulate wellhead gas compressors because the administrative burden to both the DAQ and the regulated community would far outweigh any environmental benefits gained by regulating these units under Regulation 10. As discussed in our May 10, 2001 meeting, it is likely that if the compressors were subject to requirements of Regulation 10, many, if not all, of the compressors would be exempt from Regulation 10 because they fall within the *de minimis* exemption of emitting less than 500 pounds per year of sulfur oxides. However, to properly qualify for this exemption, operators would be required to submit a basis for the exemption for each compressor and the DAQ would, in turn be required to review and accept or reject such request. This is hardly an efficient use of agency resources.

Again, I appreciate the opportunity to present these comments on the applicability of Regulation 10 to the gas production industry. If you have any questions or comments concerning the above comments please do not hesitate to call me.

Sincerely,

  
Joseph M. Dawley

JMD/#165686

cc: Mr. Joseph C. Pettey  
Mr. Michael Herron  
Mr. Robert Radabaugh  
M. Ann Bradley, Esq.

**From:** "Kim Brown Poland" <KBP@RAMLAW.COM>  
**To:** <jwhite@mail.dep.state.wv.us>  
**Date:** Mon, Dec 10, 2001 4:14 PM  
**Subject:** Comments on revisions to 45 CSR 10A

Attached please find the comments of WVONGA on the proposed revisions to interpretive Reg. 10A, along with a copy of our prior comments to the agency referenced in these comments. Please include these in the record of this rulemaking at the request of Mr. Ray Joseph, Executive Director, WVONGA. Please acknowledge receipt of this message to confirm delivery. Thanks.

**CC:** <wvonga@intelos.net>

**ROBINSON & MCELWEE PLLC**  
**P. O. BOX 1791**  
**CHARLESTON, WEST VIRGINIA 25326**

Kim Brown Poland  
Direct Dial No. (304) 347-8348  
E-Mail: kbp@ramlaw.com

TELEPHONE (304) 344-5800  
TELECOPIER (304) 344-9566  
OVERNIGHT DELIVERY ADDRESS  
600 UNITED CENTER  
500 VIRGINIA STREET, EAST  
CHARLESTON, WV 25301

CLARKSBURG OFFICE  
140 WEST MAIN STREET  
P.O. BOX 128  
CLARKSBURG, WV 26302  
TELEPHONE (304) 622-5022  
TELECOPIER (304) 622-5065

August 15, 2001

Karen G. Watson, Esquire  
Division of Air Quality  
West Virginia Department of Environmental Protection  
7012 MacCorkle Avenue, S.E.  
Charleston, West Virginia 25304-2943

Re: Natural Gas Compression Engines and Applicability of 45 C.S.R. 10

Dear Karen:

The West Virginia Oil & Natural Gas Association is in receipt of a copy of a letter dated July 20, 2001, addressed to Mr. Joseph M. Dawley from you. The opinion letter sets forth your interpretation of the applicability of Regulation 10 dealing with the control of sulfur oxides. We have reviewed that letter, but continue to believe that Regulation 10 does not apply to compressor engines. Accordingly, on behalf of the Association, we set forth below additional information which we would ask that you and the DAQ take into account in reconsideration of this determination.

First of all, we believe it is important to note that a determination that an engine serving only a compression function is not regulated by Regulation 10 does not mean that the source would go unregulated for purposes of sulfur oxide controls. Rather, the provisions of 45 C.S.R. 13, subsection 2.24.b., indicates that any "stationary source" that discharges or has the potential to discharge more than six pounds per hour or 10 tons per year of VOCs or any regulated air pollutant for which there is an ambient air quality standard, would be required to obtain a Regulation 13 permit and be subject to reasonable terms and conditions in that permit, including terms and conditions for the regulation and limitation of sulfur oxide emissions. We believe this is an important point because it is not necessary to force compressor engines into Regulation 10 in order to regulate them. See 45 C.S.R. 13-5.11.

Natural gas compressors involved in gathering and transmission do nothing but provide force to move natural gas through a pipeline. No product is manufactured and no "process" goes on. In such a circumstance, we do not believe that the engine constitutes a "source operation" as defined in subsection 2.19 of Regulation 10, because the engine does not result in the separation of sulfur oxide from the process materials (the transported natural gas) nor does it convert the natural gas into an air pollutant. The engine is entirely separate and emissions come from it, not any process material. The standards for emissions of sulfur oxide in section 4 of Regulation 10 specifically apply only to "source operations."

Accordingly, we believe that a compressor engine is also not "a manufacturing process" as defined in section 2.11, because the engine is not a "process" in and of itself, nor is it a "source operation" as previously referenced, as defined under subsection 2.19. The natural gas being compressed and transmitted is not changed in physical characteristics at all. It is simply being moved. The act of moving the gas does not emit any pollutant. Only the engine itself emits pollutants associated with the fuel used to fire it. Such an engine is also not a "fuel burning unit" as defined in subsection 2.8 because it does not have as its primary purpose the production of heat or power by indirect transfer. (In this context and rule, the word "power" clearly means electrical power).

As we read your letter, virtually everything falls into the category of either being a fuel burning unit or a manufacturing process under the very broad reading given by you to the term "processing." As stated above, we do not believe it is necessary to stretch the meaning of this regulation so far since the DAQ possesses ample authority to regulate sulfur oxide emissions from units if that is appropriate for protection of ambient air quality standards.

While it may be that very small engines at well heads would fall below the rule's threshold amount of 500 pounds of SO<sub>2</sub> per year, we must note that there are many compressor engines above that size which would be subject to the rule under this interpretation, and which would be required to file monitoring plans with the DAQ. Engines used for compression and distribution or transmission of natural gas would almost always have a PTE greater than 500 pounds per year.

Under the provisions of Interpretative Reg. 10A, units subject to the rule would be required to conduct compliance tests within 12 months from March 15, 2001, for existing units; or, the owner or operator of the source must petition the director for an alternative to the compliance testing which might include process gas sampling for percent sulfur by weight. Given your opinion, a new question is also raised as to whether or not the DAQ would consider engines governed by subsection 5.2 or whether they would be governed by section 5.3 for combustion sources. This determination would hinge on whether the DAQ believes that the sources are using "process gas" in the engines, thereby combusting it and thereby also subjecting the units to a limitation on hydrogen sulfide in the transported gas if it is used as fuel for the engine. Section 5.3 also requires testing within 12 months of the effective date of the rule for existing sources.

Under subsection 6.2 of Regulation 10A, the owner or operator of the manufacturing process source has to submit a plan for each source describing the method to be used to monitor compliance with mass emission standards of Regulation 10. Similarly, combustion sources, under subsection 6.3, must also submit a monitoring plan for each source describing the method the operator will use to monitor compliance with Reg. 10 standards. If the "combustion source" has a process gas stream containing an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet, then that operator "shall" use a continuous emissions monitoring system (CEMS) to satisfy the requirements of a monitoring plan unless the director approves an alternative. Obviously, CEMS cannot be used with internal combustion engines, nor would they be economically justified for such minor sources of SO<sub>2</sub>.

Karen G. Watson, Esquire  
August 15, 2001  
Page 3

Reg. 10A also requires the owner of the combustion source to maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit.

The inequitable result of this application is that under the direct provisions of section 3 of Reg. 10A, dealing with applicability, fuel burning units which combust natural gas, wood or distillate oil, alone or in combination, are not even subject to the monitoring, testing and record keeping provisions of Regulation 10A. These would include very large fuel burning units. Yet, the DAQ is interpreting Reg. 10A to include small sources with only a potential to emit more than 500 pounds per year of sulfur oxides. This is a very low threshold and far less than the Reg. 13 permit threshold. The engines at issue will emit on an annual basis typically far less than numerous fuel burning units combusting natural gas, wood or distillate oil, all of which are exempt from Reg. 10A.

Accordingly, we ask that you take this additional information into account and reconsider your assessment with respect to the applicability of Regulation 10 and 10A to natural gas compressor engines. We welcome an opportunity to discuss this matter with you if you believe that would be helpful as this is a very important matter to our members and our industry.

Very truly yours,

Kim Brown Poland, Counsel for  
West Virginia Oil & Natural Gas Association

cc: Thomas Zerbe, Esquire, DEP  
Joseph M. Dawley, Esquire  
Ray Joseph, Executive Director, WVONGA

December 10, 2001

John A. Benedict  
Deputy Director  
Division of Air Quality  
Department of Environmental Protection  
7012 MacCorkle Avenue, S.E.  
Charleston, West Virginia 25304-2943

Re: Comments on Proposed Revisions to 45 CSR 10A-2,  
“Testing, Monitoring, Recordkeeping, and Reporting  
Requirements Under 45 CSR 10.”

Dear Deputy Director Benedict:

These comments are submitted on behalf of the West Virginia Oil & Natural Gas Association (WVONGA) and its members regarding the revisions to 45 CSR 10A. We appreciate the DAQ’s continued willingness to address our concerns about this rule in order to reach an equitable application of it to oil and gas sources which typically have very low levels of sulfur oxide emissions.

Definitions

Section 2.7 is proposed to be amended to add a definition of “pipeline quality natural gas.” We assume that this is meant to describe unprocessed, raw natural gas, rather than

processed gas which is sold to end-users for fuel. If so, then perhaps the definition would be clarified by adding the word “unprocessed” before the word “natural.”

If, instead, the DAQ is intending to create an exception for sources which combust natural gas that contains no more than 4.2 gr per 1000 dry standard cubic feet (dscf), then the sulfur content really doesn't equate to “pipeline quality” and the definition should simply be for “natural gas” and “for purposes of this rule only.”

We also note that the concentration listed is in an odd standard unit. For testing, concentrations are normally stated per 100 dscf. Is there a typographical error in the text? If not, what is the basis of the proposed number? It is extremely low. We further note that fuel natural gas sulfur content when converted to engine emissions, at around 20 gr/100 scf, would still only be about 5% of the 2000 ppm limit of Reg. 10.

#### Applicability

To carry this concept into the rule, additional language needs to be added in section 3.1.c. at the end thereof: “, or which are combusting pipeline quality natural gas; or. . . .” If the exception is meant to apply to “natural gas” with a limited sulfur content, then the definition should be amended as discussed above and 3.1.c. amended to exempt manufacturing sources combusting natural gas, as defined for purposes of this rule, just as is done for fuel-burning units in section 3.1.b. which grants an exception from the rule to those units, without regard to the amount of emissions, if they are combusting natural gas. Otherwise, the rule remains inequitable for manufacturing process source operations by making the rule generally applicable to them, but

not to, even very large, fuel burning units. This adversely impacts units such as natural gas compressor engines using natural gas as fuel, which are not “fuel-burning units,” but are being classed by the DAQ as “manufacturing process source operations” under 45 CSR 10.

The proposed addition to subdivision 7.2.b.4 excusing such sources from the requirement of subdivision 7.2.b. only does not eliminate the requirement to comply with the rest of the rule, i.e. monitoring plans and record keeping. Therefore, the rule still discriminates unfairly by source type, regardless of amount of emissions, if the fuel combusted is natural gas.

#### Reg. 10 Interpretation

As noted in previous comments filed with the DAQ, WVONGA continues to believe that internal combustion engines are neither “fuel-burning units” nor “manufacturing process source operations” as defined in 45 CSR 10. The engines are not “processing” gas; they are merely using natural gas as fuel in engines to produce physical compression to move the gas through a pipeline. As such, they are not subject to 45 CSR 10 or 45 CSR 10A, but are simply stationary sources subject to permitting and reasonable emissions limits on regulated pollutants like SO<sub>2</sub> where appropriate under Reg. 13. Predicted emissions from these engines for sulfur is very low. Accordingly, our preference remains that this rule contain an exclusion provision in subsection 3.1 as follows:

3.1.e. Stationary internal combustion engines which combust natural gas, or distillate oil, alone or in combination.

Better yet, we ask that the DAQ reconsider its interpretation of Reg. 10 and agree that stationary internal combustion engines are not "manufacturing process source operations."

We appreciate this opportunity to bring our concerns and suggestions to your attention.

Sincerely,

Ray Joseph

Executive Director

RJ:smm

cc: Kim Brown Poland, Esquire

Members

## 45CSR10A

### TESTING, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS UNDER 45CSR10

#### RESPONSE TO COMMENTS

On November 7, 2001, the Division of Air Quality (DAQ) filed a Notice of Comment Period on proposed revisions to interpretive rule 45CSR10A, permitting written comments to be submitted through December 10, 2001. The DAQ received five (5) written comments which the DAQ addresses below.

#### I. Commenter: American Electric Power Service Corporation

**COMMENT A.** *American Electric Power Service Corporation (AEP) proposes that the deadline for quarterly reporting be changed from 30 days to 45 days after the end of the quarter, since the electronic submittal deadline under 45 CFR 75 is also 30 days (with extensions available). AEP suggests the additional time would be helpful by allowing for quality control/quality assurance (QA/QC) to the 40 CFR Part 75 data prior to submitting to the Division of Air Quality (DAQ) in compliance with 45CSR10A. AEP also suggests the additional time would be helpful by allowing for the preparation and mailing of the reports. The effect of DAQ's 30-day deadline is to effectively reduce the 30-day deadline for Part 75 reporting by approximately one week, the time that would be required to provide the additional QA/QC and submit to the DAQ on time.*

**RESPONSE A.** The DAQ concurs with the comments of AEP and will change the deadline for quarterly reporting from 30 days to 45 days after the end of the quarter.

#### II. Commenter: Columbia Gas Transmission Corporation

**COMMENT A.** *Columbia Gas Transmission Corporation (Columbia) questions the DAQ's definition of "pipeline quality natural gas" at 45 CSR §10A - 2.7. The DAQ defines "pipeline quality natural gas" as natural gas containing sulfur at a concentration of less than or equal to 4.2 grains per 1000 dry standard cubic feet (dscf). Columbia states the gas industry normally measures such concentrations in grains per 100 dscf. The DAQ's definition of pipeline quality, using the industry standard, would then have the sulfur concentration less than 0.42 grains per 100 dscf. Columbia questions the accuracy of the defined standard for "pipeline quality natural gas" and suggests that as it now stands it is too restrictive. Columbia requests that the definition be revised such that pipeline quality be defined as having a sulfur content of less than 20 grains per 100 dscf. Columbia states that even this level of sulfur will produce an exhaust gas that has less than 10% of the allowable SO<sub>2</sub> concentration.*

**RESPONSE A.** The DAQ has thoroughly reviewed its definition of “pipeline quality natural gas” and has concluded that 20 grains total sulfur per 100 dry standard cubic feet is an appropriate criterion to determine whether a source must submit the results of its monitoring to the agency. The purpose of paragraph 7.2.b.4 and subsection 2.7 is to exempt from reporting requirements only those clean-burning fuels which the DAQ believes are unlikely to ever exceed the applicable standard. The DAQ used 4.2 grains/1000 dscf because that standard is generally consistent with the AP-42 emission factor established for the combustion of natural gas. However, based on the limited scope of the exemption and the fact that a higher number is still well below the applicable standard, the DAQ believes it is appropriate to adopt the standard of 20 grains/100 dscf. The rule has been revised accordingly.

**COMMENT B.** *Columbia supports the addition of section 7.2.b.4 eliminating the reporting requirements for relatively “clean” fuels.*

**RESPONSE B.** No response necessary.

**III. Commenter: Weirton Steel Corporation**

**COMMENT A:** *Weirton Steel Corporation (WSC) comments that it is pleased with the exemption for clean burning fuels, including those that burn natural gas, distillate oil or wood; however WSC believes the rule should be made equitable for those sources which burn other fuels with similar sulfur concentrations. WSC provides a number of alternative proposals for making the rule equitable for those sources: (1) exempt all sources which burn fuels with a sulfur concentration below 0.5% sulfur from 45CSR10A; (2) identify additional exempt fuels in 45CSR10A, including blast furnace gas; or (3) provide a mechanism for review of fuels by the DAQ in 45CSR10A, whereby the source owner could request an exemption based upon sulfur concentration and the DAQ could compare the fuel’s sulfur concentration to other exempt fuels.*

**RESPONSE A:** The exemption the DAQ has provided in section 7.2.b.4 is only to the requirement to report monitoring results, not to the requirement to monitor and keep records. The DAQ agrees that this limited exemption may, on a case-by-case basis, be expanded to include other fuels with a similar ratio of sulfur content to heating value and which meet other criteria. The DAQ has revised the rule to include a mechanism for the Secretary to grant an exemption on a case-by-case basis. The DAQ cautions the regulated community that an exemption to reporting requirements under 45CSR10 will not necessarily result in an exemption to reporting requirements pursuant to other applicable requirements, such as Regulation 13 permit conditions.

**IV. Commenter: Independent Oil & Gas Association of West Virginia (IOGA)**

**COMMENT A:** *The Independent Oil & Gas Association (IOGA) asserts that 45CSR10 does not apply to gas compressors because such compressors are not “manufacturing processes” as defined in 45CSR10, subsection 2.11, and that the provisions of 45CSR10A are*

*not applicable to gas compressors. IOGA incorporates by reference a June 11, 2001 letter to Ms. Karen Watson from Mr. Joe Dawley.*

**RESPONSE A:** The DAQ believes gas compressors are “manufacturing processes” under 45CSR10 for the reasons stated in Ms. Watson’s letter of July 20, 2001 to Mr. Joe Dawley, a copy of which is attached hereto and incorporated by reference.

**COMMENT B:** *IOGA comments that the units used to express the sulfur content of pipeline quality natural gas in the definition in 45CSR10A, subsection 2.7, are not expressed in the standard units used by the oil and gas industry, which is grains per 100 dry standard cubic feet (dscf). IOGA requests a basis and rationale for selecting the 4.2 grains per 1000 dscf in the definition.*

**RESPONSE B:** See Response to Columbia Comment A.

**COMMENT C:** *IOGA comments that the revisions to the initial compliance testing requirements set forth in subdivisions 5.1.a, 5.2.a and 5.3 should be deleted to permit the testing to be completed within one year from the effective date of the rule, thus providing regulated sources adequate time to establish and implement the appropriate testing methodology.*

**RESPONSE C:** The change in the initial compliance testing requirements was done to preserve the one year time period that was set when 45CSR10A was initially effective. The DAQ believes that regulated sources have had an adequate amount of time to establish and implement the appropriate testing methodology.

**COMMENT D:** *IOGA comments that the addition in paragraph 7.2.b.4, provides minor relief, in the form of reduced reporting requirements, to manufacturing processes and combustion sources where sulfur dioxide emissions result only from the combustion of pipeline quality natural gas. IOGA contends that if the DAQ maintains its position that a natural gas compressor is a manufacturing process, then operators of gas compressors would still be required to perform compliance testing, submit a monitoring plan and maintain records. IOGA contends that a compressor is not a manufacturing process and thus should not be regulated sources under 45CSR10 (see Comment A above).*

**RESPONSE D:** The DAQ has provided relief from the reporting requirements by providing the exemption in paragraph 7.2.b.4, and the DAQ believes there is currently a mechanism in 45CSR10A that provides relief from the requirement to conduct compliance testing. Subdivision 5.2.c. provides that the owner or operator of a manufacturing process source may petition the Secretary for an alternative to compliance testing, which may include gas sampling for percent sulfur by weight. The requirements to submit a monitoring plan and maintain records are specified in 45CSR10, the underlying legislative rule.

**COMMENT E:** IOGA proposes that the DAQ include a provision in the Applicability section of 45CSR10A that clarifies the scope of 45CSR10's definition of manufacturing process, such as:

*“Manufacturing Process” shall not include the operation of a compressor(s) that have the sole purpose of increasing the pressure of air, natural gas, or any other gas where the only source of sulfur dioxide emissions results from the combustion of pipeline quality natural gas, wood or distillate oil, alone or in combination.*

IOGA contends that such a provision is appropriate for inclusion in an interpretive rule in light of the uncertainty with the definition of “manufacturing process” as set forth in 45CSR10, subsection 2.11.

**RESPONSE E:** As the DAQ stated in Response A above, it believes gas compressors are included in the definition of “manufacturing process” under 45CSR10. Although it is true that an interpretive rule can provide information and guidance regarding the agency’s interpretation of the law, the commenter’s suggested definition would impermissibly alter the definition in the legislative rule by narrowing its scope of coverage.

**V. Commenter: West Virginia Oil & Natural Gas Association**

**COMMENT A:** *The West Virginia Oil & Natural Gas Association (WVONGA) comments on the addition of a definition of “pipeline natural gas.” WVONGA has requested clarification as to whether the DAQ meant to describe unprocessed, raw natural gas, rather than processed gas which is sold to end-users for fuel, or if the DAQ intended to create an exception for sources which combust natural gas that contains no more than 4.2 grains per 1000 dscf. WVONGA notes that the oil and gas industry normally uses standard units of grains per 100 dscf, not grains per 1000 dscf. WVONGA further notes that fuel natural gas content when converted to engine emissions, at around 20 gr/100 dscf, would be about 5% of the 2000 ppm limit specified in 45CSR10.*

**RESPONSE A:** See Response to Columbia Comment A.

**COMMENT B:** *WVONGA comments that the applicability of 45CSR10A should be modified by adding an exemption to subdivision 3.1.c for manufacturing process sources which combust natural gas, similar to the exemption for fuel burning units which combust natural gas, without regard for the amount of emissions. WVONGA contends that without this added exemption the rule is inequitable for manufacturing process source operations since the rule is applicable to them, but not to large fuel burning units. WVONGA also points out that natural gas compressors are still required by the rule to monitor emissions and keep records.*

**RESPONSE B:** The DAQ notes that the exemptions in 45CSR10A, Section 3,

“Applicability” are taken directly from 45CSR10, the underlying legislative rule, and may not be changed. The intent of 45CSR10A is to provide information and guidance regarding the agency’s interpretation of the legislative rule, not to change the meaning or intent of the legislative rule. Although the DAQ believes it has the ability to clarify under what circumstances a source must submit monitoring reports in the interpretive rule, it cannot change the requirement in the legislative rule that “manufacturing processes” monitor their emissions and keep records of that monitoring. The DAQ notes the oil and gas industry currently monitors and keeps records of the sulfur content in gas, and with the removal of the reporting requirement for clean fuels, the only requirement imposed as a direct result of the DAQ’s rule is to submit an initial monitoring plan and possibly conduct testing (unless an exemption is granted by the DAQ).

**COMMENT C:** *WVONGA contends that internal combustion units are neither “fuel-burning units” nor “manufacturing process source operations” as defined in 45CSR10, since the engines are not “processing” gas; they are merely using natural gas as fuel in engines to produce physical compression to move the gas through a pipeline. WVONGA contends that as such, they are not subject to 45CSR 10 or 45CSR10A, but are simply sources subject to permitting and reasonable emissions limits on regulated pollutants like SO<sub>2</sub> where appropriate under 45CSR13. WVONGA also includes its prior comments made in a letter dated August 15, 2001 from Ms. Kim Poland to Ms. Karen Watson. WVONGA proposes that 45CSR10A contain an exclusion provision in subsection 3.1, as follows:*

*3.1.e. Stationary internal combustion engines which combust natural gas, or distillate oil, alone or in combination.*

**RESPONSE C:** See Response to WVONGA Comment B and Response to IOGA Comments A and E. In addition, one of the issues raised by Ms. Poland’s August 15, 2001 letter is whether the DAQ’s position that natural gas compressors are “manufacturing processes” also means they are “combustion sources” subject to subsection 5.1 of 45CSR10. The DAQ believes these sources are in fact subject to both standards, the 2000 ppm standard under subsection 4.1 and the 50 grains/100 cubic feet standard under subsection 5.1 of the legislative rule. However, the DAQ notes there is an exemption to the 50 grain standard under subsection 5.1 of 45CSR10 that will be available to most natural gas engines based upon the small amount of hydrogen sulfide contained in the gas.



Office of Air Quality  
7012 MacCorkle Avenue, SE  
Charleston, WV 25304-2943  
Telephone Number: (304) 926-3647  
Fax Number: (304) 926-3637

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## West Virginia Department of Environmental Protection

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Bob Wise  
Governor

Michael O. Callaghan  
Secretary

July 20, 2001

Mr. Joseph M. Dawley  
Spilman Thomas & Battle, PLLC  
300 Kanawha Boulevard, East  
Post Office Box 273  
Charleston, WV 25321-0273

Re: Gas Compressors and Applicability of 45CSR10

Dear Mr. Dawley:

The Division of Air Quality (DAQ) appreciates the Independent Oil and Gas Association's (IOGA's) participation in the meeting May 10, 2001, and your follow-up letter of June 11 regarding the issue of the applicability of 45CSR10 to compressor engines located at wellheads. As you know, the rule was revised effective August 31, 2000, to require sources subject to the rule to submit monitoring plans to demonstrate compliance with the standards by February 28, 2001. As we stated in the meeting, the DAQ believes that the rule applies to any natural gas compressor engine with a potential to emit (PTE) sulfur dioxide greater than 500 lbs/year, whether located at a wellhead for gathering purposes or at a more distant location for transmission purposes.

We believe the plain language of the rule relating to "manufacturing process source operations" includes gas compressor engines, assuming they are stationary sources as opposed to "portable non-road engines" and they exceed the rule's threshold exemption of 500 lbs /year.

Your letter examines the pertinent definitions in the rule and concludes gas compressors are not "manufacturing process source operations" since you believe that only manufacturing activities, defined in the traditional sense of converting a raw material into a product, are "manufacturing processes" under the rule. Your letter further states that since gas compressors only change the physical characteristics of the material and do not result in any conversion of a raw material into a product, these sources are not "manufacturing processes".

While DAQ might agree that the term "manufacturing" by itself means some type of transformation into a new or different product, it is not at all clear that a change in physical characteristics alone does not constitute "manufacturing." However, it is unnecessary to argue

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this point since the definition of the term "manufacturing process" in the rule is much broader than the term "manufacturing" alone. The definition states:

2.11 "Manufacturing Process" means any action, operation or treatment embracing chemical, industrial or manufacturing efforts, and employing, for example, heat-treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and non-ferrous foundries, kilns, stills, pipe stills, reformers, furnaces associated with manufacturing processes, driers, crushers, grinders, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit sulfur dioxide or other sulfur compounds. (Emphasis added)

Although the initial part of the definition limits the activity to "any action, operation or treatment embracing chemical, industrial or manufacturing efforts," (thereby excluding domestic and residential activities), it is designed to be broad in nature. The latter part of the definition states that "all other methods or forms of manufacturing or processing that may emit sulfur dioxide..." are considered "manufacturing processes." The definition includes "processing" as well as "manufacturing," making a clear distinction between the two terms. Both are subject to the rule. In other words, all other methods or forms of "processing," as well as "manufacturing," that may emit sulfur dioxide shall be included in the definition. In essence, the term "manufacturing process" encompasses both "manufacturing" and "processing."

While your letter discusses the possible meaning of the term "manufacturing," it fails to address the term "processing." The term is clearly broader than the term "manufacturing," and while all manufacturing is a type of processing, not all processing constitutes manufacturing. "Processing" is defined in Webster's Third International Dictionary to mean:

[T]o subject to a particular method, system or technique of preparation, handling or other treatment designed to effect a particular result; put through a special process, as ... (1) to prepare for market, manufacture or other commercial use by subjecting to some process (processing cattle by slaughtering them; processing milk by pasteurizing it; processing grain by milling; processing cotton by spinning) (2) to make usable by special treatment (processing rancid butter; processing waste material; processing water to remove impurities).

Note that this definition merely requires that the product undergo a treatment rendering the product more marketable or useful.

The definition also includes a broad description of activities considered to be "manufacturing processes." We disagree with your position that these activities all involve the conversion of a raw material into a product in the traditional sense of "manufacturing." Many of these activities are similar to gas compression in that they require the combustion of fuel to effect a particular result, and it is from the combustion of fuel that sulfur dioxide is emitted, not necessarily from the conversion of raw materials into a final product.

Mr. Joseph M. Dawley

July 20, 2001

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Further evidence of the breadth of the term "manufacturing process" is provided by the language "and equipment associated therewith" at the end of the examples listed in the definition. These words expand the definition to include not only the type of activity listed but also any equipment associated with the activity. This is consistent with the concept that 45CSR10 is designed to encompass all business activities with a potential to emit sulfur dioxide above a certain de minimis level.

The process of increasing the pressure of gas in order to facilitate its transportation, either from gathering lines or to transmission lines, clearly falls within the definition. Certainly the internal combustion engine used to drive the compressor is "equipment associated" with an industrial processing activity, which if having a PTE greater than 500 lbs/ year of sulfur dioxide, is subject to the rule.

Your letter also discusses the definition of the term "source operation." While the significance of the term "source operation" is mainly to ensure that emissions are measured prior to any air pollution control equipment, as opposed to establishing applicability requirements, gas compression and the internal combustion engines associated with that activity result in the conversion of process materials, in this case fuel, into air pollutants, and would therefore be considered a "source operation" under the rule.

Finally, although you take the position that the definition of "manufacturing process" does not include gas compressors, your letter states that "many, if not all, of the compressors" would not trigger the rule's threshold amount of 500 lbs/year. This is consistent with DAQ's evaluation. We understand from our discussions with you that most of the engines owned or operated by your companies have a horsepower between 30 and 60, and that the largest engines might be approximately 100 horsepower. Using conservative assumptions of 20 grains/scf (the most sulfur content permitted by FERC as pipeline quality gas) and a heat rate of 12,200 BTU/hp-hr, an engine with a horsepower of 80 would generally have a PTE of about 500 lbs/year. This is consistent with information provided by others in the industry.

When more realistic emission factors are used (.25 grains/scf), it appears that only very large engines, those with horsepower ratings exceeding 10, 000, will be subject to the rule. With regard to your point that operators will be required to submit a basis for the exemption for each compressor, DAQ believes it addressed this issue in our May 10, 2001 meeting and explained that it will accept a more generic approach to this demonstration.

In summary, DAQ believes 45CSR10, as it is currently written, applies to gas compressors as "manufacturing sources," and that for those compressors which have a PTE greater than 500 lbs/year, the standard in the rule applies and thus the requirement for a monitoring plan. We note the rule, and its 500 lbs/year de minimis amount, was the product of an extensive stakeholder process, and DAQ believes it is reasonable to proceed with implementation of the rule's terms. However, if DAQ and the industry find in the future, that the rule is unduly

Mr. Joseph M. Dawley  
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onerous and not serving its intended purpose of controlling sulfur dioxide emissions, DAQ will certainly embark upon rule revision efforts.

In the meantime, however, for sources meeting the 500 lbs/year threshold, we look forward to the expeditious submittal of the required monitoring and testing plans (or requests for alternatives to testing). Please contact Laura Crowder, Robert Keatley or me at the above number if you have any questions or need additional assistance in this matter.

Sincerely,



Karen G. Watson  
Attorney

c: John A. Benedict  
Deputy Director