

**WEST VIRGINIA  
SECRETARY OF STATE  
NATALIE E. TENNANT  
ADMINISTRATIVE LAW DIVISION**

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Form #1

OFFICE WEST VIRGINIA  
SECRETARY OF STATE

**NOTICE OF A PUBLIC HEARING ON A PROPOSED RULE**

AGENCY: WV Department of Environmental Protection - Division of Air Quality TITLE NUMBER: 45

RULE TYPE: Legislative CITE AUTHORITY: W. Va. Code §22-5-4

AMENDMENT TO AN EXISTING RULE: YES  NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR8

TITLE OF RULE BEING AMENDED: Ambient Air Quality Standards

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

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

DATE OF PUBLIC HEARING: July 13, 2009 TIME: 6:00 p.m.

LOCATION OF PUBLIC HEARING: WV Department of Environmental Protection  
Dolly Sods Conference Room  
601 57th Street, S.E.  
Charleston, WV 25304

COMMENTS LIMITED TO: ORAL  WRITTEN  BOTH

DATE WRITTEN COMMENT PERIOD ENDS: July 13, 2009 TIME: Close of Hearing

WRITTEN COMMENTS MAY BE MAILED TO:

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

Kathy Cosco, Public Information Office  
WV Department of Environmental Protection  
601 57th Street, S.E.  
Charleston, WV 25304

The issues to be heard shall be limited to the proposed rule.

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

  
Authorized Signature

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY**

**BRIEFING DOCUMENT**

**Rule Title:** 45CSR8 - "Ambient Air Quality Standards"

**A. AUTHORITY:** W.Va. Code §22-5-4

**B. SUMMARY OF RULE:**

The purpose of this rule is to establish ambient air quality standards for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide and lead, equivalent to those national primary and secondary National Ambient Air Quality Standards (NAAQS) established by the U.S. EPA.

National primary ambient air quality standards define levels of air quality which the Administrator of the U.S. EPA judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define levels of air quality which the Administrator of the U.S. EPA judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Such standards are subject to revision, and additional primary and secondary standards may be promulgated as the Administrator of the U.S. EPA deems necessary to protect the public health and welfare.

**C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:**

In accordance with Sections 108 and 109 of the Clean Air Act (CAA), EPA has promulgated air quality criteria and NAAQS for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide and lead. 45CSR8 will meet the requirements for State Implementation Plans under Section 110 of the CAA through the NAAQS standards for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide and lead set forth in this rule. Because U.S. EPA has revised the national primary and secondary lead NAAQS, the DAQ has revised and updated 45CSR8 to reflect these revised standards. Revisions to the rule also include deletion of redundant methods of measurement language in section 4. In accordance with Section 110(a)(2)(H) of the CAA, the DAQ will submit final rule 45CSR8 as a revision to the State Implementation Plan.

**D. FEDERAL COUNTERPART REGULATIONS - INCORPORATION BY REFERENCE/DETERMINATION OF STRINGENCY:**

A federal counterpart to this proposed rule exists. Because proposed revisions make the rule conform to the federal counterpart rule, no determination of stringency is required.

**E. CONSTITUTIONAL TAKINGS DETERMINATION:**

In accordance with §22-1A-1 and 3(c,) the Secretary has determined that this rule will not result in taking of private property within the meaning of the Constitutions of West Virginia and the United States of America.

**F. CONSULTATION WITH THE ENVIRONMENTAL PROTECTION ADVISORY COUNCIL:**

At its June 3, 2009 meeting, the Environmental Protection Advisory Council reviewed and discussed this rule. (See attached minutes for Council's discussion).

# West Virginia Department of Environmental Protection

## ADVISORY COUNCIL MEETING MINUTES

Wednesday, June 3, 2009  
601 57th Street, SE, Charleston, West Virginia  
West Virginia Room – 3rd Floor

### IN ATTENDANCE:

#### *Members of the Council:*

Lisa Dooley  
Jackie Hallinan  
Larry Harris  
Karen Price  
Bill Raney  
Rick Roberts

#### *DEP:*

Raymond Franks II	General Counsel
Kristin Boggs	Associate General Counsel
Kathy Cosco	Chief Communications Officer
Tom Clarke	Director, Division of Mining & Reclamation
James Martin	Chief, Office of Oil & Gas
Robert Bates	Division of Water & Waste Management
Bill Brannon	Division of Water & Waste Management
Carroll Cather	Division of Water & Waste Management
Ellen Herndon	Division of Water & Waste Management
Jeff Knepper	Division of Water & Waste Management
Teresa Koon	Division of Water & Waste Management
Sudhir Patel	Division of Water & Waste Management
Yogesh Patel	Division of Water & Waste Management
Bill Timmermeyer	Division of Water & Waste Management
Ken Politan	Division of Mining & Reclamation
Jim Mason	Division of Air Quality

#### *Others:*

Don Garvin	Interested Citizen
Steve Hannah	Interested Citizen
Dave Yaussy	Interested Citizen

## **OLD BUSINESS:**

Raymond Franks called the meeting to order at 1:45 p.m. Mr. Franks noted that two members of the Council had pointed out a minor discrepancy in the April minutes as circulated, and that for expediency's sake the error would be corrected following the meeting and the April and June minutes each moved for approval at the September meeting.

Mr. Franks provided to the Council information it had requested at the April meeting regarding ongoing projects in the Office of Abandoned Mine Lands and recruiting potential for environmental inspectors. The Council agreed to review the information and discuss it in more detail at the September meeting.

## **NEW BUSINESS:**

Mr. Franks turned the meeting over to Kristin Boggs for presentation and discussion of the 2010 proposed Legislative Rules:

### **DIVISION OF WATER & WASTE MANAGEMENT – WATER RULES**

**47CSR10 – NPDES Rule:** Promulgated last in 2008. The proposed revisions reflect changes made to the Federal rule regarding Concentrated Animal Feeding Operations (CAFOs), which became effective in November 2008. EPA gave DEP two years to revise the State rules and start issuing permits. The revisions include a clarified definition of CAFO, a detailed explanation of the permitting process and the process for permit exemption, and an explanation of the required nutrient management plan. Technical revisions and corrections are made throughout.

**47CSR26 – Water Pollution Control Permit Fee Schedules:** Promulgated last in 2000. The proposed revisions reflect the CAFO changes made in the NPDES Rule. The fees for CAFOs will be as follows: \$300 for the initial application; \$300 for permit renewal; \$50 for permit modification; and \$50 for the annual permit fee. Technical revisions and corrections are made throughout.

**47CSR12 – Requirements re Groundwater Standards:** Promulgated last in 2002. The proposed revisions reflect updates and additions made to EPA's 2006 edition of the Drinking Water Standards & Health Advisories. Technical revisions and corrections are made throughout.

**47CSR59 – Monitoring Well Rule.** Promulgated last in 1994. The proposed revisions add new language to incorporate "high" and "low" risk boreholes, experience requirements for those persons applying for monitoring well driller certificates, recertification and training requirements for monitoring well drillers, and definitions. Technical revisions and corrections are made throughout.

**47CSR60 – Monitoring Well Design Standards.** Promulgated last in 1996. The proposed revisions bring this rule in conformance with the 47CSR59 *Monitoring Well Rule* definition changes, and "high" and "low" borehole requirements. Technical revisions and corrections are made throughout.

## DIVISION OF WATER & WASTE MANAGEMENT – WASTE MANAGEMENT RULES

**33CSR1 – Solid Waste Management Rule:** Promulgated last in 2006. The proposed revisions include removing the requirement that free day tonnage count toward monthly/daily totals and clarifying the definition of pick-up truck. Technical revisions and corrections are made throughout.

**33CSR20 – Hazardous Waste Management System:** Promulgated last in 2009. The proposed rule reflects the annual incorporation-by-reference (IBR) revisions made by DEP to its hazardous waste rule. The proposed revisions include changes to the academic laboratory waste provisions to allow alternative requirements for hazardous waste determination and accumulation of unwanted materials at labs owned by and affiliated with colleges and universities. Other proposed revisions are directed at the hazardous waste code 019 provisions, which expand the exclusion for sludges generated from the chemical conversion coating of aluminum using a zinc phosphating process. The F019 waste code exclusion only applies to the automobile or light truck manufacturing industry. This IBR specifically excludes two federal amendments that are currently undergoing reconsideration by the EPA, *i.e.*, revisions to the definition of solid waste and expansion of RCRA comparable fuel exclusion. Technical revisions and corrections are made throughout.

Mr. Franks asked whether the Council had any questions about the seven DWWM rules. Mr. Raney inquired about the impetus for the change in the monitoring well rules, since they have not been revised in several years. Ms. Boggs responded that the changes in the rules reflect changes in technology and practice over time. There were no further questions from the Council.

## OFFICE OF OIL AND GAS RULE

**35CSR4 – Oil & Gas Wells and Other Wells:** Promulgated last in 2001. The proposed revisions include updating the permit fees to reflect the 2005 statutory change, clarifying general requirements for pit and impoundment construction, and adding a new section setting forth requirements for constructing pits and impoundments that exceed a certain size. Technical revisions and corrections are made throughout.

Mr. Franks asked whether the Council had any questions about the OOG rule. Dr. Harris expressed concern that the current statutory bond amount may not suffice given the larger pits associated with Marcellus wells. Mr. Martin explained that the bond is a performance bond, not designed to cover any specific area of the well operation. Dr. Harris then asked about protections for surface owners whose water supply is impaired from drilling operations, in response to which Mr. Martin pointed out the statutory and regulatory remedies. There were no further questions from the Council.

## DIVISION OF MINING & RECLAMATION RULE

**47CSR30 – Mining NPDES Rule:** Promulgated last in 2009. The proposed revisions include deleting the certification language for NPDES maps and decreasing from two years to one the raw mine drainage water quality data required for abandonment of a deep mine. Technical revisions and corrections are made throughout.

Mr. Franks asked whether the Council had any questions about the DMR rule. Ms. Dooley inquired whether the changes were substantive or merely technical. Ms. Boggs explained that although the changes appeared merely technical, they had real-world effects upon licensed professional engineers and surveyors, whom the rule required to swear to the contents of a NPDES map under penalty of perjury. Engineers and surveyors could not obtain insurance for such an oath, because they did not create the maps and were therefore subjecting themselves to criminal penalties for work that was not entirely within their control. There were no further questions from the Council.

#### **DIVISION OF AIR QUALITY RULES**

**45CSR8 – *Ambient Air Quality Standards*:** Promulgated last in 2009. The proposed revisions include deletion of redundant measurement method language for lead and addition of new national primary and secondary ambient air quality standards for lead.

**45CSR14 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration*:** Promulgated last in 2009. The proposed revisions incorporate the New Source Review Program for Particulate Matter Less Than 2.5 Micrometers. Other miscellaneous revisions and corrections are also included, so that the rule comports with federal counterpart language.

**45CSR16 – *Standards of Performance for New Stationary Sources*:** Promulgated last in 2009. The proposed rule reflects the annual IBR revisions to New Source Performance Standards, including Stationary Spark-Ignition Internal Combustion Engines, Fossil Fuel-Fired Steam Generators and Industrial-Commercial-Institutional Steam Generating Units, Stationary Combustion Turbines, Nonroad Spark Ignition Engines, Alternative Work Practice To Detect Leaks From Equipment, Petroleum Refineries and Performance Specification 16 for Predictive Emissions Monitoring Systems, Amendments to Testing and Monitoring Provisions, and Nonmetallic Mineral Processing Plants. The IBR exclusion for the vacated Clean Air Mercury Rule has been removed.

**45CSR19 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution Which Cause or Contribute to Nonattainment*:** Promulgated last in 2005. The proposed revisions incorporate the New Source Review Program for Particulate Matter Less Than 2.5 Micrometers, Reasonable Possibility in Recordkeeping, Ethanol Production Facilities, and 8-Hour Ozone National Ambient Air Quality Standard provisions. Other proposed revisions to the rule remove references to pollution control projects and clean units per the 2005 decision by the United State Court of Appeals for the District of Columbia Circuit that vacated the parallel federal provisions. Other miscellaneous revisions and/or corrections are also included, so that the rule comports with federal counterpart language.

**45CSR25 – *Control of Air Pollution from Hazardous Waste Treatment, Storage and Disposal Facilities*:** Promulgated last in 2009. The proposed rule reflects the annual IBR revisions to the Hazardous Waste rule.

**45CSR33 – *Acid Rain Provisions and Permits*:** Promulgated last in 2006. The proposed rule

reflects the annual IBR revisions, including Air Pollution Control, Transport of Emissions of Nitrogen Oxide and Sulfur Dioxide; Amendments to Monitoring Provisions; Revisions to Acid Rain Program Rules, and Revisions to the Continuous Monitoring Rule for the Acid Rain Program.

**45CSR34 – *Emission Standards for Hazardous Air Pollutants*:** Promulgated last in 2009. The proposed rule reflects the annual IBR revisions to the Hazardous Air Pollutant rule. Excluded from incorporation by reference are the national emission standards for hazardous air pollutants affecting non-major (area) sources of hazardous air pollutants for Iron and Steel Foundries, Plating and Polishing Operations, Ferroalloys Production Facilities, and Metal Fabrication and Finishing Source Categories.

Mr. Franks asked whether the Council had any questions about the seven DAQ Rules, and there were none.

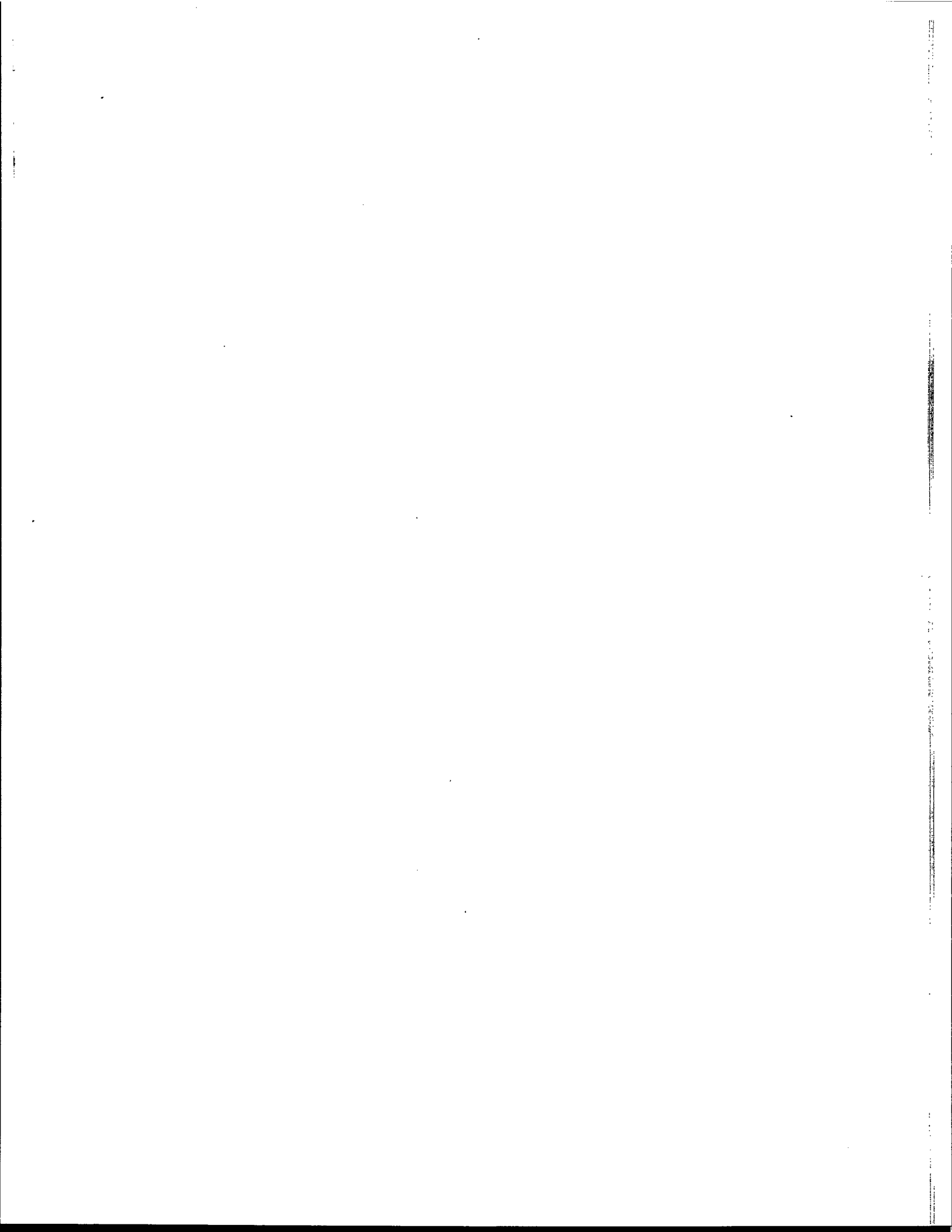
On general comment, Dr. Harris inquired about water quality standards for mercury, citing a newspaper report that DEP supported less stringent standards based on data that State residents consume relatively fewer fish per capita. Mr. Clarke explained the factual context of the reported quote and the method by which EPA developed the point three (0.3) standard. With respect to the rules presentation, Dr. Harris suggested a return to the practice of providing Council with written summaries of the proposed rules, along with justifications for the proposed changes. The suggestion was well-received.

Mr. Franks then opened the floor to questions from the general public. Don Garvin, Legislative Coordinator for the West Virginia Environmental Council, inquired about acid rain standards, to which Mr. Mason responded that the State's standards with respect to acid rain derive from Title VI of the federal Clean Air Act.

Dr. Harris then asked whether the downturn in the energy market has caused any decrease in the number of permit applications to drill gas wells in the Marcellus Shale. Mr. Martin responded that the economy has had some effect on the number of permit applications overall, and that he could later provide Dr. Harris with more precise statistics.

Mr. Garvin complimented the Agency and the Office of Oil & Gas on finally requiring pits to be lined. Mr. Raney then thanked DEP staff for their hard work on the rules.

With no further comments forthcoming from the Council or public, Mr. Franks reminded everyone that the next meeting is scheduled for Wednesday, September 23, 2009. On motion from Mr. Raney, seconded by Mr. Roberts, Mr. Franks declared the meeting adjourned at 2:45 p.m.



APPENDIX B

**FISCAL NOTE FOR PROPOSED RULES**

Rule Title: 45CSR8 - "Ambient Air Quality Standards"

Type of Rule:  X  Legislative   Interpretive   Procedural

Agency: Division of Air Quality

Address: 601 57<sup>th</sup> Street SE  
Charleston, WV 25304

Phone Number: 926-0475

Email: tammy.l.mowrer@wv.gov

**Fiscal Note Summary**

Summarize in a clear and concise manner what impact this measure will have on costs and revenues of state government.

The proposed revisions to this rule should cause no additional impact on costs and revenues of state government.

**Fiscal Note Detail**

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

**FISCAL YEAR**

Effect of Proposal	2010 Increase/Decrease (use "-")	2011 Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)
<b>1. Estimated Total Cost</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
Personal Services	0	0	0
Current Expenses	0	0	0
Repairs & Alterations	0	0	0
Assets	0	0	0
Equipment	0	0	0
Other	0	0	0
<b>2. Estimated Total Revenues</b>	<b>0</b>	<b>0</b>	<b>0</b>

Rule Title: 45CSR8 - "Ambient Air Quality Standards"

- 3. Explanation of above estimates (including long-range effect):**  
Please include any increase or decrease in fees in your estimated total revenues.

The proposed revisions to this rule will have a minimal effect on the costs to the Division of Air Quality because they impose no additional requirements beyond current federal requirements. Costs are covered under previous cost estimates.

### MEMORANDUM

Please identify any areas of vagueness, technical defects, reasons the proposed rule **would not** have a fiscal impact, and/or any special issues **not** captured elsewhere on this form.

Date: 6/4/09

  
Signature of Agency Head

2009 JUN 10 AM 11:19

TITLE 45  
LEGISLATIVE RULE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY

OFFICE WEST VIRGINIA  
SECRETARY OF STATE

SERIES 8  
AMBIENT AIR QUALITY STANDARDS

**§45-8-1. General.**

1.1. Scope. -- This rule establishes ambient air quality standards in West Virginia for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide and lead, equivalent to the national primary and secondary ambient air quality standards established under Section 109 of the Clean Air Act, and promulgated by the United States Environmental Protection Agency under 40 CFR Part 50. National primary ambient air quality standards define levels of air quality which the Administrator judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define levels of air quality which the Administrator judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Such standards are subject to revision, and additional primary and secondary standards may be promulgated as the Administrator deems necessary to protect the public health and welfare.

1.2. Authority. -- W.Va. Code §22-5-4.

1.3. Filing Date. -- ~~May 8, 2009.~~

1.4. Effective Date. -- ~~June 1, 2009.~~

1.5. Former Rules. -- This legislative rule amends 45CSR8 - "Ambient Air Quality Standards" which was filed on ~~April 23, 2008~~ May 8, 2009 and became effective on ~~June 1, 2008~~ June 1, 2009.

**§45-8-2. Anti-Degradation Policy.**

2.1. Pursuant to the best interests of the State

of West Virginia, it is the objective of the Secretary to obtain and maintain the cleanest air possible, consistent with the best available technology.

2.2. Where the present ambient air is of better quality than the established standards, the Secretary will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air uses in these areas of high air quality.

2.3. The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Secretary that such a change is justifiable as a result of necessary economic or social development and will not result in statutory air pollution. This will require that any industrial, public, or private project or development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project or development.

2.4. The promulgation of primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of West Virginia.

**§45-8-3. Definitions.**

3.1. "Administrator" means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

3.2. "Air Pollutants" means solids, liquids, or gases which, if discharged into the air, may

result in a statutory air pollution.

3.3. "Air Pollution" or 'statutory air pollution', shall have the meaning ascribed to it in W.Va. Code §22-5-2.

3.4. "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

3.5. "Ambient Air Quality Standards" means the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time averaging interval over which that concentration level is measured.

3.6. "Clean Air Act" or "CAA" means the federal Clean Air Act, as amended, 42 U.S.C. §7401 et seq.

3.7. "Equivalent method" means a method of sampling and analyzing the ambient air for an air pollutant that has been designated as an equivalent method in accordance with 40 CFR Part 53; it does not include a method for which an equivalent method designation has been cancelled in accordance with 40 CFR §53.11 or 40 CFR §53.16.

3.8. "Ozone" means the triatomic oxygen molecule (O<sub>3</sub>), a very reactive form of oxygen.

3.9. "Particulate Matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

3.10. "Person" means any and all persons, natural or artificial, including the state of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.

3.11. "PM<sub>2.5</sub>" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers.

3.12. "PM<sub>10</sub>" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers.

3.13. "Reference method" means a method of sampling and analyzing the ambient air for an air pollutant that is specified as a reference method in an appendix to this part, or a method that has been designated as a reference method in accordance with 40 CFR Part 53; it does not include a method for which a reference method designation has been cancelled in accordance with 40 CFR §53.11 or 40 CFR §53.16.

3.14. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§22-1-6 or 22-1-8.

3.15. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in W.Va. Code §22-5-1 et seq. and 40 CFR §50.1. Words and phrases not defined therein shall have the meaning given to them in the federal Clean Air Act.

#### §45-8-4. Ambient Air Quality Standards.

4.1. Standards for Sulfur Oxides. -- No person shall allow emissions of sulfur oxides to the ambient air in any manner which causes or significantly contributes to an exceedance of the following primary and secondary ambient air quality standards:

4.1.a. Annual Arithmetic Mean Concentration. -- The level of the annual primary standard for sulfur oxides is 0.030 parts per million (ppm) and 80 micrograms per cubic meter (µg/m<sup>3</sup>), not to be exceeded in a calendar year. The annual arithmetic mean shall be rounded to three decimal places (fractional parts equal to or greater than 0.0005 ppm shall be rounded up).

4.1.b. Maximum 24-Hour Concentration. -- The level of the 24-hour primary standard for sulfur oxides is 0.14 ppm (365 µg/m<sup>3</sup>), not to be

exceeded more than once per calendar year. The 24-hour averages shall be determined from successive non-overlapping 24-hour blocks starting at midnight each calendar day and shall be rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm shall be rounded up).

4.1.c. To demonstrate attainment with the sulfur oxides primary standards in subdivisions 4.1.a and 4.1.b, the annual arithmetic mean and the second-highest 24-hour averages must be based upon hourly data that are at least 75 percent complete in each calendar quarter. A 24-hour block average shall be considered valid if at least 75 percent of the hourly averages for the 24-hour period are available. In the event that only 18, 19, 20, 21, 22, or 23 hourly averages are available, the 24-hour block average shall be computed as the sum of the available hourly averages using 18, 19, etc. as the divisor. If fewer than 18 hourly averages are available, but the 24-hour average would exceed the level of the standard when zeros are substituted for the missing values, subject to the rounding in subdivision 4.1.b, then this shall be considered a valid 24-hour average. In this case, the 24-hour block average shall be computed as the sum of the available hourly averages divided by 24.

4.1.d. Maximum Three (3) Hour Concentration. -- The level of the 3-hour secondary standard for sulfur oxides is 0.5 ppm, ( $1300 \mu\text{g}/\text{m}^3$ ), not to be exceeded more than once per year. The 3-hour averages shall be determined from successive non-overlapping 3-hour blocks starting at midnight each calendar day and shall be rounded to one decimal place (fractional parts equal to or greater than 0.05 ppm shall be rounded up).

4.1.e. To demonstrate attainment with the sulfur oxides secondary standard in subdivision 4.1.d, the second-highest 3-hour average must be based upon hourly data that are at least 75 percent complete in each calendar quarter. A 3-hour block average shall be considered valid only if all three hourly averages for the 3-hour period are available. If only one or two hourly averages are

available, but the 3-hour average would exceed the level of the standard when zeros are substituted for the missing values, subject to the rounding in subdivision 4.1.d, then this shall be considered a valid 3-hour average. In all cases, the 3-hour block average shall be computed as the sum of the hourly averages divided by three.

4.2. Standards for Particulate Matter. -- No person shall allow emissions of particulate matter to the ambient air in any manner which causes or significantly contributes to an exceedance of the following primary and secondary ambient air quality standards:

4.2.a.  $\text{PM}_{10}$  Maximum 24-Hour Average Concentration. -- The level of the primary and secondary 24-hour standards for  $\text{PM}_{10}$  is  $150 \mu\text{g}/\text{m}^3$ . The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above  $150 \mu\text{g}/\text{m}^3$ , as determined in accordance with Appendix K of 40 CFR Part 50, is less than or equal to one.

4.2.b.  $\text{PM}_{2.5}$  Maximum Annual Arithmetic Mean Concentration. -- The level of the annual primary and secondary standards for  $\text{PM}_{2.5}$  are  $15.0 \mu\text{g}/\text{m}^3$ . The standards are met when the annual arithmetic mean concentration, as determined in accordance with Appendix N of 40 CFR Part 50, is less than or equal to  $15.0 \mu\text{g}/\text{m}^3$ .

4.2.c.  $\text{PM}_{2.5}$  Maximum 24-Hour Average Concentration. -- The level of the 24-hour primary and secondary standards for  $\text{PM}_{2.5}$  are  $35 \mu\text{g}/\text{m}^3$ . The standards are met when the 98<sup>th</sup> percentile 24-hour concentration, as determined in accordance with Appendix N of 40 CFR Part 50, is less than or equal to  $35 \mu\text{g}/\text{m}^3$ .

4.3. Standards for Carbon Monoxide. -- No person shall allow emissions of carbon monoxide to the ambient air in any manner which causes or significantly contributes to an exceedance of the following primary ambient air quality standards:

4.3.a. Maximum Eight (8) Hour Average Concentration. -- The level of the primary 8-hour

standard for carbon monoxide is 9 ppm and 10 mg/m<sup>3</sup>, not to be exceeded more than once per year. An 8-hour average shall be considered valid if at least 75 percent of the hourly average for the 8-hour period are available. In the event that only six (or seven) hourly averages are available, the 8-hour average shall be computed on the basis of the hours available using six (or seven) as the divisor.

4.3.b. Carbon Monoxide Maximum One (1) Hour Average concentration. -- The level of the primary 1-hour standard for carbon monoxide is 35 ppm (40 mg/m<sup>3</sup>), not to be exceeded more than once per year.

4.3.c. When summarizing data for comparison with the primary carbon monoxide standards under subdivisions 4.3.a and 4.3.b, averages shall be stated to one decimal place. Comparison of the data with the levels of the standards in parts per million shall be made in terms of integers with fractional parts of 0.5 or greater rounding up.

4.4. Standards for Ozone. -- No person shall allow emissions of ozone to the ambient air in any manner which causes or significantly contributes to an exceedance of the following primary and secondary ambient air quality standards:

4.4.a. Eight-Hour Primary and Secondary Standards. -- The level of the eight (8) hour primary and secondary ambient air quality standards for ozone is 0.075 ppm, daily maximum 8-hour average.

4.4.b. The 8-hour primary and secondary ozone ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.075 ppm, as determined in accordance with Appendix P to 40 CFR Part 50.

4.5. Standards for Nitrogen Dioxide. -- No person shall allow emissions of nitrogen dioxide to the ambient air in any manner which causes or significantly contributes to an exceedance of the

following primary and secondary ambient air quality standards:

4.5.a. Maximum Annual Arithmetic Mean Concentration. -- The level of the annual primary and secondary standards for nitrogen dioxide is 0.053 ppm and 100 µg/m<sup>3</sup>.

4.5.b. The annual primary and secondary standards for nitrogen dioxide under subdivision 4.5.a are attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places (fractional parts equal to or greater than 0.0005 ppm must be rounded up). To demonstrate attainment, an annual mean must be based upon hourly data that are at least 75 percent complete or upon data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter.

4.6. Standards for Lead. -- No person shall allow emissions of lead and its compounds, measured as elemental lead, to the ambient air in any manner which causes or significantly contributes to an exceedance of the following primary and secondary ambient air quality standards:

4.6.a. Maximum Arithmetic Mean Concentration. -- The level of the primary and secondary ambient air quality standards for lead and its compounds is 1.5 µg/m<sup>3</sup>, averaged over a calendar quarter.

~~4.6.b. The primary and secondary ambient air quality standards for lead and its compounds under subsection 4.6.a shall be measured as elemental lead by a reference method based on Appendix G of 40 CFR Part 50, or by an equivalent method.~~

4.6.b. The ambient air quality standards for lead set forth in subdivision 4.6.a will remain applicable to all areas notwithstanding the promulgation of primary and secondary ambient air quality standards for lead in subdivision 4.6.c. The standards for lead set forth in subdivision

4.6.a will no longer apply to an area one year after the effective date of the designation of that area, pursuant to Section 107 of the Clean Air Act, for the lead standards set forth in subdivision 4.6.c.

4.6.c. Maximum Arithmetic Mean Concentration. -- The national primary and secondary ambient air quality standards for lead and its compounds are  $0.15 \mu\text{g}/\text{m}^3$ , arithmetic mean concentration over a 3-month period.

4.6.d. The national primary and secondary ambient air quality standards under subdivision 4.6.c are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to  $0.15 \mu\text{g}/\text{m}^3$ .

#### **§45-8-5. Methods of Measurement.**

5.1. For the purpose of determining attainment of the primary and secondary  $\text{PM}_{10}$  standards under subdivision 4.2.a, particulate matter shall be measured in the ambient air as  $\text{PM}_{10}$  by:

5.1.a. A reference method based on Appendix J of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53; or

5.1.b. An equivalent method designated in accordance with 40 CFR Part 53.

5.2. For the purpose of determining attainment of the primary and secondary sulfur oxides standards under subsection 4.1, sulfur oxides shall be measured in the ambient air as sulfur dioxide by:

5.2.a. The reference method described in Appendix A of 40 CFR Part 50 ; or

5.2.b. An equivalent method designated in accordance with 40 CFR Part 53.

5.3. For the purpose of determining attainment of the primary and secondary  $\text{PM}_{2.5}$

standards under subdivisions 4.2.b and 4.2.c, particulate matter shall be measured in the ambient air as  $\text{PM}_{2.5}$  by:

5.3.a. A reference method based on Appendix L of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53; or

5.3.b. An equivalent method designated in accordance with 40 CFR Part 53.

5.4. For the purpose of determining attainment of the primary carbon monoxide standards under subsection 4.3, carbon monoxide concentrations shall be measured in the ambient air by:

5.4.a. A reference method based on Appendix C of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53; or

5.4.b. An equivalent method designated in accordance with 40 CFR Part 53.

5.5. For the purpose of determining attainment of the primary and secondary ozone standards under subsection 4.4, ozone concentrations shall be measured in the ambient air by a reference method based on Appendix D to 40 CFR Part 50 and designated in accordance with 40 CFR Part 53.

5.6. For the purpose of determining attainment of the primary and secondary nitrogen dioxide standards under subsection 4.5, nitrogen dioxide concentrations shall be measured in the ambient air by:

5.6.a. A reference method based on Appendix F of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53; or

5.6.b. An equivalent method designated in accordance with 40 CFR Part 53.

5.7. For the purpose of determining attainment of the primary and secondary lead standards under ~~subsection 4.6~~ subdivision 4.6.a,

lead concentrations shall be measured as elemental lead in the ambient air by:

5.7.a. A reference method based on Appendix G of 40 CFR Part 50; or

5.7.b. An equivalent method.

5.8. For the purpose of determining attainment of the primary and secondary lead standards under subdivision 4.6.c, lead concentrations shall be measured in the ambient air as lead either by:

5.8.a. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53; or

5.8.b. An equivalent method designated in accordance with 40 CFR Part 53.

**§45-8-6. Reference Conditions.**

6.1. All measurements of air quality that are expressed as mass per unit volume (e.g., micrograms per cubic meter) other than for the PM<sub>2.5</sub> standards contained in subdivisions 4.2.b and 4.2.c shall be corrected to a reference temperature of 25°C and a reference pressure of 760 millimeters of mercury (1013.2 millibars). Measurements of PM<sub>2.5</sub> for purposes of comparison to the standards contained in subdivisions 4.2.b and 4.2.c shall be reported based on actual ambient air volume measured at the actual ambient temperature and pressure at the monitoring site during the measurement period.

**§45-8-7. Inconsistency Between Rules.**

7.1. In the event of any inconsistency between this rule and any other rule of the West Virginia Department of Environmental Protection, the inconsistency shall be resolved by the determination of the Secretary and the determination shall be based upon the application of the more stringent provision, term, condition, method, or rule.