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# Virginia Regulatory Town Hall

# Final Regulation Agency Background Document

Agency Name:	State Air Pollution Control Board
Regulation Title:	Regulations for the Control and Abatement of Air Pollution
Primary Action:	9 VAC 5 Chapter 40, Part I
Secondary Action(s):	9 VAC 5 Chapter 10, 9 VAC 5-20-180, 9 VAC 5 Chapter 50, Part I, and 9 VAC 5 Chapter 60, Part I
Action Title:	Special provisions for existing sources, new and modified sources, and hazardous air pollutant sources
Date:	March 31, 2000

Please refer to the Administrative Process Act (§ 9-6.14:9.1 et seq. of the Code of Virginia), Executive Order Twenty-Five (98), and the Virginia Register Form, Style and Procedure Manual for more information and other materials required to be submitted in the final regulatory action package.

#### **Summary**

Please provide a brief summary of the new regulation, amendments to an existing regulation, or the regulation being repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation.

Special provisions are contained in several locations throughout the Board's regulations as follows: Existing Sources, Chapter, 40 Part I; New and Modified Sources, Chapter 50, Part I; and Hazardous Air Pollutant Sources, Chapter 60, Part I. The special provisions address such issues such as: applicability, compliance, emission testing, monitoring, notification, records and reporting. Amendments are being proposed to update certain requirements in the provisions to be consistent with new federal requirements and EPA policy and to address concerns identified pursuant to the review of existing regulations mandated by Executive Order 15(94) as well as changes made to federal regulations since that review.

### **Substantial Changes Made Since the Proposed Stage**

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Please briefly and generally summarize any substantial changes made since the proposed action was published. Please provide citations of the sections of the proposed regulation that have been substantially altered since the proposed stage.

- 1. Added a definition for "Affirmative defense". [9 VAC 5-10-20]
- 2. Added a provision to clarify that 9 VAC 5-20-180 applies to only facility and control equipment maintenance or malfunction. [9 VAC 5-20-180 A]
- 3. Added provisions that specify an affirmative defense does not apply to excess emissions due to malfunction or maintenance (i) for sources subject to New Source Performance Standards, NSPS (9 VAC 5-50-410); National Emission Standards for Hazardous Air Pollutants, NESHAP (9 VAC 5-60-70); Maximum Achievable Control Technology Standards, MACT (9 VAC 5-60-100); or acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-20-180 A].
- 4. Modified the provision that provides legal relief if a violation has taken place due to excess emissions as a result of facility and control equipment maintenance or malfunction. The provision now entitles the owner of a facility to use an affirmative defense for relief from penalties. [9 VAC 5-20-180 G]
- 5. Modified the provisions pertaining to facility and control equipment maintenance or malfunction to incorporate the limitations and the criteria for an affirmative defense. [9 VAC 5-20-180 G]
- 6. Modified the provisions that authorize the board to reduce the level of operation or shut down a facility if it is necessary to prevent a violation of any primary ambient air quality standard. The provisions have been expanded to include any ambient air increment identified in the Prevention of Significant Deterioration program and is no longer restricted to just primary ambient air quality standards. [9 VAC 5-20-180 I]
- 7. Added provisions that specify an affirmative defense does not apply to excess emissions due to startup or shut down (i) for sources subject to New Source Performance Standards, NSPS (9 VAC 5-50-410); National Emission Standards for Hazardous Air Pollutants, NESHAP (9 VAC 5-60-70); Maximum Achievable Control Technology Standards, MACT (9 VAC 5-60-100); or acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-40-10 E; 9 VAC 5-50-10 G; 9 VAC 5-60-10 E]

8. Deleted provisions that provided a permanent exemption for excess visible emissions during periods of startup, shutdown, and malfunction. [9 VAC 5-40-20 A; 9 VAC 5-50-20 A]

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- 9. Added a provision that entitles the owner of a facility to use an affirmative defense for relief from penalties if a violation has taken place due to excess emissions during start up or shutdown. The provision includes the limitations and the criteria for an affirmative defense. [9 VAC 5-40-20 K; 9 VAC 5-50-20 J; 9 VAC 5-60-20 F]
- 10. Clarified that the violation exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial emissions test or initial performance test. [9 VAC 5-40-30 C; 9 VAC 5-50-30 C; 9 VAC 5-60-30 C]

#### Statement of Final Agency Action

Please provide a statement of the final action taken by the agency, including the date the action was taken, the name of the agency taking the action, and the title of the regulation.

On March 30, 2000, the State Air Pollution Control Board adopted final amendments to regulations entitled "Regulations for the Control and Abatement of Air Pollution", specifically Special provisions for existing sources, new and modified sources and hazardous air pollutant sources (9 VAC Chapters 10, 20, 40, 50 and 60). The regulation amendments are to be effective on July 1, 2000.

#### Basis

Please identify the section number and provide a brief statement relating the content of the statutory authority to the specific regulation adopted. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to adopt the regulation and that it comports with applicable state and/or federal law.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare. Written assurance from the Office of the Attorney General that (i) the State Air Pollution Control Board possesses the statutory authority to promulgate the proposed regulation amendments and that (ii) the proposed regulation amendments comport with the applicable state and/or federal law is available upon request.

#### **Purpose**

Please provide a statement explaining the rationale or justification of the regulation as it relates to the health, safety or welfare of citizens.

The purpose of the regulation is ensure compliance with emissions standards and other requirements by stationary sources in order to protect public health and welfare by

establishing the protocols and provisions which address applicability, compliance, emission testing, monitoring, and record keeping and reporting for existing sources, new and modified sources and sources of hazardous air pollutants. The proposed amendments are being made to update certain requirements in the provisions cited above to be consistent with federal requirements and other changes identified pursuant to the review of existing regulations mandated by Executive Order 15(94).

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#### **Substance**

Please identify and explain the new substantial provisions, the substantial changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement providing detail of the changes.

- 1. The term "Affirmative defense" has been added. [9 VAC 5-10-20]
- 2. The term "malfunction" has been changed to clarify that failure of air pollution control equipment caused by poor maintenance or careless operation will not be considered a "malfunction". [9 VAC 5-10-20]
- 3. The term "reference method" has been changed to include a reference to Appendix M of the Code of Federal Regulations. This appendix includes new test methods approved by EPA for inclusion into the state implementation plan. [9 VAC 5-10-20]
- 4. The term "volatile organic compound" has been changed to conform to the EPA definition with regard to substances exempted from being identified as a volatile organic compound (VOC). [9 VAC 5-10-20]
- 5. Changes have been made to some other definitions to make them consistent with recent amendments to other regulations of the Board. [9 VAC 5-10-20]
- 6. Provisions have been added to clarify that 9 VAC 5-20-180 applies to only facility and control equipment maintenance or malfunction. [9 VAC 5-20-180 A]
- 7. Provisions have been added that specify an affirmative defense does not apply to excess emissions due to malfunction or maintenance (i) for sources subject to New Source Performance Standards, NSPS (9 VAC 5-50-410); National Emission Standards for Hazardous Air Pollutants, NESHAP (9 VAC 5-60-70); Maximum Achievable Control Technology Standards, MACT (9 VAC 5-60-100); or acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-20-180 A].
- 8. Provisions have been changed to be consistent with recommendations made pursuant to the review of existing regulations mandated by Executive Order 15(94). [9 VAC 5-20-180 B, C, D, G]

9. Provisions pertaining to malfunctions for hazardous air pollution sources have been revised because they are not consistent with requirements pertaining to sources which meet federal NESHAPS and MACT standards for hazardous air pollutants. [9 VAC 5-20-180 F]

- 10. Provisions that provide legal relief if a violation has taken place due to excess emissions as a result of facility and control equipment maintenance or malfunction has been changed. The provisions now entitle the owner of a facility to use an affirmative defense for relief from penalties. [9 VAC 5-20-180 G]
- 11. Provisions pertaining to facility and control equipment maintenance or malfunction have been changed to incorporate the limitations and the criteria for an affirmative defense. [9 VAC 5-20-180 G]
- 12. Provisions that authorize the board to reduce the level of operation or shut down a facility if it is necessary to prevent a violation of any primary ambient air quality standard have been changed. The provisions have been expanded to include any ambient air increment identified in the Prevention of Significant Deterioration program and is no longer restricted to just primary ambient air quality standards. [9 VAC 5-20-180 I]
- 13. Provisions have been added to allow for the submittal of information electronically upon mutual consent by owner and Board. [9 VAC 5-40-10 D]
- 14. Provisions have been added that specify an affirmative defense does not apply to excess emissions due to startup or shut down (i) for sources subject to the acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-40-10 E]
- 15. Provisions for compliance have been changed to allow the use of alternative equivalent methods to determine compliance with federal requirements only when approved by the Administrator of EPA. [9 VAC 5-40-20 A 2]
- 16. Provisions that provided a permanent exemption for excess visible emissions during periods of startup, shutdown, and malfunction have been deleted. [9 VAC 5-40-20 A]
- 17. Provisions governing compliance with opacity standards have been changed to require the following:
- a. opacity observations shall be conducted concurrently with the initial emission test following certain criteria and conditions, [9 VAC 5-40-20 A 3, G 1]
- b. opacity observations shall be reported to the board, [9 VAC 5-40-20 G 2]

c. a continuous opacity monitor may be used provided specific protocols are followed, and [9 VAC 5-40-20 G 4,5]

- d. a waiver may be granted by the Board to a source that fails to meet any applicable opacity standard provided that specific conditions are met. [9 VAC 5-40-20 G 6,7,8]
- 18. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations. [9 VAC 5-40-20 J]
- 19. Provisions have been added that entitles the owner of a facility to use an affirmative defense for relief from penalties if a violation has taken place due to excess emissions during start up or shutdown. The provisions include the limitations and the criteria for an affirmative defense. [9 VAC 5-40-20 K]
- 20. Provisions have been added specifying that appropriate reference test methods shall be used for emission testing unless the board, in advance, deems otherwise using criteria specified in the regulation. [9 VAC 5-40-30 A]
- 21. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered a violation during emission testing unless otherwise specified in the applicable standard. [9 VAC 5-40-30 C]
- 22. Provisions have been added to clarify that the violation exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial emissions test or initial performance test. [9 VAC 5-40-30 C]
- 23. Provisions have been added requiring that sampling ports shall be adequate for applicable test methods. [9 VAC 5-40-30 F 1]
- 24. Provisions pertaining to the sampling protocol for emissions and performance testing have been changed to clarify that acceptable flow characteristics are to be present in the stack or duct during testing instead of mandating that the stack or duct be free of cyclonic flow. [9 VAC 5-40-30 F 1]
- 25. Provisions have been added that require continuous monitoring systems meet the performance specifications specified in 40 CFR Part 60. [9 VAC 5-40-40 A]
- 26. Provisions have been added that require continuous opacity monitoring systems to be subject to a performance evaluation and conform to EPA performance specifications. [9 VAC 5-40-40 D]
- 27. Provisions pertaining to emissions monitoring have been changed to allow alternative monitoring systems for sources subject to the requirements of 40 CFR Part 75, if appropriate. [9 VAC 5-40-40 F 12]

28. Provisions have been changed to require that the Board have no less than 30 day notification for opacity compliance observations. [9 VAC 5-40-50 A 3,4]

- 29. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless more frequent reporting is requires by a specific emission standard, or the Board determines that more frequent reporting is required. [9 VAC 5-40-50 C]
- 30. Provisions pertaining to reporting frequency have been changed to be consistent with recent changes to 40 CFR 60.7. [9 VAC 5-40-50 C]
- 31. Provisions have been added providing that certain general provisions of 40 CFR Part 60 are to be implemented under the authority of this part. [9 VAC 5-50-10 E]
- 32. Provisions have been added to allow for the submittal of information electronically upon mutual consent by owner and Board. [9 VAC 5-50-10 F]
- 33. Provisions have been added that specify an affirmative defense does not apply to excess emissions due to startup or shut down (i) for sources subject to New Source Performance Standards, NSPS (9 VAC 5-50-410); or acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-50-10 G]
- 34. Provisions for compliance have been changed to allow the use of alternative equivalent methods to determine compliance with federal requirements only when approved by the Administrator of EPA. [9 VAC 5-50-20 A 2]
- 35. Provisions that provided a permanent exemption for excess visible emissions during periods of startup, shutdown, and malfunction have been deleted. [9 VAC 5-50-20 A]
- 36. Provisions governing compliance with opacity standards have been changed to require the following:
- a. opacity observations shall be conducted concurrently with the initial emission test following certain criteria and conditions, [9 VAC 5-50-20 A 3,G 1]
- b. opacity observations shall be reported to the board, [9 VAC 5-50-20 G 2]
- c. a continuous opacity monitor may be used provided specific protocols are followed, and [9 VAC 5-50-20 G 4,5]
- d. a waiver may be granted by the Board to a source that fails to meet any applicable opacity standard provided that specific conditions are met. [9 VAC 5-50-20 G 6,7,8]

37. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations. [9 VAC 5-50-20 I]

- 38. Provisions have been added that entitles the owner of a facility to use an affirmative defense for relief from penalties if a violation has taken place due to excess emissions during start up or shutdown. The provisions include the limitations and the criteria for an affirmative defense. [9 VAC 5-50-20 J]
- 39. Provisions have been added specifying that appropriate reference test methods shall be used for performance testing unless the board, in advance, deems otherwise using criteria specified in the regulation. [9 VAC 5-50-30 A]
- 40. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered a violation during emission testing unless otherwise specified in the applicable standard. [9 VAC 5-50-30 C]
- 41. Provisions have been added to clarify that the violation exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial emissions test or initial performance test. [9 VAC 5-50-30 C]
- 42. Provisions have been added requiring that sampling ports shall be adequate for applicable test methods. [9 VAC 5-50-30 F 1]
- 43. Provisions pertaining to sampling protocol for emissions and performance testing have been changed to clarify that acceptable flow characteristics are to be present in the stack or duct during testing instead of mandating that the stack or duct be free of cyclonic flow. [9 VAC 5-50-30 F 1]
- 44. Provisions have been added that require continuous monitoring systems meet the performance specifications specified in 40 CFR Part 60. [9 VAC 5-50-40 A]
- 45. Provisions have been added that require continuous opacity monitoring systems to be subject to a performance evaluation and conform to EPA performance specifications. [9 VAC 5-50-40 D]
- 46. Provisions pertaining to emissions monitoring have been changed to allow alternative monitoring systems for sources subject to the requirements of 40 CFR Part 75, if appropriate. [9 VAC 5-50-40 F 10]
- 47. Provisions have been changed to require that the Board have no less than 30 day notification for opacity compliance observations. [9 VAC 5-50-50 A 6,7]
- 48. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless more frequent reporting is requires by a

specific emission standard, or the Board determines that more frequent reporting is required. [9 VAC 5-50-50 C]

- 49. Provisions pertaining to reporting frequency have been changed to be consistent with recent changes to 40 CFR 60.7. [9 VAC 5-50-50 C]
- 50. Provisions have been added providing that certain general provisions of 40 CFR Part 61 and 40 CFR Part 63 are to be implemented under the authority of this part. [9 VAC 5-60-10 B, C]
- 51. Provisions have been added to allow for the submittal of information electronically upon mutual consent by owner and Board. [9 VAC 5-60-10 D]
- 52. Provisions have been added that specify an affirmative defense does not apply to excess emissions due to startup or shut down for sources subject to National Emission Standards for Hazardous Air Pollutants, NESHAP (9 VAC 5-60-70); or Maximum Achievable Control Technology Standards, MACT (9 VAC 5-60-100). [9 VAC 5-60-10 E]
- 53. Provisions for compliance have been changed to allow the use of alternative equivalent methods to determine compliance with federal requirements only when approved by the Administrator of EPA. [9 VAC 5-60-20 A 2]
- 54. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations. [9 VAC 5-60-20 E]
- 55. Provisions have been added that entitles the owner of a facility to use an affirmative defense for relief from penalties if a violation has taken place due to excess emissions during start up or shutdown. The provisions include the limitations and the criteria for an affirmative defense. [9 VAC 5-60-20 F]
- 56. Provisions have been added specifying that appropriate reference test methods shall be used for emission testing unless the board, in advance, deems otherwise using criteria specified in the regulation. [9 VAC 5-60-30 A]
- 57. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered a violation during emission testing unless otherwise specified in the applicable standard. [9 VAC 5-60-30 C]
- 58. Provisions have been added that clarify that the violation exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial emissions test or initial performance test. [9 VAC 5-60-30 C]
- 59. Provisions have been added requiring that sampling ports shall be adequate for applicable test methods. [9 VAC 5-60-30 E 1]

60. Provisions pertaining to sampling protocol for emissions and performance testing have been changed to clarify that acceptable flow characteristics are to be present in the stack or duct during testing instead of mandating that the stack or duct be free of cyclonic flow. [9 VAC 5-60-30 E 1]

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#### Issues

Please provide a statement identifying the issues associated with the regulatory action. The term "issues" means: 1) the primary advantages and disadvantages to the public of implementing the new or amended provisions; and 2) the primary advantages and disadvantages to the agency or the Commonwealth. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

- 1. Public: The primary advantage to the general public, including affected sources, is that public health and/or welfare will be protected with the least possible cost and intrusiveness to the citizens and businesses of the Commonwealth. In addition, the sources will have clearly specified test methods and procedures for determining compliance with the emissions standards. There are no disadvantages.
- 2. Department: The advantages for the Department are three-fold. First, the regulation will provide a clear enforcement basis for determining compliance with the emission standards and other applicable requirements. Second, the regulation provides procedures for continuous or process parameter monitoring of emissions for determining compliance with the emission standards, and third, the use of stack height of the facility or any other dispersion technique as a method to avoid compliance with emission limits has been prohibited. There are no disadvantages to the department.

#### **Public Comment**

Please summarize all public comment received during the public comment period and provide the agency response. If no public comment was received, please include a statement indicating that fact.

A summary and analysis of the public testimony, along with the basis for the decision of the Board, is attached.

#### **Detail of Changes**

Please detail any changes, other than strictly editorial changes, made since the publication of the proposed regulation. This statement should provide a section-by-section description of changes.

- 1. Added a definition for "Affirmative defense". [9 VAC 5-10-20]
- 2. Added a provision to clarify that 9 VAC 5-20-180 applies to only facility and control equipment maintenance or malfunction. [9 VAC 5-20-180 A]
- 3. Added provisions that specify an affirmative defense does not apply to excess emissions due to malfunction or maintenance (i) for sources subject to New

Source Performance Standards, NSPS (9 VAC 5-50-410); National Emission Standards for Hazardous Air Pollutants, NESHAP (9 VAC 5-60-70); Maximum Achievable Control Technology Standards, MACT (9 VAC 5-60-100); or acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-20-180 A].

- 4. Modified the provision that provides legal relief if a violation has taken place due to excess emissions as a result of facility and control equipment maintenance or malfunction. The provision now entitles the owner of a facility to use an affirmative defense for relief from penalties. [9 VAC 5-20-180 G]
- 5. Modified the provisions pertaining to facility and control equipment maintenance or malfunction to incorporate the limitations and the criteria for an affirmative defense. [9 VAC 5-20-180 G]
- 6. Modified the provisions that authorize the board to reduce the level of operation or shut down a facility if it is necessary to prevent a violation of any primary ambient air quality standard. The provisions have been expanded to include any ambient air increment identified in the Prevention of Significant Deterioration program and is no longer restricted to just primary ambient air quality standards. [9 VAC 5-20-180 I]
- 7. Added provisions to allow for the submittal of information electronically upon mutual consent by owner and Board. [9 VAC 5-40-10 D; 9 VAC 5-50-10 F; 9 VAC 5-60-10 D]
- 8. Added provisions that specify an affirmative defense does not apply to excess emissions due to startup or shut down (i) for sources subject to New Source Performance Standards, NSPS (9 VAC 5-50-410); National Emission Standards for Hazardous Air Pollutants, NESHAP (9 VAC 5-60-70); Maximum Achievable Control Technology Standards, MACT (9 VAC 5-60-100); or acid rain provisions of the federal Clean Air Act; or (ii) that cause an exceedance of an ambient air quality standard or PSD ambient air quality increment. [9 VAC 5-40-10 E; 9 VAC 5-50-10 G; 9 VAC 5-60-10 E]
- 9. Deleted provisions that provided a permanent exemption for excess visible emissions during periods of startup, shutdown, and malfunction. [9 VAC 5-40-20 A; 9 VAC 5-50-20 A]
- 10. Added a provision that entitles the owner of a facility to use an affirmative defense for relief from penalties if a violation has taken place due to excess emissions during start up or shutdown. The provision includes the limitations and the criteria for an affirmative defense. [9 VAC 5-40-20 K; 9 VAC 5-50-20 J; 9 VAC 5-60-20 F]

11. Clarified that the violation exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial emissions test or initial performance test. [9 VAC 5-40-30 C; 9 VAC 5-50-30 C; 9 VAC 5-60-30 C]

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- 12. Modified the sampling protocol for emissions and performance testing to clarify that acceptable flow characteristics are to be present in the stack or duct during testing instead of mandating that the stack or duct be free of cyclonic flow. [9 VAC 5-40-30 F 1; 9 VAC 5-50-30 F 1; 9 VAC 5-60-30 E 1]
- 13. Modified the requirements for emissions monitoring to allow alternative monitoring systems for sources subject to the requirements of 40 CFR Part 75, if appropriate. [9 VAC 5-40-40 F 12 and 9 VAC 5-50-40 F 10]
- 14. Modified the reporting frequency to be consistent with recent changes to 40 CFR 60.7. [9 VAC 5-40-50 C and 9 VAC 5-50-50 C]

#### **Family Impact Statement**

Please provide an analysis of the regulatory action that assesses the impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

It is not anticipated that these regulation amendments will have a direct impact on families. However, there will be positive indirect impacts in that the regulation amendments will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in fertility disorders, fetal mutation and deformity, chronic and acute illness, premature death, and property damage.

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# COMMONWEALTH OF VIRGINIA STATE AIR POLLUTION CONTROL BOARD

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#### SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR REGULATION REVISION D97 CONCERNING

SPECIAL PROVISIONS FOR EXISTING SOURCES, NEW AND MODIFIED SOURCES, AND HAZARDOUS AIR POLLUTANT SOURCES (9 VAC 5 CHAPTERS 10, 20, 40, 50 and 60)

#### INTRODUCTION

At the January 1999 meeting, the Board authorized the Department to promulgate for public comment a proposed regulation revision concerning special provisions contained in several locations throughout the Board's regulations as follows: Definitions, Chapter 10; General Provisions, Chapter 20, Part II; Existing Sources, Chapter 40, Part I; New and Modified Sources, Chapter 50, Part I; and Hazardous Air Pollutant Sources, Chapter 60, Part I.

A public hearing was advertised accordingly and held in Richmond on November 17, 1999 and the public comment period closed on December 10, 1999. The proposed regulation amendments subject to the hearing are summarized below followed by a summary of the public participation process and an analysis of the public testimony, along with the basis for the decision of the Board.

#### SUMMARY OF PROPOSED AMENDMENTS

The proposed regulation amendments concerned provisions covering special provisions for existing sources, new and modified sources, and hazardous air pollutant sources. A summary of the amendments follows: (The changes are accompanied with citations to the appropriate sections of the regulation.)

- 1. The term "malfunction" has been changed to clarify that failure of air pollution control equipment caused by poor maintenance or careless operation will not be considered a "malfunction". [9 VAC 5-10-20]
- 2. The term "reference method" has been modified to include a reference to Appendix M of the Code of Federal Regulations. This appendix includes new test methods approved by EPA for inclusion into the state implementation plan. [9 VAC 5-10-20]

3. The term "volatile organic compound" has been modified to conform to the EPA definition with regard to substances exempted from being identified as a volatile organic compound (VOC). [9 VAC 5-10-20]

- 4. Changes have been made to some other definitions to make them consistent with recent amendments to other regulations of the Board. [9 VAC 5-10-20]
- 5. Provisions have been changed to be consistent with recommendations made pursuant to the review of existing regulations mandated by Executive Order 15(94). [9 VAC 5-20-180 B, C, D, G]
- 6. Provisions pertaining to malfunctions for hazardous air pollution sources have been revised because they are not consistent with requirements pertaining to sources which meet federal NESHAPS and MACT standards for hazardous air pollutants. [9 VAC 5-20-180 F]
- 7. Provisions for compliance have been changed to allow the use of alternative equivalent methods to determine compliance with federal requirements only when approved by the Administrator of EPA. [9 VAC 5-40-20 A 2]
- 8. Provisions governing compliance with opacity standards have been changed to require the following:
- a. opacity observations shall be conducted concurrently with the initial emission test following certain criteria and conditions, [9 VAC 5-40-20 A 3, G 1]
- b. opacity observations shall be reported to the board, [9 VAC 5-40-20 G 2]
- c. a continuous opacity monitor may be used provided specific protocols are followed, and [9 VAC 5-40-20 G 4, 5]
- d. a waiver may be granted by the Board to a source that fails to meet any applicable opacity standard provided that specific conditions are met. [9 VAC 5-40-20 G 6, 7, 8]
- 9. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations. [9 VAC 5-40-20 J]
- 10. Provisions have been added specifying that appropriate reference test methods shall be used for emission testing unless the board, in advance, deems otherwise using criteria specified in the regulation. [9 VAC 5-40-30 A]
- 11. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered a violation during emission testing unless otherwise specified in the applicable standard. [9 VAC 5-40-30 C]

12. Provisions have been added requiring that sampling ports shall be adequate for applicable test methods. [9 VAC 5-40-30 F 1]

- 13. Provisions have been added that require continuous monitoring systems meet the performance specifications specified in 40 CFR Part 60. [9 VAC 5-40-40 A]
- 14. Provisions have been added that require continuous opacity monitoring systems to be subject to a performance evaluation and conform to EPA performance specifications. [9 VAC 5-40-40 D]
- 15. Provisions have been modified to require that the Board have no less than 30 day notification for opacity compliance observations. [9 VAC 5-40-50 A 3, 4]
- 16. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless more frequent reporting is requires by a specific emission standard, or the Board determines that more frequent reporting is required. [9 VAC 5-40-50 C]
- 17. Provisions have been added providing that certain general provisions of 40 CFR Part 60 are to be implemented under the authority of this part. [9 VAC 5-50-10 E]
- 18. Provisions for compliance have been changed to allow the use of alternative equivalent methods to determine compliance with federal requirements only when approved by the Administrator of EPA. [9 VAC 5-50-20 A 2]
- 19. Provisions governing compliance with opacity standards have been changed to require the following:
- a. opacity observations shall be conducted concurrently with the initial emission test following certain criteria and conditions, [9 VAC 5-50-20 A 3, G 1]
- b. opacity observations shall be reported to the board, [9 VAC 5-50-20 G 2]
- c. a continuous opacity monitor may be used provided specific protocols are followed, and [9 VAC 5-50-20 G 4, 5]
- d. a waiver may be granted by the Board to a source that fails to meet any applicable opacity standard provided that specific conditions are met. [9 VAC 5-50-20 G 6, 7, 8]
- 20. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations. [9 VAC 5-50-20 I]

21. Provisions have been added specifying that appropriate reference test methods shall be used for performance testing unless the board, in advance, deems otherwise using criteria specified in the regulation. [9 VAC 5-50-30 A]

- 22. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered a violation during emission testing unless otherwise specified in the applicable standard. [9 VAC 5-50-30 C]
- 23. Provisions have been added requiring that sampling ports shall be adequate for applicable test methods. [9 VAC 5-50-30 F 1]
- 24. Provisions have been added that require continuous monitoring systems meet the performance specifications specified in 40 CFR Part 60. [9 VAC 5-50-40 A]
- 25. Provisions have been added that require continuous opacity monitoring systems to be subject to a performance evaluation and conform to EPA performance specifications. [9 VAC 5-50-40 D]
- 26. Provisions have been modified to require that the Board have no less than 30 day notification for opacity compliance observations. [9 VAC 5-50-50 A 6, 7]
- 27. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless more frequent reporting is requires by a specific emission standard, or the Board determines that more frequent reporting is required. [9 VAC 5-50-50 C]
- 28. Provisions have been added providing that certain general provisions of 40 CFR Part 61 and 40 CFR Part 63 are to be implemented under the authority of this part. [9 VAC 5-60-10 B, C]
- 29. Provisions for compliance have been changed to allow the use of alternative equivalent methods to determine compliance with federal requirements only when approved by the Administrator of EPA. [9 VAC 5-60-20 A 2]
- 30. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations. [9 VAC 5-60-20 E]
- 31. Provisions have been added specifying that appropriate reference test methods shall be used for emission testing unless the board, in advance, deems otherwise using criteria specified in the regulation. [9 VAC 5-60-30 A]
- 32. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered a violation during emission testing unless otherwise specified in the applicable standard. [9 VAC 5-60-30 C]

33. Provisions have been added requiring that sampling ports shall be adequate for applicable test methods. [9 VAC 5-60-30 E 1]

#### **SUMMARY OF PUBLIC PARTICIPATION PROCESS**

A public hearing was held in Richmond, Virginia on November 17, 1999. One person attended the hearing, and did not offer testimony; and five additional written comments were received during the public comment period. As required by law, notice of this hearing was given to the public on or about October 11, 1999 in the Virginia Register and in seven major newspapers (one in each Air Quality Control Region) throughout the Commonwealth. In addition, personal notice of this hearing and the opportunity to comment was given by mail to those persons on the Department's list to receive notices of proposed regulation revisions. A list of hearing attendees and the complete text or an account of each person's testimony is included in the hearing report which is on file at the Department.

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#### **ANALYSIS OF TESTIMONY**

Below is a summary of each person's testimony and the accompanying analysis. Included is a brief statement of the subject, the identification of the commenter, the text of the comment and the Board's response (analysis and action taken). Each issue is discussed in light of all of the comments received that affect that issue. The Board has reviewed the comments and developed a specific response based on its evaluation of the issue raised. The Board's action is based on consideration of the overall goals and objectives of the air quality program and the intended purpose of the regulation.

#### <u>111(d) Plans</u>

1. **SUBJECT**: 111(d)/129 Plans (9 VAC 5-40-20 and 9 VAC 5-50-20)

**COMMENTER:** United States Environmental Protection Agency (EPA) by Judith M. Katz. Director. Air Protection Division

**TEXT:** The proposed Virginia Administrative Code (VAC amendments for Existing Stationary Sources, 9 VAC 5-40-20 G 6, and New and Modified Stationary Sources, 9 VAC 5-50-20 G 6, both contain a VE waiver provision for a source that fails to meet an applicable opacity standard, provided that specific Board conditions are met. Such a waiver is not consistent with the requirements of Subpart B, unless the submitted III(d) plan properly provides for the application of "less stringent emissions standards" through a demonstration consistent with the requirements of 40 CFR ∍60.24(f). Specifically, a reduced VE emissions standard or provision, for example, is approvable only if the State demonstrates to EPA with respect to the designated facility or class of facilities that: 1) the cost of control would be unreasonable because of plant age, location, or basis process design; 2) it would be a physical impossibility to install necessary control equipment; and 3) there are other factors that make the application of less stringent emission standards more reasonable.

Furthermore, for solid waste incinerator 111(d)/ 129 plans, the "at least as protective as the emissions guidelines (EG)" maximum available control technology (MACT) requirement of Section 129 of the CAA now eliminates the plan flexibility provided under 40 CFR  $\ni$ 60.24(f) for the application of "less stringent emissions standards".  $\ni$ 60.24(f) of Subpart B was revised on December 19, 1995 (see 60 FR 65414) to provide for this more stringent requirement for 111(d)/129 plan approvals.

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Accordingly, the above concern must be properly addressed with the submittal of any Virginia 111(d) or 129 plan that includes the proposed VE waiver under the proposed VAC.

**RESPONSE:** The commenter is correct regarding submittals of 111(d) plans. It is not intended to make these provisions a part of a 111(d) Plan submittal at this time.

No changes have been made to the proposal based on this comment.

# Excess Emissions During Startup, Shutdown, Malfunction and Maintenance (9 VAC 5-20-180, 9 VAC 5-40-30, 9 VAC 5-50-30 and 9 VAC 5-60-30)

2. **SUBJECT:** Excess Emissions During Periods of Startup, Shutdown, Malfunction and Maintenance (9 VAC 5-20-180, 9 VAC 5-40-30 and 9 VAC 5-50-30)

**COMMENTER:** United States Environmental Protection Agency (EPA) by Judith M. Katz, Director, Air Protection Division

TEXT: EPA recently clarified its existing policy on excess emissions during periods of startup, shutdown and malfunction. The EPA policy is described in the EPA memorandum "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown" (EEM memo) dated September 20, 1999. EPA is currently reviewing all State Implementation Plans (SIPs) to ensure that they adhere to the policies outlined in the memorandum. Since the state is revising portions of 9 VAC 5-20-180 Facility and Control Equipment Maintenance or Malfunction, this provides an opportunity to revise this portion of the regulations in accordance with this policy. EPA's existing policy regarding excess emissions during maintenance is contained in an older memorandum entitled "Policy on Excess Emissions During Startup, Shutdown, Maintenance and Malfunctions" (Maintenance memo) dated Feb. 15 1983.

9 VAC 5-40-30 C contains revised language that states "Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of an emission test nor shall

emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard." This blanket exemption from emission standards during periods of startup, shutdown, and malfunction cannot be approved as a SIP revision. Provisions related to excess emissions must adhere to the criteria and limitations identified in the EEM memo.

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This comment also applies to 9 VAC 5-50-30 C.

**RESPONSE:** It is the intent to develop regulatory programs that ensure equity in enforcement and consistency in implementation across all regions of Virginia. The regulatory program for the control and abatement of air pollution in the Commonwealth is a comprehensive program that includes a variety of federal program including  $\ni$  110,  $\ni$  111(d) and  $\ni$  129 submittals, NSPS, MACT, Title V and various other permit programs. It has been the policy to incorporate, when appropriate, the general provisions found Subpart A of 40 CFR Part 60 as the basis for the special provisions included in 9 VAC 5 Chapter 40 (existing sources) and 9 VAC 5 Chapter 50 (new and modified sources). This is done for two reasons: to enhance the possibility of EPA approval and to maintain a certain level of consistency between the regulation of implementation plan sources and NSPS sources for which the state has delegation from EPA. This approach also helps ensure consistent enforcement: minimizes different interpretations of language between the state and EPA; and reduces the burden of possibly conflicting requirements since the state must not substantively change the NSPS requirements if it is to maintain the delegation authority.

Following the above concept, one of the changes in this proposal was to include in 9 VAC 5-40-30 C and 9 VAC 5-50-30 C certain provisions of 40 CFR 60.8(c), which provide:

"Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of an emission test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard."

This language provides that excess emissions during startup, shutdown and malfunction are not an violation of the applicable standard for NSPS sources, in effect an exemption for NSPS sources.

In the 1999 EEM memo EPA says: "In general, startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design, and implementation of operating

procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods." It is particularly distressing that EPA feels that the newer NSPS sources cannot meet the above criteria and should be granted this exemption while the generally older SIP sources should not be granted the exemption. For the SIP sources, the owners may not have had the opportunity to plan and design the source to address these startup and shutdown issues. Also, EPA mentions that states that regulate the NSPS sources should not change the NSPS requirements to meet the policies in the 1983 (maintenance) and 1999 (EEM) memos. No rationale is provided for why NSPS sources should have less stringent requirements addressing this issue than implementation plan sources. It will be difficult for state enforcement staff to go to a facility that has two emissions units, one being an implementation plan source and one being a NSPS source, and having to tell the owner the implementation plan source must meet more stringent requirements than the NSPS source.

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In the above comment EPA says: "This blanket exemption from emission standards during periods of startup, shutdown, and malfunction cannot be approved as a SIP revision. Provisions related to excess emissions must adhere to the criteria and limitations identified in the EEM memo." As mentioned previously, the language to which EPA objects is taken verbatim from 40 CFR 60.8(c). While this provision of 40 CFR 60.8(c) is not entirely clear, it may be in erroneous to refer to the provision as being a "blanket exemption". The exemption may not be blanket but only applicable during stack tests since it appears in 40 CFR 60.08 (performance tests) as opposed to 40 CFR 60.11 (compliance with standards and maintenance requirements). It would seem that any blanket exemption should be in 40 CFR 60.11 which does contain one blanket exemption in 60.11(c).

Given the choice between the requirements of the 1983 maintenance memo verses the requirements of the Code of Federal Regulations, Virginia believes it is more prudent to include the language out of the CFR. However, changes have been made to clarify that this "blanket exemption" is only for initial emission or performance tests.

3. **SUBJECT:** Excessive Emissions During Periods of Startups, Shutdowns, and Malfunctions (9 VAC 5-40-30, 9 VAC 5-50-30 and 9 VAC 5-60-30)

**COMMENTER:** Reynolds Metals Company by Andy Gates, Air Quality Engineer

**TEXT:** We endorse the clarification of the long-standing exemption from enforcement for "excessive" emissions during periods of startups, shutdowns, and malfunctions. These exemptions appear in 9 VAC 5-40-30 C, 9 VAC 5-50-30 C, and 9 VAC 5-60-30 C.

However, we vehemently disagree with the analysis of this issue contained in the preamble to these proposed regulations. It is apparent that the person performing the review is not aware of some of the safety and other issues that are present at manufacturing facilities during periods of startup, shutdown, and malfunctions. The reviewer believes that industries are not doing all they can to minimize emissions during periods of startup, shutdown, and malfunction; and, that industry should be held to meet the same emission standards as apply during periods of normal operations. Furthermore, the reviewer believes that there is a significant financial benefit to this exemption and that industry should be forced to comply with the "normal" operating standards during the "non-normal" periods. We believe these allegations are simply not true in general. All industries in Virginia are held to the same standard of operating their equipment with good principles and practices of air pollution control and the obligation to continually minimize emissions. There are good and longstanding reasons that sources have not been held the "normal operating" standards during these periods. We applaud the DEQ for proposing straightforward language.

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**RESPONSE:** Support for the proposal is appreciated. Please note, however, that language will be added to the regulation to clarify that the exemption applies only during initial emission or performance testing.

Concerning the analysis in the "preamble" of the regulations, the commenter is referring to the economic analysis conducted by the Department of Planning and Budget.

#### Facility and Control Equipment Maintenance or Malfunction (9 VAC 5-20-180)

4. **SUBJECT**: Facility and Control Equipment Maintenance or Malfunction (9 VAC 5-20-180)

**COMMENTER:** United States Environmental Protection Agency (EPA) by Judith M. Katz, Director, Air Protection Division

**TEXT**: 9 VAC 5-20-180 B and C indicate that excess emissions for maintenance or malfunction that do not exceed one hour do not need to be reported. These sections imply that these excess emissions are not a violation of a source's emission limit. Although an hour may seem like a brief time period, short-term standards could be effected by any time period when a source had excess emissions. This automatic "exemption" should be removed or clarified to indicate that these emissions may still be considered a violation. As mentioned previously, EPA's policy on excess emissions during maintenance can be found in the Maintenance memo cited above, and the policy on excess emissions and malfunctions can be found in the EEM memo.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal to clarify that 9 VAC 5-20-180 applies to all excess emissions during facility and control equipment maintenance or malfunction.

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5. **SUBJECT**: Facility and Control Equipment Maintenance or Malfunction (9 VAC 5-20-180)

**COMMENTER:** United States Environmental Protection Agency (EPA) by Judith M. Katz, Director, Air Protection Division

**TEXT:** Section G in 9 VAC 5-20-180 states that "No violation of applicable emission standards or monitoring requirements shall be judged to have taken place if the excess emissions or cessation of monitoring activities is due to a malfunction provided that: .... .. sources follow procedures as outlined in this section on malfunctions. While some of the procedures outlined in the section reflect the criteria that may be used to establish an affirmative defense, the section lacks portions of the criteria and limitations outlined in the EEM memo. The state should incorporate the appropriate criteria as outlined in the EEM memo into this section of their regulations.

**RESPONSE**: Provisions have been added to ensure that all criteria and limitations to establish an affirmative defense are included.

## Compliance Determination (9 VAC 5-40-20 and 9 VAC 5-50-20)

6. **SUBJECT**: Compliance (9 VAC 5-40-20 and 9 VAC 5-50-20)

**COMMENTER**: United States Environmental Protection Agency (EPA) by Judith M. Katz, Director, Air Protection Division

**TEXT:** In 9 VAC 5-40-20 A 2 and 9 VAC 5-50-20, the regulations state that "Compliance with federal requirements in this chapter may be determined by alternative or equivalent methods only if approved by the administrator". Since compliance depends upon testing methods as well as the performance of testing/monitoring equipment, EPA interprets this statement as requiring administrator approval for changes to these types of items, such as performance specifications of Continuous Opacity Monitoring Systems (COMS) or waiving the requirements for an emissions test.

**RESPONSE**: Section 110 state implementation plans (SIP) are to be developed and implemented by states after approval by EPA. EPA has traditionally tried to limit discretionary authority of the states. Limiting discretionary authority in the typically bureaucratic way is very difficult to administer because it is impossible to write a regulation that covers every

contingency that may come up and to address situations where flexibility is needed in a timely manner. The SIP revision is a particularly difficult mechanism for this purpose as it has been the Commonwealth's experience that EPA cannot handle the workload associated with this approach in a timely manner and the action timetable on a particular revision is typically measured in years. EPA also has difficulty in promulgating regulations within reasonable timetable. For this reason, EPA generally addresses these types of issues by policy rather than promulgating regulations. The recent memos cited in comment #2 on excess emissions are examples. Whether regulating by policy is enforceable is questionable, but in any case that is the system.

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There is, however, one instance where EPA does limit discretionary authority by regulation. This addresses the use of alternative test methods and is found in 40 CFR 51.212(c)(2). A comparable but less clear provision is found in 40 CFR 60.24(b)2, applicable to € 111(d) implementation plans.

The currently approved SIP allows the use of (in lieu of the EPA reference methods) alternative or equivalent test methods upon approval of the Board. State regulations also contain provisions (9 VAC 5-20-180, copy attached) that recognize that the Board may have to get EPA approval to implement certain decisions in the regulatory program. However, these provisions are non-specific in order to deal with the wide range of procedural mechanisms EPA has for granting discretionary authority and to minimize the bureaucracy associated with the decision making process. The new, specific provisions of 9 VAC 5-40-20 A 2 and 9 VAC 5-50-20 A 2 are intended to update the SIP to meet the requirements of 40 CFR 51.212(c)(2) and 40 CFR 60.24(b)2, nothing more. Essentially these new provisions establish a dual approval system whereby the use of alternative or equivalent test methods must be approved by both the Board and EPA.

No changes have been made to the proposal based on this comment.

7. **SUBJECT**: Compliance (9 VAC 5-40-20 and 9 VAC 5-50-20)

**COMMENTER**: American Electric Power by Jeffrey P. Novotny, Air Quality Section, Environmental Services

**TEXT:** In 9 VAC 5-40-20 A 3 and 9 VAC 5-50-20 A 3, the protocol to determine the initial compliance of a source with the revised regulation requires a minimum total time of observations of three (3) hours (30 six-minute averages) for the emission test or other set of observations (meaning those fugitive type emission sources subject only to an opacity standard). Fugitive emissions are defined in 9 VAC 5-40-70 C and 9 VAC 5-50-70 C as "emissions which are generated by industrial or other activities and which do not pass through a stack, chimney, vent, or other functionally

equivalent opening, but which may escape from openings (such as windows, doors, ill-fitting closures or poorly maintained equipment) or material handling equipment". The requirement for unnecessarily testing all potential sources for fugitive emissions, as required in the proposed rule, is burdensome to industry. A typical source or material handling system may have several potential sources for fugitive emissions, including several hundred feet of conveyor. The time required to perform a 3-hour test on each potential source may run into weeks of testing. An alternative protocol is recommended which will first allow the source to perform a visible qualitative evaluation, looking at the potential sources for visible fugitive emissions over a much shorter time frame. If visible emissions are discovered, provide the option for the source to correct the problem or perform opacity testing on a 6-minute or 12-minute time period to verify compliance with the standard. If the emission is below the standard, no further action is required. If the standard is exceeded, the 3-hour test is required to be completed after corrective actions are taken.

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RESPONSE: The new language in 9 VAC 5-40-20 A 3 and 9 VAC 5-50-20 A 3 is directly from the CFR and is necessary to ensure equity and consistent implementation of air regulatory programs as well as be consistent with EPA requirements (See response to comment #2). However, the regulation does provide for the use of alternative and equivalent test methods upon the approval of the Board and, if necessary, EPA. It should be noted that the new language addresses initial compliance. For existing sources the procedure would be used for determining initial compliance with a new regulation, emission standard, etc., not necessary for ongoing compliance evaluations.

No changes have been made to the proposal based on this comment.

8. **SUBJECT:** Compliance (9 VAC 5-40-20 and 9 VAC 5-50-20)

**COMMENTER:** American Electric Power by Jeffrey P. Novotny, Air Quality Section. Environmental Services

**TEXT:** In 9 VAC 5-40-20 G and 9 VAC 5-50-20 G, the provisions for demonstrating compliance with opacity standards appear to develop a pecking order where the State will first consider data by visual reading by Reference Method 9, followed by continuous monitoring using a transmissometer. While COM may be petitioned to be the compliance monitoring method, these two sections state that Reference Method 9 data will determine compliance if both COM and Method 9 data are available for the same period of time. While Method 9 is a reference method, the method is dependent on both a human element of the visual reader and a environmental element when considering the time of day, sky conditions, wind variations and so on. The COM data developed by equipment

designed and operated according to the specifications developed by the EPA and state should be considered equally with that of visual data and the conditions that existed at the time of the readings. Both methods will need to take into account the conditions of when the measurement was taken. Because of the uncertainty of which measurement will provide the more credible result, considering operating and environmental conditions, no specific order should be included into a regulation. If the State has information to indicate, at all times, the visual reading is more credible than the transmissometer, this should be provided or referenced.

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**RESPONSE**: As mentioned previously (see response to comment #2), the Board attempts to adopt and implement a comprehensive air pollution abatement program across the Commonwealth. The method described is not an arbitrary "pecking order" but rather a logical approach to determine compliance so that all sources are dealt with in an equitable and consistent manner. If necessary, case-by-case evaluations and determinations are made.

No changes have been made to the proposal based on this comment.

#### Compliance: Any Credible Evidence (9 VAC 5-40-20 J, 5-50-20 I)

9. <u>SUBJECT</u>: Any Credible Evidence ("ACE") Provisions (Sections 9 VAC 5-40-20 J, 5-50-20 I)

**COMMENTER:** Virginia Manufacturers Association (VMA) by Thomas E. Knauer, Esq. and Reynolds Metals Company by Andy Gates, Air Quality Engineer

**TEXT:** The Board proposes to add 9 VAC 5-40-20 J, 5-50-20 I, and 5-60-20 E "to allow the use of any credible evidence or information for determining compliance certifications or violations." 16 *Va. Reg.* 134 and 135. The VMA believes the acceptability of certain information as evidence of a violation of the law is an evidentiary matter squarely within the province of the courts. Neither EPA nor a state agency can dictate what is "credible" evidence for the purpose of determining compliance with the law. We believe that as an evidentiary matter, a statement in the Virginia air regulations about the use of any credible evidence is totally inappropriate. (We also note that language mandating the use of any credible evidence found its way into the Department's "boilerplate" permit language. The VMA has previously expressed its objections in general to the inclusion of ACE language in permits and specifically about the wording of the ACE boilerplate.)

The ACE provisions are undoubtedly being inserted because EPA wants them in the Virginia regulations. The VMA urges the Board to resist EPA's pressure to include inappropriate ACE provisions in the Virginia air

regulations. We recommend the Board delete the ACE provisions before finalizing the revisions proposed in D97.

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**RESPONSE:** Prior to the Clean Air Act Amendments (CAA) of 1990, violations of air emissions could only be proved by using reference test method data. Section 113(e) of the CAA included the follow new phrase (underlined) in the list of factors to consider in determining penalties:

the size of the business, the economic impact of the penalty on this business, the violators' full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

The EPA promulgated a regulation in 1997 that allowed "any credible evidence" to be used to establish a violation. It is commonly referred to as the ACE Rule. The provisions of this rule can now be used in all federal permit programs, including Title V of the CAA.

EPA has also indicated that not including this language into state regulatory programs will be considered a violation of federal regulations and grounds for SIP disapproval. This same language is included in the federal NSPS, NESHAPS, and MACT programs. It is also included in 40 CFR Part 52 of the federal regulations dealing with Federal Implementation Plans (FIPS).

The regulation has survived a court case brought before the U.S. Court of Appeals for the District of Columbia as well as a subsequent appeal to the U.S. Supreme Court. On June 21, 1999, the high court denied a request by industry petitioners to review the rule. The refusal to take the case upholds the earlier ruling by the D.C. circuit court.

Industry must cope with the requirement in most federally enforceable programs. To ensure compliance with the SIP submittal requirements and to provide state enforcement personnel the tools outlined in the CAA, it is necessary for the language to remain in the regulation.

No changes have been made to the proposal based on this comment.

10. **SUBJECT**: Any Credible Evidence Provisions (9 VAC 5-40-20 and 9 VAC 5-50-20)

**COMMENTER:** American Electric Power by Jeffrey P. Novotny, Air Quality Section, Environmental Services

**TEXT:** With the inclusion of the Credible Evidence statement in part 9 VAC 5-40-20 H and 9 VAC 5-50-20 I, the submittal of compliance certifications or determination of whether a violation of a standard has occurred or is occurring shall not preclude the use, including the exclusive use, of any credible evidence or information. The evidence shall at that time be weighed and a determination made of the appropriate use of the information presented. As discussed above (comment number 8) by providing a hierarchy of test methods, the ability to discern credible and possibly more accurate information will be removed from the agency.

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**RESPONSE**: The universe of appropriate information (or evidence) to be considered in the determination of a violation is enhanced, not limited by including the ACE language into the regulation. The commenter is correct that the logical approach and procedures for conducting a specific reference method for opacity, for example, may be structured, but the inclusion of the ACE language makes it possible to utilize <u>any</u> credible evidence, including data gathered outside of the boundaries of a reference method. It is recognized that this additional information may be either a benefit or a burden to the source when making considering whether a violation has occurred.

No changes have been made to the proposal based on this comment.

#### **Definitions:**

#### "federally enforceable"

11. **SUBJECT**: Redefining "Federally Enforceable Requirements" (9 VAC 5-10-20)

**COMMENTER:** Virginia Manufacturers Association (VMA) by Thomas E. Knauer, Esq. and Reynolds Metals Company by Andy Gates, Air Quality Engineer

<u>TEXT</u>: Proposed revisions in D97 would significantly change the concept of "federally enforceable requirements" in the Virginia regulations. Specifically, the definition of "federally enforceable" in 9 VAC 5-10-20 and the definition of "federal requirements" in 9 VAC 5-40-20 A 2, 5-50-20 A 2, and 5-60-20 A 2 include in relevant part:

Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA in accordance with 40 CFR Part 51.

Limitations and conditions that are part of an operating permit issued pursuant to a program approved by EPA into a [state implementation plan] as meeting EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.

This would mean that any and all terms contained in preconstruction permits issued by the Department pursuant to Virginia's minor new source review permitting program, 9 VAC 5-80-10, or in a state operating permit issued pursuant to 9 VAC 5, chapter 80, article 5, with public notice would be enforceable by the EPA and citizens under the federal Clean Air Act. This would include even those permit terms based on state-only requirements that are not otherwise enforceable under the federal Clean Air Act. Such state-only requirements would include requirements governing odor (9 VAC, chapters 40 and 50, article 2), state air toxics (9 VAC 5, Chapters 40 and 50, article 3), and any other regulatory requirements that have not been approved by the EPA for inclusion in the Virginia SIP.

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We understand EPA has recently begun insisting that terms and conditions of permits issued pursuant to SIP approved permitting programs are federally enforceable. We think this represents a departure from the prevailing understanding in Virginia. To illustrate, the Virginia Title V regulations currently do not require permit terms derived from state-only requirements to be included as applicable requirements in a source's Title V permit. EPA granted interim approval of Virginia's Title V program without objection to this approach. However, again at EPA's recent insistence, the Board is in the process of changing Virginia's Title V regulations on this point.

The VMA strongly urges the Department and Board to resist EPA's strongarm tactics to create federal enforceability where it didn't exist in the past. We have serious concerns about the legality of EPA's position. We are also very concerned about the practical consequences to Virginia businesses of EPA's federalization of Virginia law, particularly in the NSR and Title V permitting programs in Virginia. We recommend the Board and Department delete the new provisions changing the concept of federal enforceable requirements and continue using the current concept unless and until EPA issues a formal SIP call to Virginia requiring it to adopt EPA's concept.

**RESPONSE**: This proposal does not change the concept of "federally enforceable requirements" but reflects the concept as it currently exists. The concept of what requirements are federally enforceable is determined by the enabling regulations for the programmatic requirement. In addition, the

definitions and provisions in this proposal related to this issue are sufficiently flexible as to allow changes.

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The commenter states this proposal would make:

"... any and all terms contained in preconstruction permits issued by the Department pursuant to Virginia's minor new source review permitting program, 9 VAC 5-80-10, or in a state operating permit issued pursuant to 9 VAC 5, chapter 80, article 5, with public notice would be enforceable by the EPA and citizens under the federal Clean Air Act."

This is incorrect. The construct of the regulations for those permit programs and how they are incorporated in the state implementation plan determine whether they are federally enforceable or not. The terms and conditions for those permit programs were federally enforceable before the provisions of this regulatory action became effective. The only way this situation can be changed is by submitting a revised version of the regulations to EPA and getting an approval that recognizes that certain terms and conditions are not federally enforceable.

There are plans underway to submit regulations that would get an approval that recognizes that certain permit terms and conditions are not federally enforceable with regard to the minor new source review permit program (9 VAC 5-80-10). Until that process is complete, the situation will not change.

This opinion is supported by comments made by EPA regarding both the permit program to satisfy the requirements of section 112(g) of the Clean Air Act and the Title V permit program.

Regarding the recently adopted regulation to address section 112(g) EPA said:

"... any limitation or condition that is part of a permit issued under 40 CFR Part 52.21 or that was approved by EPA in a State Implementation Plan is, by definition, federally enforceable. The language added in these subsections will not preempt the definition of federally enforceable for other programs."

In addition, EPA has indicated that despite the fact that the state Title V permit program regulations specifically provide that terms and conditions in minor new source review permits are not to be federally enforceable, EPA contends that this provision of the state Title V permit regulation cannot override the fact that the minor new source review permit program regulations were approved into the implementation plan in a manner that makes the terms and conditions federally enforceable.

No changes have been made to the proposal based on this comment.

12. **SUBJECT**: Definition of "Federally Enforceable" (9 VAC 5-10-20)

**COMMENTER:** American Electric Power by Jeffrey P. Novotny, Air Quality Section, Environmental Services

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TEXT: The definition of "Federally Enforceable" in the proposed regulation is unclear. Item 1 in the definition refers to compliance with standards and limitations of Section 112 of the federal Clean Air Act as amended in 1990 while Item 2 refers to compliance with the emission standards and limitations of Section 112 of the federal Clean Air Act before it was amended in 1990. The combined language of items 1 and 2 implies that all limitations developed pursuant to the Clean Air Act, before and after being amended in 1990, are federally enforceable. Congress amended the statute in 1990 to assure that specific conditions were added or revised. All other parts of the statute remain in effect. The state should not include a statement within their regulations to include conditions on a law that has since been amended. If the condition is based on a portion of the regulations that has no legal basis because the Clean Air Act amendments have eliminated or altered the language for a specific condition, there is no basis for enforcement.

**RESPONSE**: Please see response to comment #11.

No changes have been made to the proposal based on this comment.

#### "malfunction"

13. **SUBJECT**: Definition of "Malfunction" (9 VAC 5-10-20)

**COMMENTER:** Virginia Manufacturers Association (VMA) by Thomas E. Knauer, Esq. and Reynolds Metals Company by Andy Gates, Air Quality Engineer

**TEXT:** The Board proposes changes to the definition of "malfunction" in 9 VAC 5-10-20 to make it clear that equipment "failures that are caused in part by poor maintenance or careless operations are not malfunctions." We are concerned about the term "in part" in this definition. After the fact, someone might second guess a company's maintenance program or operating conditions to conclude that a deficiency in either was, at least "in part," responsible for a malfunction. The problem with the proposed definition is that it opens up the possibility that every malfunction can be attributed to "poor maintenance" or to "careless operations" no matter how trivial the supposed maintenance or operational deficiency might have been.

In the preamble to the proposed rule, the Board states that the change in the definition of "malfunction" would "clarify that failure of air pollution control equipment caused by poor maintenance or careless operation will not be considered a 'malfunction.'" 16 Va. Reg. 134. Note the Board did not include the problematic term "in part" in its statement of the purpose for the proposed change to the definition. We are concerned that the term "in part" detracts from the central purpose of the proposed change to the definition of "malfunction." We believe this concern can be addressed while preserving the essence of the proposed change by simply deleting the term "in part" from the definition. In this way the language of the revised definition would match the stated purpose for amending the definition.

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**RESPONSE**: The language for the definition of "malfunction" is consistent with federal language and 9 VAC 5-80-60 of Virginia's Title V Permit Regulation. It is important that the regulation be consistent, particularly in enforcement applications regarding Title V which is a federal mandated program.

No changes have been made to the proposal based on this comment.

14. **SUBJECT:** Definition of Malfunction (9 VAC 5-10-20)

**COMMENTER:** Virginia Power by Pamela F. Faggert, Vice President and Chief Environmental Officer

<u>TEXT</u>: Virginia Power agrees that the failure of pollution control equipment due to poor maintenance or careless operation should not be considered a "malfunction." We understand the position the Department of Environmental Quality (DEQ) is taking but we believe that this proposal will not, in and of itself, accomplish that goal.

There is no guidance about how the DEQ will determine whether poor maintenance or careless operation has occurred. Virginia Power firmly believes that determination cannot be left up to the discretion, and/or, subjective interpretation of a DEQ inspector. The lack of specific definitions for poor maintenance or improper operation in this proposed revision is a concern. We believe that the absence of those definitions will in all likelihood lead to subjective determinations. We recommend that clear definitions and detailed guidance be incorporated as a part of the regulations to provide a clear understanding of the expectations that the DEQ envisions for sources to meet these requirements. The absence of those definitions and guidance will likely render this requirement unenforceable.

**RESPONSE:** As stated in the previous comment, this language is currently included in the Title V permit program, therefore, these decisions will be made by DEQ personnel for that particular program. It is important that the

definitions for the Board's regulations remain consistent to the extent allowable by federal programs.

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No changes have been made to the proposal based on this comment.

#### "volatile organic compound"

15. **SUBJECT**: Definition of "volatile organic compound" (9 VAC 5-10-20)

**COMMENTER**: Virginia Manufacturers Association (VMA) by Thomas E. Knauer, Esq.

<u>TEXT</u>: In general, the VMA supports regulatory revisions that eliminate Virginia requirements that are more stringent than federally required (e.g., by conforming Virginia's definition of "volatile organic compound" with the federal definition) and that reduce the regulatory burdens on Virginia businesses. To the extent Revision D97 would accomplish these goals, the VMA supports the proposed changes.

**RESPONSE**: Support for the proposal is appreciated.

No changes have been made to the proposal based on this comment.

#### Emission Testing (9 VAC 5-40-30 and 9 VAC 9-50-30)

16. **SUBJECT**: Emission Testing (9 VAC 5-40-30 and 9 VAC 9-50-30)

**COMMENTER**: American Electric Power by Jeffrey P. Novotny, Air Quality Section, Environmental Services

<u>TEXT</u>: The requirement in 9 VAC 5-40-30 F 1 and 9 VAC 5-50-30 F 1 discusses the requirement for the owner and operator to provide access to sample a source. The additional language proposed "this includes (1) constructing the air pollution control system such that volumetric flow rates and pollution emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during emission tests as demonstrated by applicable test methods and procedures. Where an existing source does not meet this requirement, the source may incur a large financial obligation to engineer a system to meet this requirement, including installing new or revised ducts or stacks. The design of the test protocol should be used to dampen the effects of the gas flows within existing ducts or stacks. Where a new installation is being designed, the owner or operator shall take into account these effects and provide the best available design to minimize the potential for cyclonic flow.

**RESPONSE**: Just as it is the intent to develop regulatory programs that ensure equity in enforcement and consistency in implementation (See comment #2), it is just as important to ensure that the same consistency is achieved for emissions and performance testing, data gathering and sampling where possible. As in the case with opacity monitoring (see comment #8), if necessary case-be-case evaluations and determinations can be made. Please see comment #18 which addresses technical issues regarding cyclonic flow during emission tests.

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No changes have been made to the proposal based on this comment.

17. **SUBJECT**: Emission Testing (9 VAC 5 -40-30, 9 VAC 5 -50-30 and 9 VAC 5 -60-30)

**<u>COMMENTER</u>**: Reynolds Metals Company by Andy Gates, Air Quality Engineer

**TEXT:** We endorse the additional flexibility provided for in 9 VAC 5-40-30 A, 9 VAC 5-50-30 A, and 9 VAC 5-60-30 A for conducting an emissions test at a facility by allowing the board to approve minor changes in EPA Reference Test Methodology, the use of an equivalent method or alternative methods, waivers of testing, and shorter sampling times and smaller sample volumes. We believe that codifying this will give DEQ Regional Directors greater leeway in approving specific facilities' methodologies without compromising environmental protection or yielding spurious test results.

**RESPONSE:** Support for the proposal is appreciated.

No changes have been made to the proposal based on this comment.

18. **SUBJECT**: Emission Testing (9 VAC 5 -40-30, 9 VAC 5 -50-30 and 9 VAC 5 -60-30)

**COMMENTER:** Reynolds Metals Company by Andy Gates, Air Quality Engineer

**TEXT:** Reynolds objects to the use of the phrase "free of cyclonic flow" where it occurs in the proposed 9 VAC 5-40-30 F 1, 9 VAC 5-50-30 F 1, and 9 VAC 5-60-30 E 1. The word "free" implies that there can be no cyclonic flow at the emission testing point. However, EPA has always allowed a certain small amount of cyclonic flow for an acceptable emission test. We recommend the following substitute wording in both locations:

(ii) providing a stack or duct with acceptable flow characteristics (e.g., acceptable non-cyclonic flow), as demonstrated by applicable test methods and procedures.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

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No changes have been made to the proposal based on this comment.

#### Emission Monitoring (9 VAC 5-40-40 and 9 VAC 5-50-40)

19. **SUBJECT**: Emission Monitoring (9 VAC 5-40-40 and 9 VAC 5-50-40)

**COMMENTER:** Virginia Power by Pamela F. Faggert, Vice President and Chief Environmental Officer

**TEXT:** We are concerned about the proposed addition of provisions that require continuous emissions monitoring systems (CEMS) to meet the performance specifications specified in 40 CFR Part 60. The new Part 75 CEMS requirements promulgated in 1993 for electric utilities subject to the Acid Rain requirements are by far more stringent than the Part 60 requirements. Therefore, we recommend that the DEQ incorporate a reference to the Part 75 requirements for electric utilities to make them the certification and auditing standard rather than the Part 60 regulations. In addition, other sources will be affected by the Part 75 requirements in the future as the NOx, budget plan and other NOx monitoring and reporting requirements become effective. The revisions to the Part 75 CEMS requirements that were promulgated on May 26, 1999, incorporated NOx, reporting requirements for those sources that will be subject to these many NOx, emissions regulations. Those sources will not be limited to electric utilities. Therefore, we recommend that the DEQ specify that any sources that become subject to the Part 75 requirements in the future will be subject to those requirements in lieu of the Part 60 reporting requirements.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

### Federal NSPS General Provisions (9 VAC 5-40-50 C and 9 VAC 5-50-50 C)

20. **SUBJECT:** Federal NSPS General Provisions (9 VAC 5-40-50 C and 9 VAC 5-50-50 C)

**COMMENTER**: Virginia Manufacturers Association (VMA) by Thomas E. Knauer, Esq.

**TEXT:** Revision D97 entails numerous changes to the Virginia air regulations based on portions of the general provisions governing federal new source performance standards("NSPS") set out in 40 CFR Part 60, subpart A. The apparent purpose of the proposed changes is to conform the

Virginia regulations to the federal NSPS requirements. However, in general we caution the Board about using federal provisions governing performance standards for new sources of criteria pollutants as the basis for making changes to the Virginia regulations governing existing sources, 9 VAC 5, chapter 40, or sources of hazardous air pollutants ("HAPs"), 9 VAC 5, chapter 60. In some instances such NSPS provisions may not be appropriate for existing or HAP sources.

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More specifically, we are concerned about two instances in which the Board proposes a significant deviation from the requirements in the NSPS general provisions. Proposed sections 5-40-50.C and 5-50-50.C would establish reporting requirements more burdensome than required in the corresponding NSPS provision, 40 CFR  $\ni$  60.7(c). Subsection C of 5-40-50 and 5-50-50 would require sources to submit a written report of excess emissions (as defined in the applicable emission standard) and monitoring systems performance report or summary report form, or both, to the board semiannually, except when . . . (ii) the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted . . . .

While virtually all of the rest of subsection C appears in 40 CFR  $\ni$  60.7(c), the bolded portion in the quote above does not.

In some instances, Title V sources may choose to use a continuous monitoring system ("CMS") as a way to certify compliance with an applicable requirement even though that applicable requirement does not require the use of a CMS. The proposed language in subsection C(ii) might require these sources to submit excess emissions reports quarterly if such sources are deemed to be using the CMS data "directly for compliance determination." This would force such sources to make quarterly reports even though the NSPS general provisions and Title V regulations require only semiannual reporting of compliance deviations (excess emissions). Because we do not think this is the intended outcome, we strongly urge the Board to remove subsection C(ii). This would ensure that the burden on Virginia sources is no more stringent than federally required.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

### Notifications, Records and Reporting (9 VAC 5-40-50 and 9 VAC 5-50-50)

21. **SUBJECT**: Notifications, Records and Reporting (9 VAC 5-40-50 and 9 VAC 5-50-50)

**<u>COMMENTER</u>**: Reynolds Metals Company by Andy Gates, Air Quality Engineer

**TEXT:** Reynolds objects to the proposed requirement for quarterly reporting of excess emissions and other reporting requirements for all sources where the continuous monitoring system data are "to be used directly for compliance determination." This requirement appears as Exception (ii) to the semiannual reporting requirements contained in both 9 VAC 5-40-50 C and 9 VAC 5-50-50 C.

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We cannot determine the basis for adding such a requirement. The General Provisions of the federal New Source Performance Standards (NSPS) contain two reasonable exceptions for semiannual reporting that are also appropriately contained in DEQ's proposed regulations: when the specific NSPS (or other standard) requires more frequent reporting and when the administrator (or the board) determines on a case-by-case basis that more frequent reporting is required. (See 40 CFR 60.7 (c).) The minimum requirements for Title V programs also contain a similar 6-month reporting period. Reports of any monitoring required under the Title V permit must be submitted at least every 6 months, with all instances of deviations from permit requirements clearly identified in the reports. (See 40 CFR 70.6 (a)(iii)(A) and 9 VAC 5-80-110 F 2 a).

We do not believe it was the intent of these regulation revisions to significantly expand the reporting frequency for all facilities in Virginia subject to Title V, especially since 9 VAC 5-80-110 F 2 a specifically recommends a six-month reporting period. Exception (ii) should be removed from both 9 VAC 5-40-50 C and 9 VAC 5-50-50 C. This will ensure consistency with the federal requirements and not place an unfair burden on Virginia sources.

**RESPONSE:** This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

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