

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 (Rev. D97)
Date:	June 11, 2002

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Please provide a brief summary of the new regulation, amendments to an existing regulation, or the regulation being repealed.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.

The first final regulation was adopted on March 30, 2000. In consideration of the substantive changes made to the final, the agency suspended the effective date and conducted additional public participation activities. The second final contains a number of changes but the primary changes return the regulation to use the no violation approach (if certain conditions are met) to address excess emissions during periods of startup, shutdown and malfunction (SSM) in lieu of the EPA approach whereby sources would be in violation for these excess emissions during periods of SSM but the sources could put forth an affirmative defense if certain conditions were met and avoid penalties.

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. Provisions relating to maintenance and malfunction of facility control and monitoring equipment are found in 9 VAC 5-20-180. The amendments:

- ◆ update requirements related to source surveillance (compliance, emission testing, monitoring, notification, records and reporting) to be consistent with new federal requirements and EPA policy.
- ◆ allow for the submittal of information electronically upon mutual consent by owner and Board, except for documents requiring signature or certifications.
- ◆ address concerns relating to maintenance and malfunction of facility control and monitoring equipment identified pursuant to the review of existing regulations mandated by Executive Order 15(94).
- ◆ allow the general provisions of 40 CFR Parts 60, 61 and 63 to be implemented under the authority of the state regulations.

Substantial Changes Made Since the First Final Stage

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

All of the changes made to the proposal pursuant to the EPA policies covering startup, shutdown and malfunction (SSM) were withdrawn. The withdrawal of these changes returns the regulation to use the no violation approach (if certain conditions are met) to address excess emissions during periods of SSM in lieu of the EPA approach whereby sources would be in violation for these excess emissions during periods of SSM but the sources could put forth an affirmative defense if certain conditions were met and avoid penalties. Details of the substantial changes made to the final are as follows:

- ◆ Returned the time limit for reporting malfunctions to four hours in the provisions covering maintenance and malfunctions. The original proposal changed it to six hours. This change was needed in order to keep the provisions consistent with the current SIP version of the regulation. [9 VAC 5-20-180 C]
- ◆ Clarified the use of the provisions covering maintenance and malfunctions with regard to sources subject to the various federal hazardous air pollutant programs. [9 VAC 5-20-180 F]
- ◆ Restored provisions that provided a permanent exemption for excess visible emissions during periods of startup, shutdown, and malfunction. These provisions were originally deleted because they were they were inconsistent with the other changes made to the proposal. Now that most of the other changes have been withdrawn, these provisions can be restored. However, because 9 VAC 5-40-20 A was not approved as part of the SIP, clarifying language has been added to prevent the use of the exemption for SIP requirements. [9 VAC 5-40-20 A; 9 VAC 5-50-20 A]
- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. This change was needed because EPA has yet to promulgate the quality assurance/quality control procedures to implement the use of COMS. [9 VAC 5-40-20 G 5 through 8; 9 VAC 5-50-20 G 5 through 8]
- ◆ Restored the requirement that excess emissions data and monitoring system performance reports be provided quarterly when the data are to be used directly for compliance certification. Normal reporting frequency is semiannual. This change was needed to gain approval by EPA. [9 VAC 5-40-50 C; 9 VAC 5-50-50 C]
- ◆ All of the changes made to the proposal (see below) were withdrawn except for numbers 2 and 10.

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]
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 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]

11. Deleted the requirement that excess emissions data and monitoring system performance reports be provided quarterly when the data are to be used directly for compliance certification. Normal reporting frequency is semiannual. [9 VAC 5-40-50 C; 9 VAC 5-50-50 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 May 21, 2002, 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 5 Chapters 10, 20, 40, 50 and 60). The regulation amendments are to be effective on August 1, 2002.

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 the State Air Pollution Control Board possesses the statutory authority to promulgate the final regulation amendments 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 final 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).

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 "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".

2. 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 (SIP).

3. 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).

4. Provisions have been added to allow for the submittal of information electronically upon mutual consent by owner and Board, except for documents requiring signature or certifications.

5. 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.

6. Provisions that provide a permanent exemption for excess visible emissions during periods of startup, shutdown, and malfunction have been changed to prevent the use of the exemption for SIP requirements.

7. Provisions have been added to allow the use of any credible evidence or information for determining compliance certifications or violations.

8. Provisions have been added specifying that appropriate reference test methods shall be used for emission tests and performance tests unless the board, in advance, deems otherwise using criteria specified in the regulation.

9. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered representative conditions during the initial emissions test and initial performance test.

10. 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.

11. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless (i) more frequent reporting is required by a specific emission standard, (ii) the data are to be used directly for compliance certification; or (iii) the Board determines that more frequent reporting is required.

12. Provisions have been added providing that certain general provisions of 40 CFR Part 60 are to be implemented under the authority of 9 VAC 5 Chapter 50.

13. 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 9 VAC 5 Chapter 60.

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 is a more streamlined approach to pollution control. Changes within the regulation will ensure more timely reporting of data and records. This is particularly true with the addition of the electronic reporting of information. Requirements related to source surveillance (compliance, emission testing, monitoring, notification, records and reporting) will be consistent with new federal requirements and EPA policy, including the requirement that excess emissions data and monitoring system performance reports be provided quarterly when the data are to be used directly for compliance certification. Normal reporting frequency is semiannual. In addition, general provisions of 40 CFR Parts 60, 61 and 63 will be implemented under the authority of the state regulations and 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 many. The provisions that allow for the department to utilize technological advancements including the submittal of information electronically upon mutual consent by owner and Board, except for documents requiring signature or certifications is significant. This will streamline much of the workload for staff. In addition, changes will ensure a clear enforcement basis for determining compliance with the emission standards and other applicable requirements because the requirements for compliance, emission testing, monitoring, notification, records and reporting will now be consistent with new federal requirements. Sources and staff will have the flexibility to allow alternative monitoring systems for sources subject to

40 CFR Part 75, if appropriate. These changes will ensure a more comprehensive state program. 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. The summary and analysis addresses those comments received pursuant to the additional opportunity for oral and written comments under § 2.2-4007 J of the Code of Virginia.

Detail of Changes

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

1. The term "affirmative defense" has been added. [9 VAC 5-10-20]
 - ◆ This change has been withdrawn.
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 and EPA. [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]
 - ◆ The provisions have been revised to clarify that 9 VAC 5-20-180 also applies to facility monitoring equipment maintenance or malfunction.

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].

◆ This change has been withdrawn.

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]

◆ Returned the time limit for reporting malfunctions to four hours in the provisions covering maintenance and malfunctions. The original proposal changed it to six hours. [9 VAC 5-20-180 C]

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]

◆ Clarified the use of the provisions covering maintenance and malfunctions with regard to sources subject to the various federal hazardous air pollutant programs. [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]

◆ This change has been withdrawn.

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]

◆ This change has been withdrawn.

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]

- ◆ This change has been withdrawn.

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]

- ◆ The provisions have been revised to clarify that they do not apply to documents requiring signature or certifications.

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]

- ◆ This change has been withdrawn.

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 4]

- ◆ This change has been withdrawn. However, because the provisions were not approved as part of the SIP, clarifying language has been added to prevent the use of the exemption for SIP requirements. [9 VAC 5-40-20 A 4]

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]

- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [9 VAC 5-40-20 G 5 through 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]

◆ This change has been withdrawn.

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 representative conditions during emission testing or a violation of an emission limit unless otherwise specified in the applicable standard. [9 VAC 5-40-30 C]

22. Provisions have been changed to clarify that the exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial emissions test and the exemption provided for violations of an emission limit has been withdrawn. [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]

◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [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]

- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [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]

- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [9 VAC 5-40-50 A 4]

29. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless (i) more frequent reporting is required by a specific emission standard, (ii) the data are to be used directly for compliance certification; or (iii) 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]

- ◆ The provisions have been revised to clarify that they do not apply to documents requiring signature or certifications.

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]

- ◆ This change has been withdrawn.

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 4]

◆ This change has been withdrawn.

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]

◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [9 VAC 5-50-20 G 5 through 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]

◆ This change has been withdrawn.

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 representative conditions during performance testing or a violation of an emission limit unless otherwise specified in the applicable standard. [9 VAC 5-50-30 C]

41. Provisions have been changed to clarify that the exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during the initial performance test and the exemption provided for violations of an emission limit has been withdrawn. [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]

- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [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]

- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [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]

- ◆ Removed provisions that allowed the use of continuous opacity monitoring systems (COMS) to be used in lieu of emission tests to determine compliance. [9 VAC 5-50-50 A 7]

48. Provisions have been added that require semiannually reporting for owners that install a continuous monitoring system unless (i) more frequent reporting is required by a specific emission standard, (ii) the data are to be used directly for compliance certification; or (iii) 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]

- ◆ The provisions have been revised to clarify that they do not apply to documents requiring signature or certifications.

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]

- ◆ This change has been withdrawn.

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]

- ◆ This change has been withdrawn.

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, G, H, I, J]

57. Provisions have been added specifying excess emissions during periods of start-up, shutdown or malfunction shall not be considered representative conditions during emission testing or a violation of an emission limit unless otherwise specified in the applicable standard. [9 VAC 5-60-30 C]

58. Provisions have been changed to clarify that the exemption provided for excess emissions during periods of startup, shutdown, and malfunction applies only during

the initial emissions test and the exemption provided for violations of an emission limit has been withdrawn. [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]

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.

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

**SPECIAL PROVISIONS
(9 VAC 5 CHAPTERS 20, 40, 50 and 60)**

INTRODUCTION

On October 11, 1999, the Board published for public comment a proposal to amend its regulations concerning special provisions. In response to that request, comments were submitted that resulted in several changes be made to the original proposal, primarily to meet EPA regulations and policy. On March 30, 2000, the Board adopted final amendments to its regulations concerning special provisions, with an effective date of July 1, 2000. The final regulation amendments as adopted were published in the Virginia register on May 8, 2000. Pursuant to § 9-6.14:7.1 K of the Code of Virginia, at least 25 persons requested an opportunity to submit oral and written comments on the changes to the proposed regulation. Because of the substantive nature of these additional changes and the requests from petitioners, the proposal was reopened for public comment on those changes to the final regulation.

A public hearing was advertised accordingly and held in Richmond on July 20, 2000 and the public comment period closed on July 21, 2000. The substantive changes made to the proposed regulation 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 CHANGES TO ORIGINAL PROPOSAL

Below is a brief summary of the substantive changes made to the original proposal.

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]

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]

SUMMARY OF PUBLIC PARTICIPATION PROCESS

A public hearing was held in Richmond, Virginia on July 20, 2000. Twenty persons attended the hearing, with ten of those offering testimony; and seven 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 June 19, 2000 in the Virginia Register. 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.

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.

1. **SUBJECT:** General.

COMMENTER: U.S. Environmental Protection Agency

TEXT: EPA strongly supports the revisions made regarding excess emissions and affirmative defense provisions. We commend the effort that the Commonwealth has made to improve their State Implementation Plan (SIP) by making it comport with the policy found in the September 20, 1999 EPA memo entitled "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown."

RESPONSE: While support for the proposal is appreciated, we believe the EPA SSM policies* are misguided and unnecessary for the reasons explained below. To comply with the EPA SSM policies would entail changing the current state SSM regulations to operate under the affirmative defense approach instead of the no violation approach (or "automatic exemption" approach as EPA calls it). Under the no violation approach, excess emissions due to SSM are not considered violations as long as certain conditions are met. Under the affirmative defense approach, excess emissions due to SSM are considered violations; but if certain conditions are met, the owner may offer compliance with those conditions as an affirmative defense and avoid penalties.

*The EPA SSM policies are:

- ◆ "Policy on Excess Emissions During Startup, Shutdown, Maintenance and Malfunctions" (Maintenance memo) dated February 15 1983.
- ◆ "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown" (EEM memo) dated September 20, 1999.

The Board's current SSM regulations have been in effect for years. With some exceptions, EPA had approved those regulations into the Virginia SIP years ago. The

DEQ and regulated community have operated under those requirements for years and they have worked well with no evidence that their implementation has had any adverse impact on the attainment and maintenance of the air quality standards or public health. Now, EPA wants Virginia to change its regulations because they do not adhere to EPA's SSM policies.

We believe that EPA should not mandate Virginia to change its tried and tested regulatory approaches based on policies that were promulgated outside the regulatory process with no opportunity for public input and with questionable legal basis. If Virginia's regulations do not adhere to federal law or regulations, then EPA has every right and obligation to take the steps necessary to ensure that Virginia changes its regulatory approach to match those statutory requirements. But Virginia should be under no compulsion to change its regulatory approach to adhere to EPA policy because it is not law or regulation.

EPA found Virginia's malfunction provisions adequate to meet the requirements of the Clean Air Act when the agency initially approved them as part of the SIP. Since that time, EPA has made no SIP call finding that those provisions are now substantially inadequate to attain or maintain the NAAQS or to comply with any other requirement of the Act, as it must do under §110(k)(5) of the Act in order to compel the state to revise its SIP. As discussed above, the EPA SSM policies do not constitute such a finding, and Virginia is under no legal obligation to revise its existing SSM regulations.

Incorporating the EPA SSM policies in state regulations, especially in view of the fact that no finding has been made that such changes are necessary to comply with the Act, would pose an unnecessary hardship on the regulated entities in Virginia. Facilities experiencing malfunctions, most of which are beyond their control, would automatically be forced into noncompliance and Title V compliance certification would become virtually impossible. These periods of excess emissions due to SSM are short lived, difficult to quantify, and have minimal impact on ambient air quality, while implementation of the EPA SSM policies would impose an unnecessary burden upon the regulated community. Accordingly, the current no violation approach be retained.

Not only would the proposed startup and shutdown regulations impermissibly ratchet down existing emissions standards, they would cause older grandfathered sources to be more stringently regulated, and to be subject to far stricter emissions limitations in practice, than supposedly better-controlled New Source Performance Standard (NSPS) sources to which the revisions do not apply. Similar to Virginia's existing regulations, EPA's NSPS regulations provide that compliance with NSPS emissions standards, other than opacity, must be determined by a stack test. Also similar to Virginia's existing regulations, the NSPS regulations provide that a stack test must be conducted under representative operating conditions, and that periods of startup, shutdown and malfunction are not considered to be representative. With respect to opacity, the NSPS regulations - again like Virginia's - expressly provide that NSPS opacity standards do not apply during periods of startup, shutdown or malfunction. The construction of NSPS regulations wisely recognized the inherent difficulties of controlling emissions during startup, shutdown, and

malfunction conditions where unit operations are fluctuating and unpredictable. If the revisions are adopted as proposed, NSPS sources would be subject to less stringent emissions and opacity standards than older, grandfathered sources regulated under Virginia's SIP.

In the 1999 SSM policy 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 EPA SSM policies.

For the reasons presented above, along with numerous others presented in the comments below, we have removed the changes to the state SSM regulations that were added to comply with the EPA SSM policies. Should EPA issue a SIP call to address this issue, we will reconsider the issue at that time.

2. **SUBJECT:** Affirmative defense (9 VAC 5-40-10 E, 9 VAC 5-50-10 G, 9 VAC 5-60-10 E).

COMMENTER: U.S. Environmental Protection Agency

TEXT: The Notice of Reopening of the Public Comment Period for Proposed Regulation Revision D97 indicates in the summary of changes, under Item 7, that added provisions that specify an affirmative defense do not apply to excess emissions due to startup or shutdown for sources subject to New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, Maximum Achievable Control Technology Standards, federal acid rain provisions, or when excess emissions results in an exceedance of the ambient air quality standards or PSD increments. However, it appears that 9 VAC 5-40-10 E and 9 VAC 5-50-10 G do not include the exclusions for NESHAP and MACT. These exclusions from the use of affirmative defense must also be included.

RESPONSE: 9 VAC 5 Chapters 40 and 50 do not pertain to hazardous air pollutants, so the inclusion of provisions affecting hazardous air pollutants are not appropriate for inclusion in these chapters. 9 VAC 5 Chapter 60 pertains to hazardous air pollutants and the provisions in question may be found in 9 VAC 5-60-10 E.

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

3. **SUBJECT:** Reporting requirements (9 VAC 5-40-50 C).

COMMENTER: U.S. Environmental Protection Agency

TEXT: In previously reviewed documentation, 9 VAC 5-40-50 C indicated that reports on excess emissions and monitoring systems performance should be submitted quarterly. This provision now indicates these reports should be submitted semiannually. However, the last sentence reads “All quarterly reports shall be postmarked...the end of each six month period.” This appears to be contradictory. Also, if CMS data are to be used directly for compliance, these reports should be provided quarterly.

RESPONSE: The provisions of 9 VAC 5-40-50 are, in general, patterned after 40 CFR 60.7; and in this case, the language mirror’s the language in the EPA regulations. The changes were made to follow EPA’s initiative in providing recordkeeping relief for sources; however, since this is not acceptable for SIP purposes, the provision has been restored to its original wording.

4. **SUBJECT:** Applicability of affirmative defense.

COMMENTER: U.S. Environmental Protection Agency

TEXT: Page 2135 in the Summary section - Item 3 states that an affirmative defense does not apply to excess emissions due to malfunction, maintenance, startup or shutdown to sources subject to New Source Performance Standards (NSPS) and Maximum Achievable Control Technology Standards (MACT) under the provisions of the Clean Air Act (CAA). Because a particular NSPS is not equivalent to its related emissions guideline (EG), and MACT requirements are promulgated under both Sections 112 and 129 of the CAA, the language in Item 3 should be revised to include 111(d) plans and MACT requirements under both Sections 112 and 129.

RESPONSE: The summary was included in a notice that will not be published again, so there is no need to revise it.

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

5. **SUBJECT:** Definition of “federally enforceable.”

COMMENTER: U.S. Environmental Protection Agency

TEXT: The definition of “federally enforceable” lists several CAA provisions, and states that the list is not limited to the provisions listed. Nevertheless, the provisions of Section 129 are important and should be added to the list. Suggested VAC language for the list is “limitations and conditions that are part of Section 129 requirements.” Use of the general “Section 129 requirements” language would by CAA definitions and provisions include both MACT and 111(d)/129 plan requirements.

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

6. **SUBJECT:** Definition of “Section 111(d) plan.”

COMMENTER: U.S. Environmental Protection Agency

TEXT: The definition of “Section 111(d) plan” should be expanded to include hybrid “111(d)/129 plan” requirements under Section 129(b)(2) of the CAA.

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

7. **SUBJECT:** Compliance (9 VAC 5-40-20 A 2, 9 VAC 5-50-20 A 2, 9 VAC 5-60-20 A 2).

COMMENTER: U.S. Environmental Protection Agency

TEXT: The compliance paragraph lists several Clean Air Act standards and requirements; however, Section 129 is not referenced. Section 129 should be added to the list. Suggested language is “limitations and conditions that are part of Section 129 requirements.”

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

8. **SUBJECT:** Regulation adoption procedures.

COMMENTER: Virginia Manufacturers Association

TEXT: The adoption of the Rev. D97 SSM rules was procedurally flawed.

A fundamental principle of administrative rulemaking in Virginia and the rest of our nation is that those who will be subject to a new rule having the force and effect of law must be given sufficient notice of the proposed rule and provided a meaningful opportunity to express their views on the proposed rule. This basic principle was violated in the adoption of the new SSM rules in Rev. D97. The SSM rules in Rev. D97 were changed substantially between proposal and final adoption without sufficient notice and opportunity for comment.

However, the Department and the Board are commended for realizing the procedural flaw in the adoption of the new SSM rules. The VMA and its members appreciate the Board's action to suspend Rev. D97 and provide this opportunity to comment on the changes to the SSM rules. We urge the Department and the Board to carefully consider these comments and to rectify the problems created by the adoption of the Rev. D97 SSM rules.

RESPONSE: The adoption of the final regulation was not procedurally flawed and all procedures relative to its adoption were followed. Executive Order Number Twenty-Five (98) allows a maximum of four months from the end of the public comment period on a proposed regulation to complete the adoption process and file the final regulation with the Registrar of Regulations. Failure to meet this timeframe could result in the requirement to restart the regulatory project from the beginning. The Administrative Process Act in §9-6.14:9.1 recognizes that agencies may adopt final regulations with substantive changes and in §9-6.14:7.1 K provides a procedure whereby the public may petition for additional comment and reconsideration by the agency.

9. **SUBJECT:** Start-up/shut-down/malfunction provisions.

COMMENTER: Virginia Manufacturers Association

TEXT: The Board should keep Virginia's current "no violation" approach to excess SSM emissions.

Region III wants the Board to make sweeping and fundamental changes to Virginia's SSM rules. Virginia's current regulations take the approach that excess emissions occurring during periods of malfunction (and arguably during periods of startup, shutdown, and scheduled maintenance) are not violations of any applicable emission limitation, standard or other requirement if specified conditions are met. Region III wants Virginia to switch from this long-standing "no violation" approach to a totally different approach. Region III wants Virginia to adopt an "affirmative defense" approach.

Under Region III's approach, adopted through the Rev. D97 rulemaking, a source owner or operator might be able to assert an "affirmative defense" to civil penalties for excess emissions during periods of startup, shutdown, or malfunction. To be eligible for the affirmative defense, the owner or operator must show that 12 conditions are met. The current version of 9 VAC 5-20-180, which addresses excess emissions during maintenance and malfunction, specifies four conditions that must be met in order for the "no violation" exemption to apply.

Furthermore, the affirmative defense to civil penalties would be inapplicable whenever emissions exceed limitations imposed by federal standards, e.g., new source performance standards ("NSPS"), national emission standards for hazardous air pollutants ("NESHAPs"), and maximum achievable control technology ("MACT") standards. Thus, in comparison to the no violation approach in the current version of 9 VAC 5-20-180, the affirmative defense in the Rev. D97 version of the regulations would apply to many fewer instances of excess emissions and it would much harder for a source owner/operator to qualify for it.

Neither the Department nor the Board has articulated any compelling, or even satisfactory, reasons for changing from the current no violation approach to EPA's

affirmative defense approach. There is no evidence in the rulemaking record showing the change is necessary to address an air quality problem in Virginia. In fact, there really is no compelling, or even minimally satisfactory, reason to change Virginia's current SSM rules the way Region III wants. Thus, VMA strongly urges the Board to repeal the Rev. D97 affirmative defense approach and return to the no violation approach in Virginia's current SSM regulations.

RESPONSE: See response to comment #1.

10. **SUBJECT:** EPA guidance not sufficient to change regulation.

COMMENTER: Virginia Manufacturers Association

TEXT: The adoption of the Rev. D97 SSM rules is bad policy.

The Board's current SSM rules have been in effect for years. EPA Region III approved those rules into the Virginia state implementation plan ("SIP") years ago. The DEQ and regulated community have operated under those rules for years and they have worked well for years.

Now, Region III wants Virginia to change those tried and tested SSM rules. Region III says Virginia's current SSM rules do not "adhere to the policies outlined in" EPA's Sept. 20, 1999, memorandum, "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown" and Feb. 15, 1983, memorandum, "Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions" (collectively, EPA's "SSM guidance").

It is bad policy for Virginia to change its tried and tested regulatory approaches because Region III says they don't "adhere to" EPA guidance. If Virginia's rules do not "adhere to" federal law, then Region III has every right and obligation to take the steps necessary to ensure that Virginia changes its regulatory approach to match the law. But no matter how much EPA wishes it were, that is not the case with EPA guidance. Virginia is under no compulsion to change its regulatory approach to "adhere to" EPA guidance because it is not the law.

In the memorandum supporting VMA's petition to the Board, we describe the litigation currently underway in the U.S. Court of Appeals for the District of Columbia Circuit in which a coalition of industrial groups are challenging EPA's SSM guidance. *Clean Air Implementation Project v. EPA*, No. 99-1470. The industry coalition believes EPA's implementation of its SSM "guidance" is an unlawful attempt by the Agency to establish binding legal mandates without complying with the notice and comment rulemaking requirements of the federal Administrative Procedures Act. It was in large part for this very reason that the same court invalidated EPA's Title V periodic monitoring "guidance" as an unlawful rule. *Appalachian Power Co. v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000). The VMA believes it is totally inappropriate for the Board to change Virginia's SSM rules

to "adhere to" EPA guidance that has a substantial likelihood, in the wake of the Appalachian Power decision, of being invalidated by a federal court.

Alternatively, the court might decide that EPA's SSM "guidance" is just that and not an unlawful attempt to establish a binding rule. In that case, Virginia and other States, are not bound by it and need not "adhere to" it. Guidance is non-binding and EPA and States are free to follow it or not. Thus, whether EPA's SSM guidance withstands the judicial challenge or not, the Board is not compelled to change Virginia's SSM rules so they "adhere to" EPA's SSM guidance.

The litigation is currently in abeyance while the industry coalition and EPA attempt to negotiate a settlement. We understand that the parties are actively engaged in settlement discussions and that a settlement may be reached in the next four to eight weeks. While VMA is not privy to the settlement discussions, it's a reasonable assumption that the industry coalition would not settle the litigation without substantial concessions by EPA. Thus, whether the court decides the case or it is settled, the outcome of the litigation could very likely require dramatic changes in the substance and implementation of EPA's SSM guidance. Certainly until the litigation is over, it is premature for the Board to make any changes to Virginia's SSM rules so they "adhere to" EPA's SSM guidance.

There is another compelling reason why the Board need not change Virginia's SSM regulations to "adhere to" EPA SSM guidance. EPA is not making all States abandon the no violation approach. For example, the Texas Natural Resource Conservation Commission ("TNRCC") recently adopted revised SSM regulations that provide an exemption from any applicable standard for excess emissions occurring during "upsets" (malfunctions), maintenance, startups, and shutdowns. TNRCC General Rules, §§ 101.1, 101.6, 101.7, and 101.11.

Section 101.11 of the Texas rules states:

- (a) Upset emissions are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by TCAA § 382.0518(g) if the owner or operator complies with the requirements of) 101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements) and satisfies all of the following [eight conditions]
- (b) Emissions from any maintenance, start-up, or shutdown are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by TCAA § 382.0518(g) if the owner or operator complies with the requirements of § 101.7 of this title (relating to Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements) and satisfies all of the following [seven conditions]

The exemption approach in the Texas rules is legally and practically equivalent to Virginia's no violation approach, with the notable exception that the Texas exemption applies to excess emissions during startup and shutdown (an issue we discuss later in these comments).

We understand that EPA is prepared to approve these regulations for inclusion in the Texas SIP. Thus, EPA is apparently not insisting that all States "adhere to" its SSM guidance by either demanding changes to the SSM provisions in current SIPs or withholding approval of new SSM provisions into SIPs. Unless and until Region III issues an official "SIP call," with satisfactory justification, requiring Virginia to "adhere to" EPA's SSM guidance, the Board should maintain the no violation approach.

Virginia's current SSM rules have been working well for years. That is not to say that VMA's members would not support some improvements that would clarify and streamline the rules, and below we present some recommendations we think would do that. However, the changes Region III has demanded so the rules "adhere to" EPA's guidance are not improvements that would clarify and streamline Virginia's rules. Instead, the changes EPA has demanded would fundamentally alter, but not improve, Virginia's long-standing approach to excess emissions during SSM periods.

RESPONSE: See response to comment #1.

11. **SUBJECT:** Definition of "affirmative defense" (9 VAC 5-10-20).

COMMENTER: Virginia Manufacturers Association

TEXT: To implement the switch from the no violation approach to the affirmative defense approach in the Rev. D97 regulations, the Board added a definition of "affirmative defense." Because we believe the affirmative defense approach should be scrapped in favor of the no violation approach in the current regulations, there is no need for this definition.

RESPONSE: See response to comment #1. The definition in question has been removed from the final regulation.

12. **SUBJECT:** Facility and control equipment maintenance and malfunction (9 VAC 5-20-180 A).

COMMENTER: Virginia Manufacturers Association

TEXT: DEQ says a provision was added by Rev. D97 in subsection A "to clarify that 9 VAC 5-20-180 applies to only facility and control equipment maintenance or malfunction." We have two concerns with this statement.

First, to be eligible for the affirmative defense in subsection G of the Rev. D97 version of 9 VAC 5-20-180, excess emissions must be "caused by a sudden, unavoidable breakdown of technology beyond the control of the owner." While excess emissions during an emergency shutdown or malfunction could satisfy this condition, it is difficult to see how excess emissions during scheduled maintenance would result from "a sudden, unavoidable breakdown."

Second, to qualify for the affirmative defense, the excess emissions must result from a "breakdown of technology." The regulation contains no definition or explanation of the meaning of the term "technology." If this term applies only to emission control technology, then the affirmative defense could not be invoked if the excess emissions result from a breakdown of process equipment rather than emissions control equipment.

VMA advocates returning to the regulatory approach taken in the current and proposed versions of 9 VAC 5-20-180, with additional explicit language to clarify that the no violation approach applies to excess emissions occurring during scheduled maintenance as well as during a malfunction. Subsection G of the current and proposed versions of 9 VAC 5-20-180, which contains the specific no violation exemption, appears to be limited to instances of malfunction. We understand the Department interprets the regulation as a whole so that excess emissions during scheduled maintenance may qualify for the no violation exemption. However, we recommend that subsection G be amended as follows to make this explicit:

G. 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 maintenance or malfunction provided that:

1. The procedural requirements of this section are met or the owner has submitted an acceptable application for a variance, which is subsequently granted;
2. The owner has taken expeditious and reasonable measures to minimize emissions during the maintenance or malfunction;
3. The owner has taken expeditious and reasonable measures to minimize the duration of the maintenance or malfunction; and
4. The source is in compliance at least 90% of the operating time over the most recent 12-month period.

RESPONSE: See response to comment #1. The provision added in subsection A "to clarify that 9 VAC 5-20-180 applies to only facility and control equipment maintenance or malfunction." was intended (i) to apply to the section as a whole and not necessarily to each and every subsection and (ii) to remove the misperception that the section applied to startups and shutdowns, which it doesn't. The provisions relating to a "breakdown of technology" have been removed from the final regulation. Because we expect that EPA would not approve any changes to 9 VAC 5-20-180 that do not comply with the EPA SSM policies (see response to comment #1), we do not plan to submit the changes to 9 VAC 5-20-180 as part of the SIP revision. In order to protect the state and regulated community from being in violation of the federal Clean Air Act, it is important not to make any changes to this section that would make it less stringent than the current SIP. The change to subsection G suggested by the commenter would make the revised version less stringent than the current version. This approach is being taken in order to spare the regulated community from the requirements of the EPA SSM policies and to ensure that implementation of the revised section will not jeopardize the ability of the state to carry out the current SIP. There are two substantive changes to 9 VAC 5-20-180. The first affects subsection A. That change clarifies the applicability of the section in order to remove the current misperception that this section pertains to startup and shutdowns, which it does not. Removal of the existing language in subsection A

poses no problem since more comprehensive versions are contained in 9 VAC 5-40-20 E and 9 VAC 5-50-20 E. The second affects subsection F. Since this subsection affects only hazardous pollutants, it is not relevant to the SIP. We also plan to request that the current SIP approved version of 9 VAC 5-20-180 F be removed from the SIP, as it pertains to the state toxic program and is not appropriate for inclusion in the SIP.

13. **SUBJECT:** Affirmative defense restrictions (9 VAC 5-20-180 A).

COMMENTER: Virginia Manufacturers Association

TEXT: DEQ notes that provisions were added to subsection A specifying that the affirmative defense to civil penalties does not apply to excess emissions due to malfunction or maintenance for sources subject to NSPS, NESHAPs, MACT standards, CAA acid rain provisions, or that cause an exceedance of an ambient air quality standard or PSD increment. This list of restrictions virtually guts much of the usefulness of the affirmative defense.

VMA sees no reason for such a stringent set of restrictions. Why allow the affirmative defense for malfunction emissions that exceed a permit limit but not allow the affirmative defense for malfunction emissions that exceed an NSPS? There is no basis for distinguishing between an applicable emission limitation established in a permit from one established in a regulation. If the Board retains the affirmative defense in Virginia's SSM rules, it must be available for any applicable emission standard or limitation without restriction. However, VMA again urges the Board to scrap the affirmative defense approach and retain the no violation approach in Virginia's current SSM rules.

If the Board decides to retain the affirmative defense approach with these restrictions, they must be made clearer. The Rev. D97 language that says the affirmative defense "shall not apply . . . to sources subject to" the listed regulatory provisions should be replaced with language that says the affirmative defense "shall not apply to emissions in excess of the emissions allowed by" the listed regulatory provisions. This clarifies that excess emissions from any unit is eligible for the affirmative defense unless the excess emissions violate the listed regulatory requirement that applies to that unit. This would ensure that a source owner can assert the affirmative defense for particulate matter emissions from a boiler in excess of a permit limit even though the source has a storage tank "subject to" the NSPS in 40 CFR Part 60, subpart Kb. It would also ensure that a source owner can assert the affirmative defense for VOC emissions from a unit in excess of a permit limit even though that unit is "subject to" a MACT standard limiting HAP emissions. The regulation should clearly state that the restriction applies to emissions from a unit that exceed the emissions allowed by the listed regulatory requirement for that same unit.

RESPONSE: See response to comment #1. The provisions in question have been removed from the final regulation. However, it should be noted that the state operates some of the regulatory programs cited by the commenter under delegation of

authority from EPA. In such an arrangement, the state must abide by EPA's wishes in implementing the programs.

14. **SUBJECT:** Relief from penalties (9 VAC 5-20-180 G).

COMMENTER: Virginia Manufacturers Association

TEXT: DEQ notes that the provision that provides legal relief for excess emissions during maintenance and malfunction was modified and "now entitles the owner of a facility to use an affirmative defense for relief from penalties." VMA urges the Board to adopt the wording for subsection G we set out above. This would preserve the no violation approach VMA strongly advocates for Virginia's SSM rules.

RESPONSE: See response to comment #12.

15. **SUBJECT:** Relief from excess emissions during maintenance (9 VAC 5-20-180 G).

COMMENTER: Virginia Manufacturers Association

TEXT: DEQ says that in adopting the final Rev. D97 rules, the Board "modified the provisions pertaining to facility and control equipment maintenance or malfunction to incorporate the limitations and the criteria for an affirmative defense." We noted previously our concern that 9 VAC 5-20-180 G, as worded in any version of the regulation – current, proposed, or final Rev. D97 version – does not clearly provide relief for excess emissions occurring during maintenance. The language we propose above to return subsection G to the no violation approach takes care of this problem.

However, should the Board decide to adopt the affirmative defense approach in Virginia's SSM rules, the Rev. D97 version of subsection G must be changed to eliminate condition number six. This condition requires that the excess emissions be "caused by a sudden, unavoidable breakdown of technology." As previously explained, this would seem to eliminate the affirmative defense for excess emissions during maintenance.

RESPONSE: See response to comment #12. With regard to condition number six, the condition has been removed from the final regulation.

16. **SUBJECT:** Board authorization to curtail operation or shut down facility (9 VAC 5-20-180 I).

COMMENTER: Virginia Manufacturers Association

TEXT: DEQ notes that changes were made to 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 were expanded to include violations of any ambient air standard, not just primary standards, and any increments under the PSD program.

VMA believes the Board should return to the wording in the current and proposed version of 9 VAC 5-20-180 I. We believe it would be very unfortunate, and unnecessary, to force a facility to shut down and furlough its employees to eliminate excess emissions unless those emissions pose a real and substantial threat to human health. PSD increments and secondary (welfare-based) ambient air quality standards are not established to protect human health. Thus, the Board should not order a facility shutdown unless the facility's emissions cause a violation of the primary ambient air quality standards, which are specifically designed to protect human health.

RESPONSE: See response to comment #1. The provisions in question have been removed from the final regulation.

17. **SUBJECT:** Excess emissions resulting from startup and shutdown.

COMMENTER: Virginia Manufacturers Association

TEXT: The Rev. D97 changes described in Items 7 through 10 of the Board's notice all address excess emissions resulting from startup and shutdown. These items are discussed below out of their order in the Rev. D97 regulations because some changes that appear earlier in the regulations stem from changes that appear later in the regulations.

a. 9 VAC 5-40-20 K, 5-50-20 J, and 5-60-20 F

DEQ notes that the final Rev. D97 rules contain additional provisions that entitle a facility owner to use an affirmative defense for relief from penalties for excess emissions resulting from startup or shutdown. To qualify for the affirmative defense, the owner must show that nine conditions are met. These conditions are similar to many of the 12 conditions in the Rev. D97 version of 9 VAC 5-20-180 G that must be met in order to qualify for the affirmative defense for excess emissions resulting from maintenance or malfunction. As we expressed previously with respect to maintenance and malfunction, VMA is concerned that the Rev. D97 rules unnecessarily restrict the availability of the affirmative defense during startups and shutdowns.

b. 9 VAC 5-40-10 E, 5-50-10 G, 5-60-10 E

Like the Rev. D97 affirmative defense allowed for maintenance and malfunction, this affirmative defense does not apply to excess emissions during startup or shutdown for "sources subject to" NSPS, NESHAPs, MACT standards, CAA acid rain requirements, and NAAQS or PSD increments. As we expressed in our comments above, VMA is concerned that these restrictions virtually gut much of the usefulness of the affirmative defense. We can see no reason to differentiate between emissions that exceed a

permit limit (eligible for the affirmative defense) and emissions that exceed an NSPS (ineligible for the affirmative defense).

c. 9 VAC 5-40-20 A, 5-50-20 A

These changes would eliminate provisions in the current and proposed regulations providing a blanket exemption from violation for visible emissions in excess of opacity standards occurring during periods of startup, shutdown, and malfunction. We have no idea what justification the Board has or what motivated the Board to eliminate these provisions. These changes are not discussed in the DEQ's Summary and Analysis of Public Testimony for Regulation Revisions D97. If the Board eliminated these provisions because Region III wanted them eliminated, that is a totally inappropriate and insufficient justification for the change.

We note that while 9 VAC 5-40-20 A 3 in the current regulations (applicable to existing sources) is not part of the Virginia SIP, Region III has approved the identical language in 9 VAC 5-50-20 A 3 (applicable to new and modified sources) and it is part of the Virginia SIP. It makes no sense to allow the exemption for newer sources while denying the same exemption to older sources. We can see no reason to abandon the exemption provided by these two provisions and we recommend the Board retain them.

d. 9 VAC 5-40-30 C, 5-50-30 C, 5-60-30 C

In its Rev. D97 proposal, the Board added new language, taken directly from the federal regulations, to subsection C of these three regulations stating that:

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 emissions limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

The VMA fully supported the proposed subsection C changes. However, Region III objected to the proposed changes. In response, DEQ changed the provisions by inserting language "to clarify that this 'blanket exemption' is only for initial emission or performance tests." DEQ Summary and Analysis of Public Testimony for Regulation Revision D97, p. 8.

The language "to clarify" the provisions that DEQ inserted to satisfy Region III does not appear in the very EPA regulation, 40 CFR 60.8(c), that DEQ copied in making the subsection C changes. Thus, it is hard for us to understand why Region III wants Virginia to adopt wording "to clarify" the regulation when EPA's own regulation lacks the clarifying language.

Region III apparently objects to the proposed subsection C language (without the additional wording "to clarify" it) because it would, on its face, provide (in DEQ's words)

a "blanket exemption" for excess emissions during startup, shutdown, and malfunction. VMA continues to strongly support subsection C as worded in the Rev. D97 proposal because it would provide Virginia sources, for the first time, with a no violation exemption for unavoidable excess emissions resulting from startup and shutdown. This is sorely needed because sources very often face emission limitations they are inherently incapable of meeting. Very often these emission limitations or standards were set without considering the ability of the facility equipment to meet them during the extraordinary operating conditions that prevail during startup and shutdown.

The final Rev. D97 regulations also would, for the first time, provide some relief with respect to unavoidable excess emissions during startup and shutdown. However, relief in the form of an affirmative defense against civil penalties has extremely limited usefulness because it is encumbered with so many restrictions and conditions. As with maintenance and malfunction, VMA advocates the no violation approach. We believe Virginia's regulations should contain provisions embodying the no violation approach for startup and shutdown as well as for maintenance and malfunction. This is the approach Texas has taken in its recently adopted SSM regulations. They provide an exemption from violation for excess emissions during startup and shutdown as well maintenance and upset (malfunction).

We advocate inserting the following language in 9 VAC 5-20-180 to address excess emissions resulting from startup and shutdown:

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 startup or shutdown provided that:

1. The procedural requirements of this section are met or the owner has submitted an acceptable application for a variance, which is subsequently granted;
2. The owner has taken expeditious and reasonable measures to minimize emissions during the startup or shutdown;
3. The owner has taken expeditious and reasonable measures to minimize the duration of the startup or shutdown; and
4. The source is in compliance at least 90% of the operating time over the most recent 12-month period.

The "procedural requirements of this section" could be the same procedural requirements, e.g., notification to the DEQ, specified in 9 VAC 5-20-180 B for maintenance or 5-20-180 C for malfunction.

In any event, VMA urges the Board to correct the deficiency in the current regulations and provide relief to Virginia businesses that experience unavoidable excess emissions during periods of startup and shutdown.

RESPONSE: With regard to 9 VAC 5-40-20 K, 5-50-20 J, and 5-60-20 F, see response to comment #1. The provisions in question have been removed from the final regulation.

With regard to 9 VAC 5-40-10 E, 5-50-10 G, 5-60-10 E, see response to comment #1. The provisions in question have been removed from the final regulation.

With regard to 9 VAC 5-40-20 A, 5-50-20 A, the provisions have been reinstated in the final regulation. The provisions were originally eliminated because they did not comply with the EPA SSM policies. As the commenter notes, 9 VAC 5-40-20 A 3 in the current regulations (applicable to existing sources) is not part of the Virginia SIP. In the response to comment #12, explanation is given concerning the importance of not making regulatory changes that would jeopardize the ability of the state to implement the SIP while not being in violation of the federal Clean Air Act. While 9 VAC 5-40-20 A 3 has been reinstated, it includes language to prevent its implementation with regard to federal requirements relating to the SIP. The commenter also notes that EPA has approved the identical language in 9 VAC 5-50-20 A 3 (applicable to new and modified sources) and it is part of the Virginia SIP. We agree it makes no sense to allow the exemption for newer sources while denying the same exemption to older sources; however, we can offer no explanation for the action by EPA. Retaining this provision unchanged will not jeopardize implementation of the SIP.

With regard to 9 VAC 5-40-30 C, 5-50-30 C, 5-60-30 C, we quite often use the general provisions found Subpart A of 40 CFR Part 60 as the basis for the special provisions we include in 9 VAC 5 Chapter 40 (existing sources) and 9 VAC 5 Chapter 50 (new and modified sources). We do this for two reasons: to enhance the possibility of EPA approval and to maintain a certain level of consistency between the regulation of SIP sources and NSPS sources for which we have 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 we have no authority to change the NSPS requirements. However, the purpose of the NSPS program governed by 40 CFR Part 60 is different from the purpose of the SIP governed by 40 CFR Part 51 and EPA will not always allow the use of NSPS provisions in the SIP, as EPA contends they do not always meet the requirements of the SIP.

With regard to adding provisions to provide the no violation approach for excess emissions due to startup or shutdown, we do not believe this is practical at this time. The addition of such provisions would certainly not get EPA approval. As explained above and in the response to comment #12, failure to gain EPA approval of state regulations to be used in the administration of SIP requirements carries a risk and is, thus, inadvisable.

18. **SUBJECT:** Resumption of rulemaking process.

COMMENTER: Virginia Manufacturers Association

TEXT: On behalf of its many members who will be adversely affected if the Rev. D97 rules are retained, VMA urges the Board to scrap the affirmative defense approach to excess emissions and return to the current no violation approach. We recommend this approach be extended to address not only maintenance and malfunction, but also startup and shutdown as well.

We believe the Board should repeal the Rev. D97 SSM rules and start the rulemaking process over from the beginning. We recommend DEQ empanel an ad hoc Advisory Group to assist the Department in the drafting of appropriate SSM rules that are streamlined, cost-effective, and protective of the environment.

RESPONSE: Considering that the agency has afforded the public the opportunity to comment on the proposed changes and removed practically all of the provisions in question, there is little to be gained by restarting the regulation adoption process.

19. **SUBJECT:** General.

COMMENTER: Celanese Acetate, Honeywell, Stone Container, Virginia Independent Power Producers (VIPP), International Paper, Philip Morris, Dominion Generation, Newport News Shipbuilding, Doswell Limited Partnership and Multitrade, Air Control Techniques (ACT), Greif Brothers, Merck, BP Amoco, VIASYSTEMS Technologies, Southern Energy, Bowman Apple Products, Westvaco

TEXT: Many of the commenters expressed concern about the fundamental change from the current regulatory approach in that no violation occurs during periods of malfunction, maintenance, startup or shutdown, if specified conditions are met, to the proposed change of an "affirmative defense" approach. The commenters contend that these periods of excess emissions are short lived, difficult to quantify, and have minimal impact on ambient air quality and that the changes would impose an unnecessary burden upon the regulated community. Accordingly, they request that the no violation approach be retained for the reasons presented below.

Some of the commenters noted above also indicated support for or duplicated the substance, or a portion thereof, of the comments made by the Virginia Manufacturers Association on behalf of its members. These comments are not reiterated in this summary.

- Many of the proposed revisions are extremist in nature; they lack necessary balance and perspective. Many would establish impossible or impractical environmental protection regulations without regard to the amount of resources or effort necessary to achieve them, which would be considerable. Such single-minded focus on environmental objectives, coupled with an apparent disregard for the resources needed to comply, would yield an unbalanced and unreasonable product (the proposed regulations) which, if adopted, would be contrary to the public interest. (VIPP)
- The proposed revisions would impose more severe emissions restrictions on facilities during SSM periods, while failing to consider real-world limitations on plant operations and facility and equipment design. Simply put, it would be technologically impossible, and perhaps even irresponsible, for many facilities to comply with some of the

proposed emissions limits during SSM periods. Proposed regulatory edicts have no effect whatsoever on the physical and natural laws which apply to existing mechanical systems, which have been designed and built to meet different, less stringent emissions standards. (VIPP)

- The proposal would depart significantly from past practice and regulations and would constitute a massive, unanticipated and disruptive change for existing generating facilities. In aggregate, they would establish new regulatory requirements far in excess of technological and financial feasibility and safe operating parameters for existing facilities. Such a large incremental increase in regulatory stringency cannot sensibly occur with such rapidity, especially when considering that electrical generating facilities typically have useful lives of 30-50 years. (VIPP)
- Many permittees have installed best achievable control technology (BACT) and state-of-the-art boilers, steam turbines, generators, pollution control devices, and other equipment. Indeed, the current regulations (and the permit conditions derived from them) dictated much, if not all, of the basic facility design and choice of equipment and other features. Permit conditions typically exclude SSM periods from consideration of opacity and particulate emission standard exceedances. The individual limits on NO_x and SO₂ emissions for many boilers are based on 30-day rolling averages. Some facilities are also required to observe a detailed startup and shutdown plan designed to ensure the safe and proper operation of the equipment. To change the approach to SSM now would undermine and render obsolete many existing permit conditions, and would make the BACT requirement a de facto moving target. Virginia's air regulations program has contained the existing automatic exclusion for many years and the Commonwealth has been issuing permits consistent with that program for as many years. A drastic and sudden change now would not be in the public interest. (VIPP)
- The revisions to the existing regulations would, in effect, significantly tighten current emissions limits that were never intended to apply to periods of startup, shutdown, and malfunctions. As you know, most pollution control equipment upon which emissions limits are based cannot operate properly or effectively under startup and shutdown conditions. In addition, it is during periods of startup and shutdown that operating conditions are most difficult to control. The criteria for an "affirmative defense" in the revised regulations are so stringent that it would be highly unlikely that a source would be able to avoid an excess emission violation during startups and shutdowns. (Dominion)
- The previous regulations pertaining to malfunctions satisfy EPA's legitimate concern that a source's excess emissions resulting from negligence or poor maintenance practices not be an excuse for a violation. The proposed revisions would turn nearly all episodes of excess emissions resulting from any type of malfunction into violations and would make Title V compliance certification for nearly all sources impossible. (Dominion)

- Virginia's existing EPA-approved SIP regulations dealing with startup, shutdown and malfunction address excess emissions and violation issues in a far more reasonable manner than the revisions. Dominion Generation makes specific and immediate notifications to DEQ when an exceedance has occurred, and our quarterly excess emissions reports contain detailed cause and corrective action information for every exceedance. In addition, we have operating procedures that prevent or minimize exceedances during periods of startup, shutdown, or malfunction. Also, there are safeguards in place that require a source to justify application of an exemption for malfunctions. (Dominion)
- The net result of the proposed changes places many facilities in an impossible predicament: they are now compelled to comply with emission standards during SSM periods but only with certainty of damage to plant and equipment and threatened worker safety. The revision establishes a standard of conduct that will cause the very problem that it is intended to avoid. This is so chiefly because Revision D97 now asks facilities to meet an impossible and unsafe standard. Indeed, the proposed changes themselves will lead to a greater number of malfunctions, resulting in greater amounts of uncontrolled emissions. (Doswell)
- These changes are based on a series of EPA internal memorandum that have not included (1) analyses of the ambient air quality benefits or consequences, (2) the potential safety issues for plant employees, (3) the costs to comply, if in fact compliance is technically feasible, and (4) the legal liabilities created for plant operators who have conscientiously complied with DEQ and EPA regulatory requirements. (ACT)
- The regulatory need for this change should be evaluated to confirm that there is a reasonable improvement in ambient air quality and this gain is balanced by the associated costs and risks created by the regulatory change. The impact of the regulatory change on small business should be evaluated. Each stationary source operator should work with suppliers of air pollution control equipment and other knowledgeable organizations and individuals to identify site-specific approaches to minimize start-up and shutdown emissions. These site-specific programs should be allowed sufficient time to ensure that the changes adopted do not create significant environmental issues due to long term increased emissions and do not create safety risks for plant personnel. (ACT)
- The proposed affirmative defense approach would not lead to lower emissions than the current regulatory approach. The proposed approach could even lead to a greater potential for malfunctions as there would be no practical allowance for excess emissions during maintenance activities. Maintenance activities are generally designed to lead to more efficient operation and to avoid malfunctions. While maintenance activities may involve excess emissions, they may well lead to lower overall emissions through better process operation and lessen the risk of a large excess emission event due to a malfunction. In addition, during maintenance or other activities that involve equipment startup or shutdown there is often no practical way to reduce emissions due to the nature of the process. Facilities should not be unduly

penalized despite efforts to minimize excess emissions during startup and shutdown.
(BP)

- Our company policy is to operate our facilities at all times in compliance with environmental requirements. Each year, officials of each facility and business unit must submit to upper management a statement as to compliance of the facility with these regulatory requirements. If the many instances of startups, shutdowns and occasional malfunction of individual operations are considered to be violations under Virginia law, then they must be included in this statement. The current regulation provides that if certain conditions are met, excess emissions from malfunctions are not violations. The revised language, which abandons this approach, will impose an unnecessary burden on the company and will lead to confusion of the public.
(Celanese)
- The compliance history of companies is available to the public. In addition, in the past, there have been bills introduced into the General Assembly that would require posting of violations on the Internet. Listing what are really routine events such as startup and shutdown of equipment as violations will greatly increase the number of such incidents that are available for public scrutiny. The public will get an incorrect perception about the real compliance history of the facility and of the enforcement practices of the DEQ. The public confusion will likely result in unnecessary concerns and additional actions needed by the DEQ and the company to explain that these incidents do not pose a health concern to the public. (Celanese)

RESPONSE: See response to comment #1.

20. **SUBJECT:** Required reporting of breakdowns.

COMMENTER: Virginia Independent Power Producers, Doswell Limited Partnership and Multitrade

TEXT: The proposed language in section 9 VAC 5-20-180 D would require permit holders to report breakdowns of pollution control equipment "as expeditiously as possible but no later than 30 days after the failure..."

The proposed language "as expeditiously as possible" is unduly vague and broad and open to subjective interpretation. VIPP advocates retaining the existing standard which requires reporting "within 30 days" which is adequate to protect the public interest.

RESPONSE: In view of the potential air quality impact of any excess emissions, it is essential that the agency receive the report as expeditiously as possible.

21. **SUBJECT:** Elimination of the malfunction exclusion.

COMMENTER: Virginia Independent Power Producers, Doswell Limited Partnership and Multitrade

TEXT: The existing language of 9 VAC 5-20-180 G states in part that "no violation ...shall be judged to have taken place ...due to a malfunction [of pollution control or monitoring equipment]" The proposed regulation, in section 9 VAC 5-20-180 G. would remove this protection for equipment malfunctions, and substitute procedures providing for relief from penalties. There is no public purpose or environmental protection goal served in making bona fide equipment malfunctions enforceable violations of regulations. VIPP advocates retaining the original language excusing the licensee from violations in the event of equipment malfunctions.

RESPONSE: See response to comment #1. The new provisions in question have been removed from the final regulation.

22. **SUBJECT:** Conditions necessary for affirmative defenses.

COMMENTER: Virginia Independent Power Producers, Doswell Limited Partnership and Multitrade

TEXT: VIPP advocates the following changes to the proposals to define the conditions necessary for relief from penalties (an affirmative defense). [Ref. 9 VAC 5-20-180 G.]:

[G. 2.] Requires licensees to minimize "to the maximum extent practicable" the amount and duration of excess emissions during breakdowns. The current language requires licensees to take "expeditious and reasonable measures" to minimize emissions. VIPP advocates retention of the current "reasonable" standard as adequate to protect the public, and believes that the "maximum extent practicable" proposal is draconian and unnecessary.

[G. 3.] Requires licensees to use "off-shift labor and overtime ...to the extent practicable..." to make repairs after breakdowns occur. The current language requires "expeditious and reasonable measures" to correct breakdowns. VIPP advocates retention of the current "reasonable" standard, which adequately protects the public. The required use of off-shift labor and overtime is extremely stringent, unnecessary and not in the public interest.

[G. 7.] The proposed language would require, as an element of an affirmative defense, a finding that the excess emissions resulting from a breakdown "could not have been avoided by better operation and maintenance practices" VIPP asserts that this proposed language sets an impossibly high standard-perfection-which cannot be attained by human beings. VIPP advocates that any regulatory standard requiring perfection should be rejected.

[G. 9.] The proposed language would require a demonstration that "all possible steps" were taken to minimize excess emissions. For the same reasons as cited above, VIPP advocates rejection of all standards requiring perfection in operations, and adoption of a standard requiring "all reasonable steps."

RESPONSE: See response to comment #1. The provisions in question have been removed from the final regulation.

23. **SUBJECT:** Internal regulatory consistency.

COMMENTER: Virginia Independent Power Producers, Doswell Limited Partnership and Multitrade

TEXT: Revision D97 seeks to clarify that emission limit exceedances occurring during SSM periods of performance tests or emission tests are not considered violations of applicable standards, because conditions at that time are not representative of normal operations and expected emission levels. See Revision D97 versions of 9 VAC 5-50-30 C and 9 VAC 5-60-30 C. This change reflects federal standards at 40 CFR 60.8(c). See also 40 CFR 60.13(f) (requiring placement of monitoring devices so as to obtain representative measurements of emissions or process parameters). However, most of the other changes contained in Revision D97 abandon this logic and are contrary to it. The effect of the approach now contained in Revision D97 is to force facilities to meet emission limits under unrepresentative conditions at which the source is not meant to operate-- a rather absurd result that is aggravated by the limitations of current technology.

RESPONSE: See response to comment #17.

24. **SUBJECT:** Applicability of emissions limits to startup, shutdown and malfunction.

COMMENTER: Dominion Generation

TEXT: The proposed revisions to the existing regulations would significantly tighten current emissions limits that, for numerous reasons, were never intended to apply during periods of startup, shutdown, and malfunctions

Virginia's existing EPA-approved SIP regulations provide that opacity emissions in excess of the 20% opacity limitation that occur during periods of startup and shutdown are not violations of the opacity standard. In addition, the regulations provide implicitly that emissions of other pollutants in excess of applicable limitations that occur during periods of startup and shutdown do not constitute emissions violations either, since those periods are not considered to be "representative conditions," and emissions during those periods cannot be considered for purposes of determining a source's compliance with emissions limitations. The reason for these exclusions is that older, rate-based emissions standards were never intended by states, sources, or EPA to apply during periods of startup and shutdown because most pollution control equipment upon which emissions limits are based cannot operate properly or effectively under startup and shutdown conditions. EPA and Virginia recognized that sudden, unexpected equipment upsets can create short-lived emissions in excess of the standard, and established reasonable exemptions for those malfunction conditions. Thus, if DEQ adopts the regulations as proposed, the revisions

would dramatically reduce current emission limitations without any consideration given to whether the new lower standards are environmentally or legally necessary (neither DEQ nor EPA has made a finding that emissions during periods of startup and shutdown interfere with the NAAQS), or whether they are even feasible.

Changing the regulations and subjecting sources to emissions and opacity violations during periods of startup and shutdown at which time operating conditions are difficult to control is unwarranted. The revised regulations would force many of our sources into violation every time they startup or shutdown operations, contrary to the principles upon which the applicable emissions and opacity standards were originally promulgated. Under the revised regulations, many sources would never be able to certify compliance for purposes of Title V. In many cases, the pollution control technology may not exist to reduce emissions sufficiently during periods of startup and shutdown. If it becomes impossible to remain in compliance, it could become necessary to close down certain operations permanently.

Not only would the proposed startup and shutdown regulations impermissibly ratchet down existing emissions standards, they would cause older, grandfathered sources to be more stringently regulated, and to be subject to far stricter emissions limitations in practice, than supposedly better-controlled New Source Performance Standard (NSPS) sources to which the revisions do not apply. Similar to Virginia's existing regulations, EPA's NSPS regulations provide that compliance with NSPS emissions standards, other than opacity, must be determined by a stack test. Also similar to Virginia's existing regulations, the NSPS regulations provide that a stack test must be conducted under representative operating conditions, and that periods of startup, shutdown and malfunction are not considered to be representative. With respect to opacity, the NSPS regulations, again like Virginia's, expressly provide that NSPS opacity standards do not apply during periods of startup, shutdown or malfunction. The construction of NSPS regulations wisely recognized the inherent difficulties of controlling emissions during startup, shutdown, and malfunction conditions where unit operations are fluctuating and unpredictable. If the revisions are adopted as proposed, NSPS sources would be subject to less stringent emissions and opacity standards than older, grandfathered sources regulated under Virginia's SIP.

RESPONSE: See response to comment #17.

25. **SUBJECT:** Applicability of current SIP-approved regulations.

COMMENTER: Dominion Generation

TEXT: Dominion Generation requests that the portion of the proposed SSM revisions pertaining to malfunctions be withdrawn. As discussed above, EPA has made no finding that Virginia's existing regulations are not adequate to meet the requirements of the Act. In fact, Virginia's existing, EPA-approved SIP regulations pertaining to malfunctions provide that excess emissions during a period of malfunction do not

constitute a violation of applicable emission standards only so long as certain conditions are met. These conditions include:

- The owner or operator has taken expedient and reasonable measures to minimize emissions during the breakdown period;
- The source is in compliance at least 90% of the operating time over the most recent 12 month period; and,
- At all times, to the extent practicable, the owner or operator has maintained and operated the source, including associated air pollution control equipment in a manner consistent with good air pollution control practices of minimizing emissions.

DEQ, therefore, can cite a source for a violation for excess emissions resulting from a malfunction when, in the Department's judgment, the source has not complied with these criteria. The existing regulatory safeguards embodied in these criteria are more than sufficient to address EPA's concern expressed in its SSM memoranda that excess emissions caused by malfunctions resulting from negligence or poor maintenance at the source are not excused from violations.

EPA found Virginia's malfunction provisions adequate to meet the Act when the agency initially approved them as part of the SIP. Since that time, EPA has made no SIP call finding that those provisions are now substantially inadequate to attain or maintain the NAAQS or to comply with any other requirement of the Act, as it must do under §110(k)(5) of the Act in order to compel the state to revise its SIP. As discussed above, EPA's SSM policy memoranda do not constitute such a finding, and DEQ is under no legal obligation to revise the state's existing malfunction regulations.

Adopting the malfunction revisions as proposed, especially in view of the fact that no finding has been made that such revisions are necessary to comply with the Act, would pose an unnecessary hardship on Dominion Generation and many other regulated sources in Virginia. Sources experiencing malfunctions, most of which are beyond their control, would automatically be forced into noncompliance and Title V compliance certification would become virtually impossible.

Moreover, the affirmative defense the proposed revisions purportedly make available to excess emissions violations during malfunction periods could never be invoked effectively as a practical matter because the criteria created for application of the defense are set impossibly high. For example, one of the criteria the proposed revisions set forth for application of the affirmative defense is that the excess emissions caused by the malfunction:

"(a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices."

Based on these criteria, few, if any, excess emissions resulting from a malfunction could have been "foreseen" or prevented by "better" operation and maintenance practices.

Therefore, under the proposed malfunction revisions, excess emissions caused by nearly any malfunction would subject a source to an inescapable violation.

RESPONSE: See response to comment #1. The new provisions in question have been removed from the final regulation.

26. **SUBJECT:** Industry sector exclusions.

COMMENTER: Doswell Limited Partnership and Multitrade

TEXT: If the Board feels the need to press ahead with regulatory action similar to Revision D97, it should develop industry sector exclusions for those facility classes that do not have the capability and reasonable options to meet emission standards during SSM periods. This approach is allowed in the EPA guidance causing most of the present mischief, but is not currently included in Revision D97. At a minimum, time is needed for technology to catch up to the standards proposed in Revision D97, so a delayed effective date is essential. Without these measures, there is no way to avoid immediate noncompliance by many sources.

RESPONSE: See response to comment #1.

27. **SUBJECT:** Inconsistency with other regulatory provisions and permit conditions.

COMMENTER: Doswell Limited Partnership and Multitrade

TEXT: The latest changes to Revision D97 are inconsistent with each other and other Board and EPA regulations related to SSM periods. By example, in Revision D97, the Board properly seeks to clarify that emission limit exceedances occurring during SSM periods of performance tests or emission tests are not considered violations of applicable standards, because conditions at that time are not representative of normal operations and expected emission levels. See Revision D97 version of 9 VAC 5-50-30.C and 9 VAC 5-60-30.C. This change reflects federal standards at 40 CFR § 60.8(c). See also 40 CFR § 60.13(f) (requiring placement of monitoring devices so as to obtain representative measurements of emissions or process parameters).

The logic behind this approach is clear and sensible: as a unit starts up or shuts down, or if it malfunctions, normal operating conditions are not observed, so it is reasonably expected that uncharacteristic or abnormal emissions will result. Indeed, it is axiomatic that unrepresentative conditions lead to unrepresentative results. Thus, the need for representative conditions in accurately determining emission levels exists whether one is ascertaining initial compliance upon first operation of the source or whether one is determining compliance at other times. Unfortunately, the other changes itemized above abandon this logic when it comes to SSM periods at such other times. The effect of the Board's new approach is to force facilities to meet emission limits under unrepresentative

conditions at which the source is not meant to operate- a rather absurd result that is aggravated by the limitations of current technology.

EPA regulations actually reflect the reality of the situation in certain ways by making specific exclusions for SSM events from emission standards or compliance determinations related to NOx and other pollutants. NSPS for sources such as Doswell include a number of provisions that conflict with the recent changes to Revision D97. Subpart GG (stationary combustion turbines) specifically relies upon "peak load" or "normal load" ranges for purposes of calculating the NOx emission limits, thereby excluding SSM periods. See 40 CFR §§ 60.332(a)(1), 60.332(b), 60.335(c)(2), and 60.335(c)(3). Where NOx emissions during SSM periods are relied upon for compliance determination, they are typically incorporated into a rolling 30-day average that affords inherent flexibility to the source to avoid noncompliance. See 40 CFR §§ 60.44b(h) and 60.44b(i). Since the Board has adopted these provisions in their entirety, see 9 VAC 5-50-400 and 9 VAC 5-50-410, presumably the identical exclusions of SSM periods from emission standard applicability and emission level calculations have also been adopted. Yet, the Board's treatment of SSM excess emissions in Revision D97 runs contrary to these established rules and regulatory options.

Like many other sources, we have worked with the Board to develop NSPS, PSD, construction and operating permit conditions that meet current Board regulations. Our permit conditions specifically exclude SSM periods from consideration of emission standard exceedances. To change the approach to SSM now undermines these permit conditions and procedures and makes the BACT requirement a moving target. It would also put us in the position of having to operate out of compliance with its permit and running great risk of plant failure and damage.

RESPONSE: See response to comment #17.

28. **SUBJECT:** General

COMMENTER: Celanese Acetate, Honeywell, Smurfit-Stone Container, Virginia Independent Power Producers, International Paper, Philip Morris, Dominion Generation, Newport News Shipbuilding, Doswell Limited Partnership and Multitrade, Greif Brothers

TEXT: The commenters noted above presented oral testimony at the public hearing, as well as written comments during the comment period. However, their oral testimony did not differ substantively from their written comments.

RESPONSE: See responses to written comments.