Virginia Regulatory Town Hall

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Final Regulation
Agency Background Document

Approving authority name	State Air Pollution Control Board
Primary action	9 VAC 5-140-1061, 9 VAC 5-140-1062, 9 VAC 5-140-2061, 9 VAC 5-140-2062, 9 VAC 5-140-3061, and 9 VAC 5-140-3062
Secondary action(s)	None
Regulation title	Regulation for Emissions Trading (9 VAC 5-140)
Action title	CAIR Nonattainment Area Requirements (Rev. E05)
Date this document prepared	November 7, 2007

This information is required for executive review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act, Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief Summary

Please provide a brief summary of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Also alert the reader to changes made to the regulation since publication of the proposed.

This regulatory action encompasses the addition of nonattainment area requirements to three parts of 9 VAC 5-140; each of which is addressed below:

NO_X Annual Trading Program (Part II)

This part establishes a NO_X Annual Trading Program which addresses the following substantive provisions: permitting, allowance methodology, monitoring, banking, compliance supplement pool, compliance determination, and opt-in provisions for sources not covered by the regulation. Virginia's NO_X annual budgets are 36,074 tons in 2009 through 2014 and 30,062 tons in 2015 and thereafter.

Beginning January 1, 2009, electric generating units with a nameplate capacity greater than 25 MWe will be subject to the provisions of this part. To accommodate the NO_X emissions from the affected units, the units are allocated from the budget a specific limited number of allowances (measured in tons per year) during the months of January 1 through December 31, otherwise known as the control period. The NO_X allocations are determined through a methodology based upon heat input for existing units and electrical output for new units. January 1, 2006 is the cutoff for determining whether a unit is new or existing. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or

the source may use banked allowances to offset the amount of NO_X generated above the allocated allowances. Smaller sources within the affected source categories are allowed to opt-in to the program.

Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1, i.e., for every ton over its allocations, three tons will be forfeited from the next year's allocation.

Emissions will need to be monitored according to 40 CFR Part 75 of the Code of Federal Regulations for all sources subject to the regulation and for any sources wishing to opt-in to the program.

As proposed, the provisions related to compliance in nonattainment areas prohibited the use of allowances other than those allocated to the unit or source by the Board to comply. Since publication of the proposal, the provisions related to compliance in nonattainment areas have been revised to establish an independent annual emissions cap equivalent to the number of allowances issued to the affected unit. Provisions have been added to (i) provide temporary exemptions for new units and (ii) to allow compliance to be demonstrated in the aggregate for all units in a single source under common ownership.

NO_X Ozone Season Trading Program (Part III)

This part establishes a NO_X Ozone Season Trading Program which addresses the following substantive provisions: permitting, allowance methodology, monitoring, banking, compliance determination, and opt-in provisions for sources not covered by the regulation. Virginia's NO_X ozone season budgets for electric generating units are 15,994 tons in 2009 through 2014 and 13,328 tons in 2015 and thereafter.

Beginning May 1, 2009, electric generating units with a nameplate capacity greater than 25 MWe will be subject to the provisions of this part. To accommodate the NO_X emissions from the affected units, the units are allocated from the budget a specific limited number of allowances (measured in tons per season) during the summer months of May 1 through September 30, otherwise know as the control period. The NO_X allocations are determined through a methodology based upon heat input for existing units and electrical output for new units. January 1, 2006 is the cutoff for determining whether a unit is new or existing. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or the source may use banked allowances to offset the amount of NO_X generated above the allocated allowances. Smaller sources within the affected source categories are allowed to opt-in to the program.

Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1, i.e., for every ton over its allocations, three tons will be forfeited from the next year's allocation.

Emissions will need to be monitored according to 40 CFR Part 75 of the Code of Federal Regulations for all sources subject to the regulation and for any sources wishing to opt-in to the program.

As proposed, the provisions related to compliance in nonattainment areas prohibited the use of allowances other than those allocated to the unit or source by the Board to comply. Since publication of the proposal, the provisions related to compliance in nonattainment areas have been revised to establish an independent annual emissions cap equivalent to the number of allowances issued to the affected unit. Provisions have been added to (i) provide temporary exemptions for new units and (ii) to allow compliance to be demonstrated in the aggregate for all units in a single source under common ownership.

SO_2 Annual Trading Program (Part IV)

This part establishes a SO_2 Annual Trading Program which addresses the following substantive provisions: permitting, monitoring, banking, compliance determination, and opt-in provisions for sources not covered by the regulation. Virginia's SO_2 annual budgets are 63,478 tons in 2010 through 2014 and 44,435 tons in 2015 and thereafter.

Beginning January 1, 2010, electric generating units with a nameplate capacity greater than 25 MWe will be subject to the provisions of this part. To accommodate the SO_2 emissions from the affected units, the units have been allocated from the budget a specific limited number of allowances (measured in tons per year) during the months of January 1 through December 31, otherwise know as the control period. The SO_2 allocations are carried over from the Acid Rain Program and are valid indefinitely, except the value of the allowances is reduced over time. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or the source may use banked allowances to offset the amount of SO_2 generated above the allocated allowances. Smaller sources within the affected source categories are allowed to opt-in to the program.

Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1, i.e., for every ton over its allocations, three tons will be forfeited from the next year's allocation.

Emissions will need to be monitored according to 40 CFR Part 75 of the Code of Federal Regulations for all sources subject to the regulation and for any sources wishing to opt-in to the program.

As proposed, there were no provisions related to compliance in nonattainment areas in this part. Since publication of the proposal, provisions have been added to address compliance in nonattainment areas similar to those for the NO_X trading programs. Provisions have been added to (i) provide a permanent exemption for units not eligible for allowances under the Acid Rain Program and (ii) to allow compliance to be demonstrated in the aggregate for all units in a single source under common ownership.

Petition for Reconsideration

In 22:22 VA.R. 3074-3080 July 10, 2006, the Board published for public comment a proposal to amend its regulations concerning emissions trading. In response to that request, comments were submitted that resulted in several changes being made to the original proposal. Additional changes were made to the original proposal based on legislation enacted by the 2006 General Assembly.

On December 6, 2006, the Board adopted final amendments to its regulations concerning emission trading, which were to become effective date on April 18, 2007. The final regulation amendments as adopted were published in the Virginia Register in 23:14 VA.R. 2291-2292, 2331-2333, and 2370-2371 March 19, 2007. Pursuant to § 2.2-4007 K of the Code of Virginia, at least 25 persons requested an opportunity to submit oral and written comments on specific changes to the proposal. Because of the substantive nature of these additional changes and the requests from petitioners, the Board reopened the nonattainment area requirements of the proposal for public comment on those changes to the final regulation and suspended the effective date of nonattainment area requirements (9 VAC 5-140-1061, 9 VAC 5-140-1062, 9 VAC 5-140-2061, 9 VAC 5-140-2062, 9 VAC 5-140-3061, and 9 VAC 5-140-3062) of the regulation.

On October 10, 2007, the Virginia State Air Pollution Control Board reconsidered its original December 6, 2006 decision on the CAIR nonattainment area requirements. In its reconsideration decision, the Board retained the nonattainment area requirements; but in doing so, made changes to (i) the NO_X Annual and Seasonal Trading Program nonattainment area provisions to exempt new units until the latter of 2014 or until such time as the unit establishes a 5 year operational period and (ii) the SO_2 Annual Trading Program to exempt units not eligible for allowances under the Acid Rain Program.

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

On December 6, 2006, the State Air Pollution Control Board adopted final amendments to regulations entitled "Regulation for Emissions Trading," related to the federal Clean Air Interstate Rule (CAIR) [Parts II through IV of 9 VAC Chapter 140]. The regulation amendments included provisions to address compliance in nonattainment areas. The regulation amendments were to be effective on April 18, 2007. This effective date of the provisions to address compliance in nonattainment areas was suspended on May 14, 2007.

On October 10, 2007, the State Air Pollution Control Board adopted new final amendments to regulations entitled "Regulation for Emissions Trading," related to compliance in nonattainment areas (9 VAC 5-140-1061, 9 VAC 5-140-1062, 9 VAC 5-140-2061, 9 VAC 5-140-2062, 9 VAC 5-140-3061, and 9 VAC 5-140-3062). The regulation amendments are to be effective as provided in the Administrative Process Act.

Legal 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.

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. Section 10.1-1328 A requires that the Board adopt a regulation that will allow the state to implement the EPA Clean Air Interstate Rule (CAIR) and facilitate the trading of allowances within the United States. Under § 10.1-1328 A 5, the regulation must provide for participation in the EPA-administered cap and trade system for NOx and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities. Written assurance from the Office of the Attorney General that the State Air Pollution Control Board possesses the statutory authority to promulgate the proposed regulation amendments is available upon request.

Purpose

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

The purpose of the regulation amendments is to establish provisions addressing compliance in nonattainment areas to reduce SO_2 and NO_X emissions (which are important precursors of PM_{10} and ozone) in order to ensure the attainment of the National Ambient Air Quality Standards in Virginia, and to protect Virginia's air quality, its natural resources and public health and welfare. The regulation amendments are being proposed to create an enforceable mechanism to assure that all affected sources located in nonattainment areas will not exceed (i) the NO_X emissions caps for the years 2009 and

thereafter and (ii) the SO_2 emissions caps for the years 2010 and thereafter. The regulation amendments expand the CAIR program beyond its primary purpose of controlling interstate transport to also meeting attainment plan emission budgets via the establishment of emissions caps for electric generating units.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the "All Changes Made in this Regulatory Action" section.

This regulatory action encompasses the addition of nonattainment area requirements to three parts of 9 VAC 5-140; each of which is addressed below:

NO_X Annual Trading Program (Part II)

1. The regulation applies to electric generating units (EGUs) with a nameplate capacity greater than 25 MWe. An EGU is a fossil fuel-fired stationary boiler or combustion turbine serving at any time a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

2. The control period is January 1 through December 31 of each year.

3. The NO_X annual trading budgets for EGUs are (i) 36,074 tons for each control period in 2009 through 2014, and (ii) 30,062 tons for each control period in 2015 and thereafter. An allowance is equal to one ton.

4. Existing units are those commencing operation prior to January 1, 2006.

5. New units are those commencing operation on or after January 1, 2006.

6. The EGUs are allocated from the NO_X annual trading budget a specific limited number of allowances for each control period.

7. The NO_X allocations are determined through a methodology based upon heat input for existing units and electrical output for new units.

8. Compliance is determined on an annual basis for each control period by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units. Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1, i.e., for every ton over its allocations, three tons will be forfeited from the next year's allocation.

9. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or the source may use banked allowances to offset the amount of NO_X generated above the allocated allowances.

10. For EGUs located in nonattainment areas, the number of allowances allocated to an EGU is used to establish an independent annual emissions cap. Compliance must be demonstrated on an annual basis for the preceding control period, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each EGU and (ii) the annual emissions cap for the EGU.

11. New units are exempted from the nonattainment area compliance requirements until the later of (i) January 1, 2014 or (ii) until such time as the unit has operated each calendar year during a period of at least five consecutive calendar years.

12. Smaller sources within the core source categories are not mandated to be included in the program; however, smaller sources within the core source categories are allowed to opt-in to the program.

13. Sources that opt-in the program have a separate budget. Baseline determined for opt-ins is based upon the previous year's emissions.

14. All sources participating in the program, including those that chose to opt-in, must meet the monitoring requirements of 40 CFR Part 75 of the Code of Federal Regulations.

NO_X Ozone Season Trading Program (Part III)

1. The regulation applies to electric generating units (EGUs) with a nameplate capacity greater than 25 MWe. An EGU is a fossil fuel-fired stationary boiler or combustion turbine serving at any time a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

2. The control period is May 1 through September 30 of each year.

3. The NO_X ozone season trading budgets for EGUs are (i) 15,994 tons for each control period in 2009 through 2014, and (ii) 13,328 tons for each control period in 2015 and thereafter. An allowance is equal to one ton.

4. Existing units are those commencing operation prior to January 1, 2006.

5. New units are those commencing operation on or after January 1, 2006.

6. The EGUs are allocated from the NO_X ozone season trading budget a specific limited number of allowances for each control period.

7. The NO_X allocations are determined through a methodology based upon heat input for existing units and electrical output for new units.

8. Compliance is determined on an annual basis for each control period by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units. Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1, i.e., for every ton over its allocations, three tons will be forfeited from the next year’s allocation.

9. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or the source may use banked allowances to offset the amount of NO_X generated above the allocated allowances.

10. For EGUs located in nonattainment areas, the number of allowances allocated to an EGU is used to establish an independent ozone season emissions cap. Compliance must be demonstrated on an annual basis for the preceding control period, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each EGU and (ii) the ozone season emissions cap for the EGU.

11. New units are exempted from the nonattainment area compliance requirements until the later of (i) January 1, 2014 or (ii) until such time as the unit has operated each calendar year during a period of at least five consecutive calendar years.

12. Smaller sources within the core source categories are not mandated to be included in the program; however, smaller sources within the core source categories are allowed to opt-in to the program.

13. Sources that opt-in the program have a separate budget. Baseline determined for opt-ins is based upon the previous year's emissions.

14. All sources participating in the program, including those that chose to opt-in, must meet the monitoring requirements of 40 CFR Part 75 of the Code of Federal Regulations.

SO_2 Annual Trading Program (Part IV)

1. The regulation applies to electric generating units (EGUs) with a nameplate capacity greater than 25 MWe. An EGU is a fossil fuel-fired stationary boiler or combustion turbine serving at any time a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

2. The control period is January 1 through December 31 of each year.

3. The SO_2 annual trading budgets for EGUs are (i) 63,478 tons for each control period in 2010 through 2014, and (ii) 44,435 tons for each control period in 2015 and thereafter. An allowance is equal to one ton.

4. The EGUs are allocated from the SO_2 annual trading budget a specific limited number of allowances for each control period.

5. The allowances (carried over from the Acid Rain Program) have already been allocated by EPA and are valid indefinitely, except the value of the allowances is reduced over time.

6. Compliance is determined on an annual basis for each control period by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units. Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1, i.e., for every ton over its allocations, three tons will be forfeited from the next year's allocation.

7. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or the source may use banked allowances to offset the amount of SO_2 generated above the allocated allowances.

8. For EGUs located in nonattainment areas, the number of allowances allocated to an EGU is used to establish an independent annual emissions cap. Compliance must be demonstrated on an annual basis for the preceding control period, based on a comparison of (i) the total SO_2 emissions (expressed in tons) from each EGU and (ii) the annual emissions cap for the EGU.

9. Units for which no SO_2 allowances are allocated under the Acid Rain Program are permanently exempted from the nonattainment area compliance requirements.

10. Smaller sources within the core source categories are not mandated to be included in the program; however, smaller sources within the core source categories are allowed to opt-in to the program.

11. Sources that opt-in the program have a separate budget. Baseline determined for opt-ins is based upon the previous year's emissions.

12. All sources participating in the program, including those that chose to opt-in, must meet the monitoring requirements of 40 CFR Part 75 of the Code of Federal Regulations.

Issues

Please identify the issues associated with the proposed regulatory action, including: (1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; (2) the primary advantages and disadvantages to the

agency or the Commonwealth; and (3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

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1. Public: The CAIR program was expanded beyond its primary purpose of controlling interstate transport to also meeting nonattainment plan emission budgets via the establishment of emissions caps for electric generating units. The nonattainment provisions included in this program create a regulatory mechanism to impose independent emission caps on affected units to address local air quality needs in nonattainment areas. No trading activities can be used to comply with the emissions cap. Compliance with the emissions cap would not rely on the use of allowances under the EPA trading program but would be demonstrated by comparing the actual emissions from the source with the emissions cap. The connection between the CAIR trading program and the nonattainment provisions is the use of the number of allowances to establish the emissions caps and the use of the emissions data to determine the amount of emissions to compare with caps. This provides a clear regulatory structure to allow the Commonwealth to address local nonattainment area needs via the nonattainment area requirements without being hampered by regulatory interpretation disputes as to the authority to do so.

The primary advantage to the general public is that air quality will improve through the use of the emission caps to help attain the National Ambient Air Quality Standard (NAAQS) for ozone. The Metropolitan Washington Air Quality Committee (MWAQC) is certified by the governors of Maryland and Virginia and the mayor of the District of Columbia to develop regional air pollution control strategies for the Washington, DC-MD-VA region, currently classified as a moderate nonattainment area. Virginia jurisdictions represented on MWAQC include Arlington, Fairfax, Loudoun, and Prince William counties and the Cities of Falls Church, Alexandria, and Fairfax. MWAQC and the states have approved an air quality plan (SIP) to meet the NAAQS for ozone. The SIP contains provisions for significant reductions from the electric generating facilities located in the region. The nonattainment provisions of the Virginia CAIR rule do not allow trading of NO_X and SO_2 within the nonattainment areas to comply with the emission caps, thereby requiring facilities within the nonattainment area to reduce their emissions. Photochemical modeling in the SIP shows that the NO_X emission reductions associated with the ban on emissions trading are needed to bring the Washington, DC-MD-VA region into attainment of the ozone standard. Emissions data in the SIP indicate a reduction of more than 11 tons per day of NO_X emissions as a result of the caps established under the nonattainment provisions of the regulation. The NO_X reductions from the Virginia CAIR regulation with its no-trading provision are a critical part of the region's attainment plan.

Disadvantages to the regulated sources are in the areas of costs for control and monitoring. The total state budget for NO_X allowances may not be sufficient to meet the needs if all sources were operating at maximum capacity. The NO_X seasonal budget for 2009 is 1097 tons less than the current NO_X SIP Call budget and state law requires that five percent of the budget be reserved for new sources to include efficient energy/renewable energy (EERE) sources.

Some sources in nonattainment areas will need to install additional control equipment, as they will be unable to use purchased credits for compliance with the state emission caps. If a source chooses not to install control equipment the source will only be able to operate up to its cap. This is due to the fact that the fixed CAIR budget for Virginia is allocated annually based on actual heat input of the units subject to CAIR. If a source doesn't reduce emissions through aggressive control measures it is possible that over time its share of the budget will shrink because emissions would be capped while other facilities can procure allowances and increase generation to meet load demand growth.

Temporary exemptions are included to ensure that the nonattainment area requirements are implemented in an equitable manner for new units. The methodology for distributing the initial allocations from the new source set-aside could be a significant disadvantage for some new sources. The new source set-aside is allocated to new sources in 2009 for a 5-year period. Any new source that begins operation after the new source set-aside is distributed would not have access to any allowances; therefore, their "nonattainment emission cap" would be zero under the provisions pertaining to CAIR NO_X sources in nonattainment

areas. While a new unit constructed at an existing facility would at least have the ability to average with other existing units at the same facility, a unit constructed at a "stand-alone," greenfield facility would have no compliance option under these provisions and effectively would not be able to operate. Provisions are included that provide an exemption from the nonattainment cap provisions until such time the source has five years of operational data to base the cap on. This puts new sources on equal footing with existing sources which use the data from the highest three of five consecutive years of operation to establish the allowances and therefore the cap in nonattainment areas.

Permanent exemptions are included to ensure that the nonattainment area requirements do not impose an undue regulatory burden on units not eligible for allowances under the Acid Rain Program. A disadvantage exists for SO_2 sources that did not receive allowances under Title IV of the Clean Air Act (CAA), promulgated in the early 1990s. The SO_2 cap for sources in nonattainment areas is based on the number of SO_2 allowances distributed to sources under the provisions of the CAA. Sources built after the adoption of the CAA can only operate by purchasing allowances from the market as they did not receive any allowances during the initial allocation period. Under the current nonattainment provisions, these sources would have a cap of zero, with no opportunity to purchase any allowances, therefore, new SO_2 sources are also exempt from the nonattainment cap.

Sources will need to monitor emissions with continuous emission monitors (CEMs). These monitors were required under the NO_X SIP Call and, therefore, are already in place. However, there are costs associated with the operation of the monitors. Sources that choose to opt into the program will need to install the monitoring equipment to participate in the program.

2. Department: The advantages for the Department are in the areas of effective compliance and reduced inspections. The regulation provides procedures for continuous or process parameter monitoring of emissions for determining compliance. This will result in very accurate data to be used for compliance demonstrations or enforcement actions when necessary.

Disadvantages include the need for the Department to review the compliance demonstrations. More time may be involved to ensure compliance with the program for sources located in nonattainment areas as they may only use Board allocated credits for compliance. New allocations will need to be computed every year after the initial five year initial allocation. The new allocations will need to be incorporated into the source's budget permit.

Changes Made Since the Proposed Stage

Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar's office, please put an asterisk next to any substantive changes.

This regulatory action encompasses the addition of nonattainment area requirements to three parts of 9 VAC 5-140; each of which is addressed below.

NO_X Ozone Annual Trading Program (Part II)

Section number	Requirement at proposed stage	What has changed	Rationale for change
*1060 H, I and J/ *1061, 1062*	For units in nonattainment areas, provisions are included to automatically convert (by regulation) the CAIR NO_X allowances to an emissions limit. Use of	The provisions related to the emissions limit have been revised to establish an independent annual emissions cap equivalent to the number of allowances issued to the affected unit for the control period.	New structure is necessary to ensure that implementation of the nonattainment area requirements will not interfere with (i) operation

	allowances other than those allocated to the unit may not be used to comply with the limit. Provisions for a waiver are included to grant regulatory relief for sources that are not causing or contributing to a violation of any air quality standard or a nonattainment condition. Provisions are included to allow permits to be issued to impose more stringent emissions limit if necessary. The affected unit may not engage in any emissions trading activities or use any emissions credits obtained from emissions reductions external to the unit to comply with the requirements of the permit.	Compliance with the emissions cap would not rely on the use of allowances under the EPA trading program but would be accomplished by comparing the actual emissions with the emissions cap. Compliance with the EPA trading program and any nonattainment area caps is determined separately and in accordance with the terms of the provisions of each. Provisions have been added to provide temporary exemptions for new units. Provisions have been added to allow compliance to be demonstrated in the aggregate for all units in a single source under common ownership. The waiver provisions have been deleted.	of the EPA CAIR trading program and (ii) participation by Virginia units in the EPA CAIR trading program. Exemptions are necessary to ensure that the nonattainment area requirements are implemented in an equitable manner for new units. The waiver provisions are unnecessary since a more appropriate administrative mechanism to grant regulatory relief is available in state law.

NO_X Ozone Season Trading Program (Part III)

Section number	Requirement at proposed stage	What has changed	Rationale for change
*2060 H, I and J/ *2061, 2062*	For units in nonattainment areas, provisions are included to automatically convert (by regulation) the CAIR NO_X allowances to an emissions limit. Use of allowances other than those allocated to the unit may not be used to comply with the limit. Provisions for a waiver are included to grant regulatory relief for sources that are not causing or contributing to a violation of any air quality standard or a nonattainment condition. Provisions are included to allow permits to be issued to impose more stringent emissions limit if necessary. The affected unit may not engage in any emissions trading activities or use any emissions credits obtained from	The provisions related to the emissions limit have been revised to establish an independent ozone season emissions cap equivalent to the number of allowances issued to the affected unit for the control period. Compliance with the emissions cap would not rely on the use of allowances under the EPA trading program but would be accomplished by comparing the actual emissions with the emissions cap. Compliance with the EPA trading program and any nonattainment area caps is determined separately and in accordance with the terms of the provisions of each. Provisions have been added to provide temporary exemptions for new units. Provisions have been added to allow compliance to be demonstrated in the aggregate for all units in a single source under common ownership.	New structure is necessary to ensure that implementation of the nonattainment area requirements will not interfere with (i) operation of the EPA CAIR trading program and (ii) participation by Virginia units in the EPA CAIR trading program. Exemptions are necessary to ensure that the nonattainment area requirements are implemented in an equitable manner for new units. The waiver provisions are unnecessary since a more appropriate administrative mechanism to grant regulatory relief is available in state law.

	emissions reductions external to the unit to comply with the requirements of the permit.	The waiver provisions have been deleted.	

SO_2 Annual Trading Program (Part IV)

Section number	Requirement at proposed stage	What has changed	Rationale for change
**3061 and 3062*	None.	§ 10.1-1328 A 5 of the Code of Virginia authorizes the Board to promulgate regulations that address compliance in nonattainment areas. Provisions have been added to address Virginia's environmental needs in nonattainment areas, similar to the provisions in the NO_X Annual Trading Rule. Provisions have been added to permanently exempt units not eligible for allowances under the Acid Rain Program.	The addition of the nonattainment area requirements is necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia via the establishment of emissions caps for electric generating units. Exemptions are necessary to ensure that the nonattainment area requirements are implemented in an equitable manner for units not eligible for allowances under the Acid Rain Program.

Public Comment

Please summarize all public comment received during the public comment period following the publication of the proposed stage, and provide the agency response. If no public comment was received, please so indicate.

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

All Changes Made in this Regulatory Action

Please detail all changes that are being proposed and the consequences of the proposed changes. Detail new provisions and/or all changes to existing sections.

This regulatory action encompasses the addition of nonattainment area requirements to three parts of 9 VAC 5-140; each of which is addressed below:

NO_X Annual Trading Program (Part II)

New section number	New requirement	Rationale for new requirement
1061	Establishes compliance requirements in nonattainment areas in Virginia.	Necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia and compliance with attainment plan emission budgets via the establishment of emissions caps for electric generating units.
1062	Provides procedures for compliance demonstrations in nonattainment areas in Virginia.	Necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia and compliance with attainment plan emission budgets via the establishment of emissions caps for electric generating units.

NO_X Ozone Season Trading Program (Part III)

New section number	New requirement	Rationale for new requirement
2061	Establishes compliance requirements in nonattainment areas in Virginia.	Necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia and compliance with attainment plan emission budgets via the establishment of emissions caps for electric generating units.
2062	Provides procedures for compliance demonstrations in nonattainment areas in Virginia.	Necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia and compliance with attainment plan emission budgets via the establishment of emissions caps for electric generating units.

SO_2 Annual Trading Program (Part IV)

New section number	New requirement	Rationale for new requirement
3061	Establishes compliance requirements in nonattainment areas in Virginia.	Necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia via the establishment of emissions caps for electric generating units.
3062	Provides procedures for compliance demonstrations in nonattainment areas in Virginia.	Necessary to ensure the attainment of air quality standards in nonattainment areas in Virginia via the establishment of emissions caps for electric generating units.

Regulatory Flexibility Analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: (1) the establishment of less stringent compliance or reporting requirements; (2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) the consolidation or simplification of compliance or reporting requirements; (4) the establishment of performance standards for

small businesses to replace design or operational standards required in the proposal; and (5) the exemption of small businesses from all or any part of the requirements contained in the proposal.

The primary purpose of the regulatory flexibility analysis is to identify and address regulatory alternatives which minimize any significant impact of the regulation on small businesses. These regulations were developed to provide opportunity for the affected sources to participate in the EPA administered emissions trading program by following a specific program structure set forth by EPA. However, major industries in Virginia subject to these federal requirements also constitute, by state law, a significant number of small businesses. The structure of the regulations follows specific requirements set forth by federal regulations; therefore, it is difficult to promulgate requirements unique to small businesses.

To address any of the alternative regulatory methods [(1) establishment of less stringent compliance or reporting standards; (2) establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) consolidation or simplification of compliance or reporting requirements; (4) establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; or (5) exemption of small businesses from all or any part of the requirements contained in the proposed regulation for all businesses] would directly, significantly and adversely affect the benefits that would be achieved through the implementation of the regulations and likely jeopardize the ability of the affected sources to participate in the EPA administered emissions trading program.

The regulation amendments will minimize the regulatory burden associated with meeting the federal requirement to attain the National Ambient Air Quality Standards in Virginia via the establishment of emissions caps for all affected electric generating units, including all small businesses, by providing an efficient means of meeting an additional specific need while avoiding the administrative burden for new regulations. To this end, the provisions are structured to be an element of the CAIR rule that is implemented in conjunction with the rule but still operate independently—that is, these provisions are designed to be self-implementing.

The nonattainment area requirements contain provisions in (i) the NO_X Annual and Seasonal Trading Programs to exempt new units until the latter of 2014 or until such time as the unit establishes a 5 year operational period and (ii) the SO_2 Annual Trading Program to exempt units not eligible for allowances under the Acid Rain Program. These exemptions ensure that the nonattainment area requirements do impose an undue regulatory burden on new units and units not eligible for allowances under the Acid Rain Program. These units have the potential to qualify as a small business.

Legal Requirements

Please identify the state and/or federal source of the legal requirements that necessitate promulgation of the proposal, including: (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly bill and chapter numbers, if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal requirements and the extent to which the requirements are mandatory or discretionary.

Promulgating Entity

The promulgating entity for this regulation is the State Air Pollution Control Board.

Federal Requirements

General Requirements

Sections 109 (a) and (b) of the Clean Air Act (CAA) require EPA to prescribe primary and secondary air quality standards to protect public health and welfare, respectively, for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. These standards are known as the National Ambient Air Quality Standards (NAAQS). Section 109 (c) requires the U.S. Environmental Protection Agency (EPA) to prescribe such standards simultaneously with the issuance of new air quality criteria for any additional air pollutant. The primary and secondary air quality criteria are authorized for promulgation under § 108.

Once the NAAQS are promulgated pursuant to § 109, § 107(d) sets out a process for designating those areas that are in compliance with the standards (attainment or unclassifiable) and those that are not (nonattainment). Governors provide the initial recommendations but EPA makes the final decision. Section 107(d) also sets forth the process for redesignations once the nonattainment areas are in compliance with the applicable NAAQS.

Section 110(a) of the CAA mandates that each state adopt and submit to EPA a plan which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The state implementation plan shall be adopted only after reasonable public notice is given and public hearings are held. The plan shall include provisions to accomplish, among other tasks, the following:

(1) establish enforceable emission limitations and other control measures as necessary to comply with the provisions of the CAA, including economic incentives such as fees, marketable permits, and auctions of emissions rights;

(2) establish schedules for compliance;

(3) prohibit emissions which would contribute to nonattainment of the standards or interference with maintenance of the standards by any state; and

(4) require sources of air pollution to install, maintain, and replace monitoring equipment as necessary and to report periodically on emissions-related data.

Section 110(k)(3) and (4) set forth how EPA can issue a conditional approval, a partial approval and disapproval, or a full disapproval if it determines that the submitted SIP does not meet the statutory requirements.

Section 110(l) prohibits the EPA from approving any revision to a SIP if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement.

Section 193 provides that no control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before the date of the enactment of the Clean Air Act Amendments of 1990 in any area which is a nonattainment area for any air pollutant may be modified unless the modification insures equivalent or greater emission reductions.

40 CFR Part 50 specifies the NAAQS: sulfur dioxide, particulate matter, carbon monoxide, ozone (its precursors are nitrogen oxides and volatile organic compounds), nitrogen dioxide, and lead.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of state implementation plans. These requirements mandate that any such plan shall include several provisions, including those summarized below.

Subpart G (Control Strategy) specifies the description of control measures and schedules for implementation, the description of emissions reductions estimates sufficient to attain and maintain the standards, time periods for demonstrations of the control strategy's adequacy, an emissions inventory, an

air quality data summary, data availability, special requirements for lead emissions, stack height provisions, and intermittent control systems.

Subpart K (Source Surveillance) specifies procedures for emissions reports and record-keeping, procedures for testing, inspection, enforcement, and complaints, transportation control measures, and procedures for continuous emissions monitoring.

Subpart L (Legal Authority) specifies the requirements for legal authority to implement plans.

Section 51.230 under Subpart L specifies that each state implementation plan must show that the state has the legal authority to carry out the plan, including the authority to perform the following actions:

(1) adopt emission standards and limitations and any other measures necessary for the attainment and maintenance of the national ambient air quality standards;

(2) enforce applicable laws, regulations, and standards, and seek injunctive relief;

(3) abate pollutant emissions on an emergency basis to prevent substantial endangerment to the health of persons;

(4) prevent construction, modification, or operation of a facility, building, structure, or installation, or combination thereof, which directly or indirectly results or may result in emissions of any air pollutant at any location which will prevent the attainment or maintenance of a national standard;

(5) obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require record-keeping and to make inspections and conduct tests of air pollution sources;

(6) require owners or operators of stationary sources to install, maintain, and use emission monitoring devices and to make periodic reports to the state on the nature and amounts of emissions from such stationary sources; and

(7) make emissions data available to the public as reported and as correlated with any applicable emission standards or limitations.

Section 51.231 under Subpart L requires the identification of legal authority as follows:

(1) the provisions of law or regulation which the state determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations must be submitted with the plan; and

(2) the plan must show that the legal authorities specified in this subpart are available to the state at the time of submission of the plan.

Subpart N (Compliance Schedules) specifies legally enforceable compliance schedules, final compliance schedule dates, and conditions for extensions beyond one year.

Nonattainment Area Requirements

Part D describes how nonattainment areas are established, classified, and required to meet attainment. Subpart 1 provides the overall framework of what nonattainment plans are to contain, while Subpart 2 provides more detail on what is required of areas designated nonattainment for ozone.

Section 171 defines "reasonable further progress," "nonattainment area," "lowest achievable emission rate," and "modification."

Section 172(a) authorizes EPA to classify nonattainment areas for the purpose of assigning attainment dates. Section 172(b) authorizes EPA to establish schedules for the submission of plans designed to achieve attainment by the specified dates. Section 172(c) specifies the provisions to be included in each attainment plan, as follows:

(1) the implementation of all reasonably available control measures as expeditiously as practicable and shall provide for the attainment of the national ambient air quality standards;

(2) the requirement of reasonable further progress;

(3) a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutants in the nonattainment area;

(4) an identification and quantification of allowable emissions from the construction and modification of new and modified major stationary sources in the nonattainment area;

(5) the requirement for permits for the construction and operations of new and modified major stationary sources in the nonattainment area;

(6) the inclusion of enforceable emission limitations and such other control measures (including economic incentives such as fees, marketable permits, and auctions of emission rights) as well as schedules for compliance;

(7) if applicable, the proposal of equivalent modeling, emission inventory, or planning procedures; and

(8) the inclusion of specific contingency measures to be undertaken if the nonattainment area fails to make reasonable further progress or to attain the national ambient air quality standards by the attainment date.

Section 172(d) requires that attainment plans be revised if EPA finds inadequacies.

Section 172(e) authorizes the issuance of requirements for nonattainment areas in the event of a relaxation of any national ambient air quality standard. Such requirements shall provide for controls which are not less stringent than the controls applicable to these same areas before such relaxation.

Section 107(d)(3)(D) provides that a state may petition EPA to redesignate a nonattainment area as attainment and EPA may approve the redesignation subject to certain criteria being met. Section 107(d)(3)(E) stipulates one of these criteria, that EPA must fully approve a maintenance plan that meets the requirements of § 175A.

According to § 175A(a), the maintenance plan must be part of a SIP submission, and must provide for maintenance of the NAAQS for at least 10 years after the redesignation. The plan must contain any additional measures, as needed, to ensure maintenance. Section 175A(b) further requires that 8 years after redesignation, a maintenance plan for the next 10 years must then be submitted. As stated in § 175A(c), nonattainment requirements continue to apply until the SIP submittal is approved. Finally, § 175A(d) requires that the maintenance plan contain contingency provisions which will be implemented should the area fail to maintain the NAAQS as provided for in the original plan.

Ozone Nonattainment Area Requirements

Under Part D, Subpart 2, § 181 sets forth the classifications and nonattainment dates for 1-hour ozone nonattainment areas once they are designated as such under § 107(d).

Section 182 (a)(1) requires any state in which a marginal nonattainment area is located to submit a comprehensive, accurate and current inventory of actual emissions from all sources in that nonattainment area.

Section 182(a)(2)(A) requires that the existing regulatory program requiring reasonably available control technology (RACT) for stationary sources of volatile organic compounds (VOCs) in marginal nonattainment areas be corrected by May 15, 1991, to meet the minimum requirements in existence prior to the enactment of the 1990 amendments. RACT is the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. EPA has published control technology guidelines (CTGs) for various types of sources, thereby defining the minimum acceptable control measure or RACT for a particular source type.

Section 182(a)(3)(A) requires that the state submit a revised emission inventory for each marginal nonattainment area every three years until the areas are designated to attainment.

In support of these emission inventories, Section 182(a)(3)(B) requires the state to revise the state implementation plan to require each owner or operator of each stationary source of nitrogen oxides and volatile organic compounds to submit annual statements of the actual emissions of nitrogen oxides and volatile organic compounds from that source. Emission statements must contain a certification that the information contained in the statement is accurate to the best knowledge of the certifying official.

Section 182(b) requires stationary sources in moderate nonattainment areas to comply with the requirements for sources in marginal nonattainment areas. The additional, more comprehensive control measures in §182(b)(2)(A) require that each category of VOC sources employ RACT if the source is covered by a CTG document issued between enactment of the 1990 amendments and the attainment date for the nonattainment area. Section 182(b)(2)(B) requires that existing stationary sources emitting VOCs for which a CTG existed prior to adoption of the 1990 amendments also employ RACT.

Section 182(c) requires stationary sources in serious nonattainment areas to comply with the requirements for sources in both marginal and moderate nonattainment areas.

Section 182(d) requires stationary sources in severe nonattainment areas to comply with the requirements for sources in marginal, moderate and serious nonattainment areas.

Section 182(f) extends the requirements for the control of VOC emissions to emissions of NOx.

Section 184 establishes an Ozone Transport Region comprised of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area that includes the District of Columbia. The Ozone Transport Commission is to assess the degree of interstate transport of the pollutant or precursors to the pollutant throughout the transport region, assess strategies for mitigating the interstate pollution, and to recommend control measures to ensure that the plans for the relevant States meet the requirements of the Act.

EPA has issued detailed guidance on the implementation of the air quality planning requirements applicable to nonattainment areas. This guidance is titled the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (or "General Preamble"). See 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992). The General Preamble has been supplemented with further guidance on Title I requirements. See 57 FR 55621 (Nov. 25, 1992) (guidance on NOx RACT requirements in ozone nonattainment areas). For this subject, the guidance provides little more than a summary and reiteration of the provisions of the Act.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard. Since then, EPA has

promulgated a new 8-hour ozone air quality standard, and associated designation of nonattainment areas, which necessitates the initiation of new plans and regulatory actions.

40 CFR Part 81 specifies the designations of areas made under § 107(d) of the CAA and the associated nonattainment classification (if any) under § 181 of the CAA or 40 CFR 51.903(a), as applicable. The Commonwealth of Virginia designations are in 40 CFR 81.347.

40 CFR Part 51, Subpart X, contains the provisions for the implementation of the 8-hour ozone NAAQS, along with the associated planning requirements. Specifically, 40 CFR 51.903(a) sets forth the classification criteria and nonattainment dates for 8-hour ozone nonattainment areas once they are designated as such under 40 CFR Part 81. Briefly, 40 CFR 51.905(a)(1) and (2) state that nonattainment areas remain subject to the obligation to adopt and implement the applicable requirements, including demonstration of reasonable further progress. The rule also states, in a number of places, that nonattainment obligations may not be removed from the SIP.

State Requirements

Section 10.1-1328 A requires that the Board adopt a regulation that will allow the state to implement the EPA Clean Air Interstate Rule (CAIR) and facilitate the trading of allowances within the United States. Under § 10.1-1328 A 5, the regulation must provide for participation in the EPA-administered cap and trade system for NOx and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

Need

Please explain the need for the new or amended regulation and the potential consequences that may result in the absence of the regulation. Detail the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal, environmental benefits of the proposal, and the problems the proposal is intended to solve.

Introduction

Among the primary goals of the federal Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The NAAQS, which are developed and promulgated by the U.S. Environmental Protection Agency (EPA), are standards which establish the maximum limits of certain pollutants that are permitted in the outside ambient air. These standards are designed to protect public health and welfare, and apply to six pollutants.

Ozone is one of the pollutants for which EPA has established a NAAQS. Ozone is formed when ozone precursors--volatile organic compounds (VOCs) and nitrogen oxides (NO_X)--react together in the presence of sunlight. VOCs are chemicals contained in gasoline, polishes, paints, varnishes, cleaning fluids, inks, and other household and industrial products. NO_X emissions are a byproduct from the combustion of fuels (primarily for power generation) and industrial processes. In order to reduce ozone concentrations to levels at or below the NAAQS, emissions of ozone precursors must be reduced through controls on stationary, mobile, and area sources. To date, there have been two ozone NAAQS: a 1-hour standard of 0.12 parts per million that was established in 1990, and an 8-hour standard of 0.08 parts per million that was established in 1997. EPA is now in the process of evaluating whether the current 8-hour standard is sufficiently protective of public health, and may issue a more restrictive standard in the near future.

When concentrations of a particular pollutant in the ambient air exceed the standards, the area is considered to be out of compliance and is classified as "nonattainment." Under § 110 of the Clean Air Act, states are required to submit a plan (the State Implementation Plan or SIP) in order to implement, maintain, and enforce the NAAQS. EPA requires that each SIP, including any laws and regulations necessary to enforce the plan, demonstrate how the air pollution concentrations will be reduced to levels at or below the standard (attainment). Once the pollution levels are within the standard, the SIP must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (maintenance). The SIP must also address a state's significant contribution of pollution in other states.

States have two primary obligations under the Clean Air Act with respect to bringing areas into compliance with the NAAQS for ozone and ensuring that the areas remain in compliance.

First, states are obligated to address the transport of ozone across state lines. EPA allows states to achieve the required emission reductions to address interstate transport by using one of two compliance options: (i) meet the state's emission budget by requiring power plants to participate in an EPA-administered interstate cap and trade system, or (ii) meet an individual state emissions budget through measures of the state's choosing.

EPA promulgated the Clean Air Interstate Rule (CAIR), which establishes SIP requirements for the affected upwind states to address interstate transport of ozone. These SIP requirements include a model cap and trade rule that states may use if they select the first option to meet their obligation to address the interstate transport of ozone. EPA provides many options for the states to deviate from the model rule and still participate in the EPA administered trading program.

The State Air Pollution Control Board approved a proposal to implement the federal CAIR program. The proposal included three new programs: the NO_X Annual Trading Program, the NO_X Ozone Season Trading Program, and the SO_2 Annual Trading Program.

Second, states are also obligated to address local ozone nonattainment areas. In order to address this need, the proposal also contained additional requirements, which would limit the emissions of NO_X in nonattainment areas.

These nonattainment area requirements were included in two of the proposed trading programs: the NO_X Annual Trading Program in 9 VAC 5-140-1060 H (recodified as 9 VAC 5-140-1061 and 9 VAC 5-140-1062 in the final version) and the NO_X Ozone Season Trading Program in 9 VAC 5-140-2060 H (recodified as 9 VAC 5-140-2061 and 9 VAC 5-140-2062 in the final version)

While the primary purpose of the CAIR proposal was to meet the obligation to control interstate transport, it was recognized that the program could also be extended to enable the state to achieve its emission reduction goals for nonattainment areas, which would require the adoption of additional, local controls. The Commonwealth took the opportunity to use the CAIR regulation as a tool for addressing local nonattainment goals. This approach takes advantage of a required regulatory regime by also providing an efficient means of meeting an additional specific need while avoiding the administrative necessity for new regulations (or other enforceable mechanism) and their associated costs. It will also make the additional requirements easier to understand and comply with. To this end, the provisions are structured to be an element of the CAIR regulation that are implemented in conjunction with the regulation but still operate independently.

The proposed SO_2 Annual Trading Program did not contain any nonattainment area requirements. The nonattainment area requirements were included in the final version reflecting the Board's authority under the new legislation and codified in 9 VAC 5-140-3061, and 9 VAC 5-140-3062.

A more detailed explanation of these two primary obligations follows.

State's obligation to address the interstate transport of ozone

States are obligated under § 110(a)(2)(D)(i) of the Clean Air Act to address interstate transport of ozone across state lines. One of the strategies that states may use in order to address the transport of ozone is implementation of "cap-and-trade" programs. EPA has promulgated a number of cap-and-trade program regulations that specifically address the issue of regional transport, and provides states with a means to meet their ozone nonattainment SIP obligations on an interstate basis. Other sections of the Act address the requirements for addressing specific local nonattainment issues.

The NO_X SIP Call is a cap-and-trade program that was promulgated 1998 to address interstate ozone transport problems in the eastern United States. At the time EPA promulgated the NO_X SIP Call, states already had SIPs for the 1-hour ozone NAAQS in place. In the NO_X SIP Call, EPA determined that the 1-hour SIPs for the affected states were deficient, and EPA called on these states, under § 110(k)(5) of the Clean Air Act, to submit SIP revisions to cure the deficiency by complying with the NO_X SIP Call. In the NO_X SIP Call, EPA relied primarily on the application of highly cost-effective controls in determining the amount of emissions that the affected states were required to eliminate.

On May 12, 2005, EPA promulgated the final Clean Air Interstate Rule (CAIR), which established SIP requirements for the affected upwind states under § 110(a)(2) of the Clean Air Act. Section 110(a)(2)(D) of the Act requires SIPs to contain adequate provisions prohibiting air pollutant emissions from sources or activities in those states that contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to a NAAQS.

For SIPs due under the 8-hour ozone NAAQS, EPA did not incorporate a § 110(k)(5) SIP call, but instead required states to submit SIP revisions, under § 110(a)(1)-(2), to fulfill the requirements of § 110(a)(2)(D). EPA required these 8-hour ozone SIPs to be submitted--and the controls mandated therein to be implemented--on the same schedule as the 1-hour SIPs.

EPA also followed the statutory interpretation and approach under § 110(a)(2)(D) developed in the NO_X SIP Call rulemaking. Under this interpretation, the emissions in each upwind state that contribute significantly to nonattainment are identified as being those emissions that can be eliminated through highly cost-effective controls. However, in CAIR, EPA proposed criteria for determining appropriate levels of annual emissions reductions for SO_2 and NO_X and ozone-season emissions reductions for NO_X.

While § 110(a)(2)(D) requires upwind states to prohibit the amount of emissions that contribute significantly to downwind nonattainment, it does not require upwind states to prohibit emissions sufficient to assure that downwind areas attain. Rather, downwind areas continue to bear the responsibility of addressing remaining nonattainment. In other words, states may not rely solely on implementation of interstate transport controls if additional reductions are needed to meet the NAAQS.

The Clean Air Act and the Code of Federal Regulations allow states to implement rules that are more protective than federal rules. For many EPA regulations, as long as the baseline elements of the program are included, states have some flexibility in tailoring the federal rules to meet state needs. If EPA had intended for the CAIR rule to be adopted by the states precisely in the form it was issued, EPA would have written it as a standard, or issued a SIP call, and the states would have simply incorporated the rule without change. Indeed, states are obligated, as discussed above, to take additional measures beyond the specifics mandated by federal law and regulation in order to protect public health and welfare, which is the objective of both the federal Clean Air Act and the Virginia State Air Pollution Control Law.

State's obligation to address local nonattainment issues

Section 110(a) of the Clean Air Act mandates that each state adopt and submit to EPA a SIP which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The SIP can be adopted only after reasonable public notice is given and public hearings are held. Among other things, the plan must:

- establish enforceable emission limitations and other control measures as necessary to comply with the Act, including economic incentives such as fees, marketable permits, and auctions of emissions rights;

- establish schedules for compliance;

- prohibit emissions that would contribute to nonattainment of the standards or interference with maintenance of the standards by any state; and

- require sources to install, maintain, and replace monitoring equipment as necessary and to report periodically on emissions-related data.

A SIP is the key to the state's air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA will promulgate and implement an air quality plan for that state. EPA is also required to by law to impose sanctions in cases where there is no approved plan or the plan is not being implemented, including loss of federal funds for highways, and more restrictive requirements for new industry. Generally, the plan is revised as needed based upon changes in the Act and associated EPA regulations and policies.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The heart of the SIP is the control strategy. The control strategy describes the emission reduction measures to be used by the state to attain and maintain the air quality standards. There are three basic types of measures: stationary source, mobile source, and transportation source. Stationary source control measures limit emissions primarily from commercial/industrial facilities and operations, and may include emission limits, control technology requirements, preconstruction permit programs, and source-specific control requirements. Stationary source control measures also include area source control measures which are directed at small businesses and consumer activities. Mobile source control measures are directed at tailpipe and other emissions from motor vehicles, and transportation source control measures limit the location and use of motor vehicles.

For the most part, the SIP has worked, and the standards have been attained for most pollutants in most areas. However, attainment of NAAQS for ozone has proven problematic. The Clean Air Act includes a process for identifying and classifying each ozone nonattainment area according to the severity of its air pollution problem: marginal, moderate, serious, severe and extreme. Marginal areas are subject to the least stringent requirements and each subsequent classification is subject to successively more stringent control measures. In addition to the general SIP-related sanctions, ozone nonattainment areas have their own unique sanctions.

Once a nonattainment area is defined, each state is obligated to submit a plan demonstrating how the area will attain the air quality standards. After an area attains the NAAQS, the state may request that the area be redesignated attainment; in doing so, the state must demonstrate that it will maintain the improved air quality. A maintenance plan must include commitments to continue the controls that enabled the area to become attainment, as well as contingency measures that will be implemented if the area again fails to meet the standard.

Since the Clean Air Act Amendments of 1990, 34 localities throughout Virginia have been designated nonattainment for ozone in different classifications. These areas have prepared appropriate SIPs, implemented controls, attained the NAAQS, and have been redesignated as attainment. More than 25 of

these attainment and maintenance plan submittals have been made, over 10 of which were for the northern Virginia region alone.

In contrast, the northern Virginia region has consistently been designated nonattainment for ozone despite implementation of numerous control measures as prescribed by the various plans. Currently, the Northern Virginia Ozone 8-hour Moderate Nonattainment Area consists of the localities of Arlington, Fairfax, Loudoun, and Prince William Counties, and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. In addition to meeting all of the planning and control requirements for the 8-hour ozone standard, the area continues to be subject to controls imposed for the purpose of meeting the requirements for the 1-hour standard. The 8-hour ozone standard is currently being evaluated by EPA, and the area may become subject to yet an even more restrictive ozone standard for which it will need to develop another attainment plan. As mentioned above, numerous attainment plan submittals have been made over the years for this region, and more will be required as standards change.

While the Commonwealth has met and continues to meet its overall SIP requirements, nothing in the federal code or regulations prevents states from taking additional steps in the SIP as needed to meet the NAAQS. A state may have a complete and approved SIP while continuing to experience violations of the NAAQS, which is very much the case in Virginia. EPA's overall requirements, and the flexibility built into the CAIR rule, allow the state some latitude in determining how to meet the NAAQS, and Virginia has taken the opportunity to do so using the CAIR rule as a tool toward that end. While Virginia continues to meet the specific federal requirements for controlling criteria pollutants such as the CAIR rule, the state must also continue to take additional steps to reduce its persistent ozone problem in the northern part of the state.

Control strategies and control measures

Attainment and maintenance plans must contain certain components as specified by the Clean Air Act, and EPA regulations and policy. First, a nonattainment area must develop an emissions inventory in order to determine the amount and nature of pollution being emitted. This inventory is compared to a level of emissions projected to attain the NAAQS, which becomes the basis for emissions budgets to meet reasonable further progress requirements. Ultimately, the goal of an attainment plan is for the state to implement whatever combination of mandatory and optional control measures is needed to meet the attainment emissions budget—that is, the amount of pollution that is demonstrated to provide for attainment of the NAAQS. A measure of this goal is demonstration of "reasonable further progress": a gradual yet permanent reduction of emissions over an extended period of time. Continuing monitoring of emissions on an annual basis is conducted in order for the state to meet the obligation to keep emissions within the budgets.

The first step in choosing the combination of control measures needed to reduce emissions to and maintain emissions at a level within the emissions budget is to ensure that all federally-mandated measures are included in the plan, and their effect factored into the necessary emissions reductions. The next step is to identify other control measures that may be needed to make up any difference between the emissions reductions achieved by the federal measures and the reductions needed to meet reasonable further progress requirements. These additional control measures are determined by and implemented at the states' discretion.

When an area attains the NAAQS, the state may request redesignation to attainment, which then obligates it to submit a plan that demonstrates that the area will maintain the improved air quality. A maintenance plan must include commitments to continue the controls that enabled the area to become attainment, as well as contingency measures that will be implemented if the area again fails to meet the standard. As with attainment plans, maintenance plans also contain a budget under which emissions levels must remain and the state must monitor compliance with the emissions budgets.

One of the control measures included in a previous attainment plan for the northern Virginia area was a cap on emissions from two large electric utilities. This control measure was implemented by issuing

permits that capped facility emissions to remain within the area's budget. Over time, problems with the implementation and enforcement of these permits have emerged, making it difficult for the area to stay within its budget.

In order to address the problems associated with this permitting control measure, the Commonwealth took the opportunity to implement a different approach based on the CAIR regulation. The CAIR regulation establishes a regulatory mechanism to impose independent emission caps on affected units to address local air quality needs in nonattainment areas. No trading activities could be used to comply with the emissions cap. Compliance with the emissions cap would be demonstrated by comparing the actual emissions with the emissions cap. The only connection between the two is the use of the number of allowances to establish the emissions caps and the use of the emissions data to determine the amount of emissions to compare with caps. This provides a clear regulatory structure to allow the Commonwealth to address local nonattainment area needs via the nonattainment area requirements without being hampered by regulatory interpretation disputes as to the authority to do so.

The regulation also establishes a mechanism (nonattainment area permit) to impose more restrictive caps than the annual emissions caps set by regulation, as may be necessary to accommodate air quality planning needs or the endangerment of human health or welfare. The nonattainment area permits may also be issued to supplement the implementation of the annual emissions caps. Additionally, the regulation ensures that there is a common understanding that emissions trading may not be used to comply with any emissions caps in the permit. However, the permit may not contain any restrictions on participation by any affected unit in the EPA trading program.

Impact on Family

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent 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 related health and welfare problems.

TEMPLATES\FINAL\TH03
REG\DEV\E05-10TF-PETITION

COMMONWEALTH OF VIRGINIA

STATE AIR POLLUTION CONTROL BOARD

SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR

REGULATION REVISION E05

CONCERNING

EMISSIONS TRADING NONATTAINMENT AREA REQUIREMENTS

(9 VAC 5 CHAPTER 140)

INTRODUCTION

At the December, 2005 meeting, the Board authorized the Department to promulgate for public comment a proposed regulation revision concerning the Clean Air Interstate Rule.

A public hearing was advertised accordingly and held in Richmond on July 10, 2006 and the public comment period closed on September 8, 2006. The proposed regulation amendments subject to the hearing are summarized below followed by a summary of the public participation process and an analysis of the public testimony, along with the basis for the decision of the Board.

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.

EPA Comments

1. **SUBJECT**: General Comments; SIP Approval

COMMENTER: US EPA Region III, Philadelphia, PA

TEXT: Virginia's CAIR trading programs cannot be fully approved without inclusion of the revisions that EPA made to the CAIR model trading program in its action to finalize the federal implementation plan (FIP) (71 FR 225328, April 28, 2006). The revisions include provisions that will allow the interaction of EPA-administered NO_X and SO_2 trading programs under CAIR and under the FIP, revisions to CAIR to clarify certain provisions and to correct certain minor errors, and revisions that incorporate EPA's final action on reconsideration of the definition of EGU as it relates to solid waste incinerators.

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

2. **SUBJECT**: General Comments; SIP Approval

COMMENTER: US EPA Region III, Philadelphia, PA

TEXT: States have flexibility in how they choose to meet the requirements of CAIR, including whether to allow sources to trade or not. As one option, EPA's model trading rule allows certain flexibilities (for NO_X trading programs) that states may exercise, and still participate in the EPA-administered trading program. These flexibilities pertain to NO_X allocations, the compliance supplement pool (CSP), opt-in provisions, and inclusion of non-EGUs from the NO_X SIP Call trading program. Additional information on state flexibilities pertaining to allocations may be found at http://www.epa.gov/airmarkets/cair/allocations.html. The provisions in subsections H, I, and J of 9 VAC 5-140-1060 of the NO_X Annual Trading Program and 9 VAC 5-140-2060 of the NO_X Ozone Season Program appear to allow the state to impose restrictions on a trading program that, whether the provisions are submitted as part of the state's CAIR SIP or not, may affect EPA's ability to approve Virginia's Emissions Trading regulation to allow participation in the EPA-administered trading program. EPA has the following specific comments on these subsections:

a. Subdivision H.1 appears to apply to both CAIR NO_X "units" and CAIR NO_X "sources." However, the emission cap specified in this subdivision would apply differently to a "unit" than to a "source." An emission cap on a source provides flexibility with respect to the emissions from the individual units located at that source, while a per unit cap removes that flexibility. Moreover, as you know, CAIR allowances are allocated directly to units, rather than sources. We recommend this provision be clarified to reflect the precise type of cap envisioned (source cap or unit cap) consistent with the flexibility (or lack thereof) desired. It is also possible to construe this provision as expressing an intent to prohibit a unit/source from selling or trading excess allowances, rather than simply as a cap on emissions in excess of the amount of allowances allocated (rather than allowances held) for the control period involved. EPA would not be able to approve Virginia's participation, under the state's NO_X trading rules, in the EPA-administered NO_X trading programs, if any provision limiting trading is included in the Virginia regulations, even if Virginia does not intend to include this provision in its CAIR SIP. Thus any provision limiting trading is inconsistent with EPA's CAIR regional trading program and must be deleted from Virginia's regulations. In order to avoid the possibility of interpreting this provision as a trading restriction rather than a cap, we suggest adding clarifying language to H.1 explicitly stating that this provision is not intended to prohibit the trading, transfer or banking of allowances in excess of the unit/source allocation.

b. The first sentence in Subdivision H.3 seems to be a redundant restatement of the emissions cap we infer to be intended by Subdivision H.1, although it is likely to confuse the regulated community by using different language to describe the same concept. If Subdivision H.1 limits emissions to no more than a unit's/source's allocation, then only that unit's/source's allocation is considered in determining the unit/source emissions limit, and H.3 merely reiterates the cap we infer in H.1, making the first sentence of H.3 unnecessary; we strongly recommend that it be deleted. Further, since the emissions limit is a fixed number of tons (i.e., the allocation), no allowances are "used" in demonstrating compliance. The unit/source emissions are simply compared with the allocation (as provided in the second sentence in Subdivision H.3). The first sentence might also be read to imply a limitation on the "use" of out-of-state allowances that does not seem to be intended. This is reinforced by the last sentence in Subdivision H.3, which could be read in conjunction with the first sentence to prohibit a CAIR NO_X unit or source from participating in the CAIR NO_X annual or ozone season trading program. If this provision is intended to restrict the use of out-of-state allowances and thus on trading, EPA would not be able to approve Virginia's participation, under the state's NO_X trading rules, in the EPA-administered NO_X trading programs, if this provision remains a part of the Virginia regulation, even if Virginia does not submit this provision as part of its CAIR SIP. Accordingly, if Virginia wants to be a part of the EPA-administered NO_X trading program, the redundant first sentence of H.3 should be deleted in order to alleviate concerns that H.3 can potentially be interpreted as a restriction on trading.

c. Subdivision H.4 allows the Board to issue a permit that includes "any terms and conditions that the Board determines are necessary to ensure that the CAIR NO_X unit or CAIR NO_X source will not cause or contribute to a violation of any air quality standard or a nonattainment condition." The quoted language is broad enough to encompass permit terms or conditions to restrict or prohibit trading in a manner that makes Virginia's NO_X trading program with the provision as written unapprovable for inclusion in the EPA-administered CAIR trading program. To be approvable, this language must be revised to prohibit the Board from issuing permit terms or conditions that would interfere with trading under the EPA-administered CAIR trading program. We suggest adding language at the end of this subsection as follows: "The board may include in any permit issued to implement this subdivision any terms and conditions that do not restrict trading under the CAIR NO_X trading program."

d. Subsection I allows the Board to unilaterally issue permits in three enumerated situations. The provision as currently drafted could be read to allow the Board to impose a permit condition restricting or prohibiting trading. As with our comment on Subdivision H.4, to be approvable, the provision must contain language clarifying that any state operating permit issued to address any of the three listed situations may not interfere with trading under the EPA-administered CAIR trading program. We suggest the following language be added at the beginning of this subsection: "Nothing in this article shall prevent the board from issuing a state operating permit for the following, except that the operating permit may not include provisions that restrict trading under the CAIR NO_X trading program."

e. Subsection J allows the state discretion to issue a permit that would include terms and conditions that would "prohibit any CAIR NO_X unit or CAIR NO_X source subject to this article from engaging in any emissions trading activities…." As explained in our comment on Subdivision H.4 and Subsection I, any state operating permit issued may not interfere with trading under the EPA-administered CAIR trading program. As this provision clearly restricts the use of out-of-state allowances and thus on trading, EPA would not be able to approve Virginia's participation, under the state's NO_X trading rules, in the EPA-administered NO_X trading program, even if Virginia does not submit this provision as part of its CAIR SIP. Accordingly, if Virginia wants to be a part of the EPA-administered NO_X trading program, this provision must be deleted from the Virginia regulation.

RESPONSE: The nonattainment area provisions have been restructured in response to EPA's position that they would not be able to approve Virginia's participation in the EPA-administered CAIR trading programs, if any provision limiting trading is included in the Virginia regulations.

NOTE: The nonattainment area requirements were originally located in 9 VAC 5-140-1060 H, I and J. They have been moved to a new section (1061) in order to better define the separation of the nonattainment area provisions from those in the remainder of the rule. This relocation necessitated the renumbering of the subsections (H, I and J). The discussion below centers around the provisions in the NO_X Annual Trading Rule; substantively similar provisions are found in the NO_X Ozone Season Trading Rule and the SO_2 Annual Trading Rule.

9 VAC 5-140-1061 A (previously H) establishes a regulatory mechanism to impose independent emission caps on affected units to address local air quality needs in nonattainment areas. No trading activities could be used to comply with the emissions cap. Compliance with the emissions cap would not rely on the use of allowances under the EPA trading program but would be accomplished by comparing the actual emissions with the emissions cap. The only connection between the two is the use of the number of allowances to establish the emissions caps and the use of the emissions data to determine the amount of emissions to compare with caps. This provision places no restrictions on participation by any affected unit in the EPA trading program.

This provision establishes an NO_X annual emissions cap equivalent to the number of NO_X allowances issued to the affected unit for the preceding control period under the EPA annual trading program. The cap may vary from year to year depending on the availability of allowances

under the EPA annual trading program. The affected unit would not be allowed to have any emissions in excess of the annual emissions cap. Compliance would be determined by comparing the NO_X emissions from the unit with the NO_X annual emissions cap. Emissions would be determined using the data generated by the emissions monitoring requirements of the EPA annual trading program. The owner is required by July 1 of each year to submit the necessary documentation to demonstrate compliance with the NO_X annual emissions caps.

9 VAC 5-140-1061 B (previously I) establishes a mechanism (nonattainment area permit) to impose more restrictive caps than the annual emissions caps set by regulation, as may be necessary to accommodate air quality planning needs or the endangerment of human health or welfare. However, the nonattainment area permits may be issued to supplement the implementation of the annual emissions caps.

This provision provides the authority to issues nonattainment area permits as may be necessary to (i) cap the emissions of an affected unit or source contributing to a violation of any air quality standard or a nonattainment condition or (ii) remedy a situation that may cause or contribute to nonattainment condition or the endangerment of human health or welfare.

9 VAC 5-140-1061 C (previously J) ensures that there is a common understanding that emissions trading may not be used to comply with any emissions caps in the permit. This subsection provides a clear regulatory structure to allow the Commonwealth to address local nonattainment area needs via the nonattainment area permit without being hampered by regulatory interpretation disputes as to the authority to do so. However, the permit may not contain any restrictions on participation by any affected unit in the EPA trading program.

This provision provides that nothing in this CAIR NO_X Annual Trading Program rule shall prevent the board from including in the nonattainment area permit any terms and conditions that would prohibit any affected unit or source subject to this rule from engaging in any emissions trading activities or using any emissions credits obtained from emissions reductions external to the unit or source to comply with the NO_X annual emissions cap or any emissions cap in the nonattainment area permit, except that such terms and conditions may not prohibit any affected unit or source from engaging in any emissions trading activities unrelated to compliance with the NO_X annual emissions cap or any emissions cap in the nonattainment area permit.

9 VAC 5-140-1061 D (newly added) provides additional restrictions to assure that the nonattainment area provisions will not interfere with operation of the EPA CAIR trading program, including (i) a prohibition on issuing any permit that would contain any restrictions on participation by any affected unit in the EPA trading program and (ii) the segregation of compliance under the nonattainment area provisions from compliance under the EPA trading program.

Specifically, subsection D provides that:

- Nothing in this section shall be construed to prohibit any affected unit or source from participating in the CAIR NO_X Annual Trading Program.
- Notwithstanding any other provision of this section or any regulation of the Board, the Board may not include in any permit any terms and conditions that restrict any emissions trading activities under the CAIR NO_X Annual Trading Program.
- Compliance with the CAIR NO_X Annual Trading Program and this section (including any nonattainment area permits issued pursuant to this section) shall be determined separately and in accordance with the terms of the provisions of each.

9 VAC 5-140-1061 E (newly added) clarifies the issue of duration of the emissions cap and nonattainment area permit.

Specifically, subsection E provides that the NO_X annual emissions cap shall not apply once an area is no longer a nonattainment for any pollutant, but that any nonattainment area permits issued would remain in effect until revoked by the Board.

9 VAC 5-140-1062 (newly added) provides for an alternative means to demonstrate compliance with the NO_X annual emissions cap. It allows compliance to be demonstrated in the aggregate where one or more affected units are under common control and located in the same nonattainment area.

6. **SUBJECT**: NO_X Annual Trading Program: Standard Requirements; 9 VAC 5-140-1060

COMMENTER: US EPA Region III, Philadelphia, PA

TEXT: Subsection H.3 – This provision requires that compliance with this subsection "be demonstrated annually" and specifies how the demonstration will be made. However, language should be added to indicate when this demonstration is required and who is required to make the demonstration.

RESPONSE: See response to comment number 2.

22. **SUBJECT**: NO_X Ozone Season Trading Program: Standard Requirements; 9 VAC 5-140-2060

COMMENTER: US EPA Region III, Philadelphia, PA

TEXT: Subsection H.2. CAIR ozone season units are required to meet this section's requirements starting in January 1, 2009. If this requirement is intended to be a part of the CAIR ozone season program, the date should be changed to May 1, 2009.

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

23. **SUBJECT**: NO_X Ozone Season Trading Program: Standard Requirements; 9 VAC 5-140-2060

COMMENTER: US EPA Region III, Philadelphia, PA

TEXT: Subsection H.3 requires that compliance with this subsection "be demonstrated annually" and specifies how the demonstration will be made. However, language should be added to indicate when this demonstration is required and who is required to make the demonstration.

RESPONSE: See response to comment number 2.

OTHERS

53A. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: National Parks Conservation Association; American Lung Association of Virginia; Southern Environmental Law Center; Virginia Chapter, Sierra Club; Virginia League of Conservation Voters; Piedmont Environmental Council

TEXT: (Many commenters expressed similar concerns regarding the subject. The most comprehensive comments reflecting those concerns have been selected for use in this document.)

NPCA (National Parks Conservation Association) requests that DEQ prohibit in-state EGUs located in NAAQS nonattainment areas and those adversely affecting air quality related values at Shenandoah

National Park from complying with their emissions reduction obligations under CAIR through the purchase of emission reduction credits (ERCs). These EGUs should instead be required to reduce their SO_2 and NO_X emissions in order to protect public health and Shenandoah National Park.

Research and monitoring by NPS has shown that airborne pollutants emitted from mostly outside Shenandoah are degrading park resources and visitor enjoyment. The burning of fossil fuels—coal, oil, and gas—causes most of the pollution. Inadequate pollution control equipment in power plants, factories, and automobiles is the primary problem, according to NPS. Therefore, measures to reduce power plant pollution are among the most effective strategies to restore clean air to Shenandoah. Allowing power plants affecting the Shenandoah air shed to escape SO_2 and NO_X reductions through the purchase of ERCs under CAIR would defeat the goal of restoring the park to natural air quality conditions.

The Southern Environmental Law Center submitted the following:

We strongly encourage DEQ to take advantage of every tool included in the weakened legislation to improve air quality in the Commonwealth. Foremost among these tools is the authority to restrict the trading of NO_X and SO_2 allowances in nonattainment areas. Even with CAIR, portions of Northern Virginia will fail to reach attainment by the 2010 deadline. This year, DEQ monitors have already recorded 64 exceedances of the eight-hour ozone standard, as of September 1, 2006. These include six Code Red days, and remarkably, one Code Purple Air Quality Action Day, on July 18, 2006. The purple designation was only added to the color-coded system in 2002, to denote conditions so extreme that everyone – including healthy individuals – is advised to avoid prolonged or heavy exertion outdoors. Therefore, it is vital that DEQ prohibit sources in ozone and $PM_{2.5}$ nonattainment areas from meeting their compliance obligations through the purchase or acquisition of any allowances – either from in-state or out-of-state facilities – as specifically authorized under Va. Code § 10.1-1328(A)(5).

RESPONSE: 10.1-1328 A 5 of the Code of Virginia provides the ability for the prohibition of trading allowances for compliance purposed in nonattainment areas of Virginia as follows:

> The regulation shall provide for participation in the EPA-administered cap and trade system for NO_X and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NO_X and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

Compliance with the Code of Virginia and EPA approval of the Virginia program is predicated upon the full participation in the federal trading program. The Board has indicated a preference for preventing trading in nonattainment areas as that provision was included in the initial proposal. To ensure that both objectives are achieved, the Virginia program will establish emission caps for sources located in nonattainment areas equal to the allowances that will be allocated under the allowance methodology in the NO_X annual, NO_X seasonal and SO_2 annual trading programs. No trading activities will be used to comply with the emissions caps. Compliance with the emissions caps will not rely on the use of allowances under the EPA trading program but will be accomplished by comparing actual emissions with the emissions caps. Sources will not be able to exceed the emissions caps; however, the sources will be able to buy, sell or trade allowances without restriction (see response to comment number 2).

With regard to the comments submitted by SELC, the commenter's assertion that portions of Northern Virginia will fail to reach attainment even with CAIR is unduly pessimistic. As discussed in the response to comment number 49, additional control measures for the area are being developed in conjunction with CAIR as part of a multi-jurisdictional effort, and every effort is being made to enable the area to meet the federal ozone standard.

The statements characterizing the ozone situation are incorrect because the commenter overstates the actual number of exceedances by multiple-counting of the same exceedances. There were a total of 66 exceedances, statewide, for the entire ozone season of 2006. In the Northern Virginia nonattainment area, there were two Code Red days and one Code Purple day. It is important to understand that

exceedances and violations are counted per exceedance day per nonattainment area, not by the number of monitors. This is not to discount the importance of the exceedances that actually occurred; however, it is also important to depict air quality conditions accurately.

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

53B. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: Several hundred (230) citizens

TEXT: The comments requested that the regulation prohibit the trading of emission credits in regions of the state that fail to meet the federal health-based air quality standards.

RESPONSE: See response to comment number 53A.

54. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: FPL Energy and Doswell Limited Partnership (DLP)

TEXT: We are concerned about the restriction that the proposed rules place on units within nonattainment areas since Doswell is located in the Richmond nonattainment area. The proposed trading rules were written in response to the EPA finding that emissions from EGUs contribute significantly to the nonattainment of the NAAQS for $PM_{2.5}$ and/or 8-hour ozone in one or more downwind states (70 FR 21147). As such, the focus of the proposed rules should be on mitigating the contribution that affected units make to the long range transport of air pollution. The trading rules are not an effective means of addressing source contribution to local nonattainment. The EPA recognizes that there is a great variability among nonattainment areas in the type and level of emission reductions that may be necessary to reach attainment and therefore requires states to develop an area specific attainment plan for each area that has been designated as nonattainment. This attainment planning process, not CAIR trading rules, should be used to identify which pollutants and/or local source emission reductions will be most effective in reducing ambient concentrations within the nonattainment area being studied. DEQ should then use the tools that are available to require reductions in the pollutants and from the source groups identified during the planning process (e.g., application of Reasonably Available Control Technology).

While we believe that the restriction on trading within a nonattainment area should be lifted in its entirety, at a minimum we suggest that it be modified to allow the purchase of allowances from units within the same nonattainment area.

RESPONSE: Section 10.1-1328 A 5 of the Code of Virginia provides the authority to regulate emissions trading in nonattainment areas (see response to comment number 53A); however, the NO_X annual, NO_X seasonal and SO_2 annual trading programs have been modified to provide for the aggregation of units under common control and located in the same nonattainment area for compliance purposes.

55. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: Dominion

TEXT: The legislature has provided DEQ, through the enactment of HB1055, the authority to prohibit CAIR sources located in such areas from purchasing emission allowances through trading to comply with the reduction requirements of the rule. The proposal contains such measures for the annual NO_X and the ozone season NO_X programs. Dominion urges consideration of the following modifications and clarifications with respect to the proposed provisions regarding restrictions to trading for sources located in nonattainment areas:

Limit any such restrictions to trading only to the NO_X period control program to which the specific nonattainment condition applies. The ozone season NO_X program is designed to address the 8-hour ozone standard while the annual NO_X program is designed to address $PM_{2.5}$. Therefore, to the extent trading were to be restricted to address local nonattainment concerns, the restriction should be limited to ozone nonattainment areas for the ozone season NO_X trading program and limited to $PM_{2.5}$ nonattainment areas for the annual NO_X trading program. Only if an area is designated nonattainment for both ozone and $PM_{2.5}$ should trading restrictions be imposed for both the annual and ozone season NO_X programs. We believe these modifications would comport with the legislative requirements of HB1055 and meet the objective of further protecting air quality in nonattainment areas and would appropriately avoid the imposition of program restrictions and added compliance costs for affected sources in instances where such additional requirements would not be needed to meet the air quality standard for which the program was designed to address.

RESPONSE: Section 10.1-1328 A 5 provides the authority to restrict trading in nonattainment areas with no mention of pollutant-specific restrictions. Nor did the Board's initial proposal address pollutant specific nonattainment limitations but rather addressed the issue from broad application of nonattainment, irrespective of the pollutant responsible for the classification. As the General Assembly has addressed the issue without providing for pollutant-specific limitations for a nonattainment area it would be contrary to state code to provide such restrictions at this time. For example, the nonattainment provisions in § 10.1-1328 A 5 and F apply to annual NO_X emissions, seasonal NO_X emissions, annual SO_2 emissions, and annual mercury emissions. Since there are no nonattainment areas that correlate to some of these pollutants, and because there are no provisions in the Clean Air Act for mercury nonattainment, it is clear that the state code may not be interpreted to allow tailoring the nonattainment areas to specific pollutants.

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

56. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: Dominion

TEXT: Clarify that trading between sources located within the same nonattainment area is allowed. Facilities within the same nonattainment area and under common ownership should have the ability to comply in the aggregate. This would allow DEQ to meet air quality objectives by maintaining an overall emission cap on electric generating units within the specific nonattainment area while allowing sources some flexibility to meet the requirements.

RESPONSE: See response to comment number 54.

57. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: Dominion

TEXT: Clarify that any restrictions imposed under these provisions apply relative to an area's designation status at the time when the CAIR emission caps are actually imposed/implemented (in 2009) and are not based on current designations. As previously stated, air quality in Virginia is improving even in advance of CAIR. DEQ has already petitioned EPA for redesignation of the Fredericksburg and the Hampton Roads areas from nonattainment to attainment status, and intends to seek redesignation of the Richmond area to attainment as well since existing ambient air quality data shows these areas are now achieving the ozone standard.

RESPONSE: The provisions pertaining to nonattainment areas will only apply in areas designated as such at the time regulations are in effect and a given area is a nonattainment area. The NO_X annual, NO_X seasonal and $S0_2$ annual trading programs have been changed to clarify the issue of duration of the emissions cap and nonattainment area permit. Specifically, the changes provide that the

emissions caps shall not apply once an area is no longer nonattainment for any pollutant, but that any nonattainment area permits issued would remain in effect until revoked by the Board.

58. **SUBJECT**: Nonattainment Area Trading Restrictions

COMMENTER: Dominion

TEXT: The proposed rule contains additional provisions that would allow the Board (or not prevent the Board) from issuing a state operating permit in order to cap emissions of a NO_X CAIR unit or source contributing to a violation of any air quality standard or a "nonattainment condition," remedy a situation that may cause or contribute to a "nonattainment condition" or the endangerment of human health or welfare. Nonattainment condition is defined (in both the annual and ozone season NO_X portions of the rule) as "a condition where any area is shown by air quality monitoring data or which is shown by an air quality impact analysis (using modeling or other methods determined by the Board to be reliable) to exceed the levels allowed by the ambient air quality standard for a given pollutant, regardless of whether such demonstration is based on current or projected emissions data." Dominion does not take issue with DEQ's or the Board's authority to impose limits on sources located in nonattainment areas when it can be shown that such measures are necessary to address air quality problems. However, these local issues need to be addressed under programs and using mechanisms that consider and evaluate all sources contributing to the specific local nonattainment problem. We are concerned that the provisions of the proposed rule provide no guidance in terms of how the Board would determine whether any given source already subject to CAIR is "contributing" to a violation of an air quality standard, a "nonattainment condition" or the endangerment of human health or welfare.

RESPONSE: The NO_X annual, NO_X seasonal and $S0_2$ annual trading programs have been changed to provide a mechanism (nonattainment area permit) to impose more restrictive caps as may be necessary to accommodate air quality planning needs or the endangerment of human health or welfare. However, the nonattainment area permits may be issued to supplement requirements which impose emissions caps by regulation equal to the number of NO_X or SO_2 allowances issued to the affected unit.

Changes also provide the authority to issues nonattainment area permits as may be necessary to (i) cap the emissions of an affected unit or source contributing to a violation of any air quality standard or a nonattainment condition or (ii) remedy a situation that may cause or contribute to nonattainment condition or the endangerment of human health or welfare. This authority is already established under the state operating program [Article 5 (9 VAC 5-80-800 et seq.) of Part II of 9 VAC 5 Chapter 80]. These additional changes provide clarity to ensure that air quality needs can be addressed in areas where trading is detrimental to air quality planning needs.

E05-12ST-NA REQUIREMENTS

COMMONWEALTH OF VIRGINIA

STATE AIR POLLUTION CONTROL BOARD

SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR

REGULATION REVISION E05

CONCERNING

NONATTAINMENT AREA REQUIREMENTS

(9 VAC 5 CHAPTER 140)

INTRODUCTION

In 22:22 VA.R. 3074-3080 July 10, 2006, the board published for public comment a proposal to amend its regulations concerning emissions trading (Revision E05). In response to that request, comments were submitted that resulted in several changes being made to the original proposal. Additional changes were made to the original proposal based on legislation enacted by the 2006 General Assembly.

On December 6, 2006, the board adopted final amendments to its regulations concerning emission trading, which were to become effective on April 18, 2007. The final regulation amendments as adopted were published in the Virginia Register in 23:14 VA.R. 2291-2292, 2331-2333, and 2370-2371 March 19, 2007. Pursuant to § 2.2-4007 K of the Code of Virginia, at least 25 persons requested an opportunity to submit oral and written comments on specific changes to the proposal. Because of the substantive nature of these additional changes and the requests from petitioners, the board reopened the nonattainment area requirements of the proposal for public comment on those changes to the final regulation and suspended the effective date of nonattainment area requirements (9 VAC 5-140-1061, 9 VAC 5-140-1062, 9 VAC 5-140-2061, 9 VAC 5-140-2062, 9 VAC 5-140-3061, and 9 VAC 5-140-3062) of the regulation.

A public meeting was advertised accordingly and held in Richmond on June 18, 2007 and the public comment period closed on June 18, 2007. The substantive changes made to the proposed regulation subject to the public comment period 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.

A number of changes have been made to the original proposal; they are enumerated below. The changes are derived from (i) changes to the Code of Virginia as a result of the 2006 Acts of Assembly (Chapters 867 and 920) subsequent to the close of the public comment period on the original proposal, (ii) comments made by the U.S. Environmental Protection Agency (EPA) during the public comment period on the original proposal and during subsequent discussions and negotiations, (iii) clarifications and

other improvements noted by Department of Environmental Quality (DEQ) staff during subsequent reviews.

1. 9 VAC 5-140-1061 and 9 VAC 5-140-1062 (9 VAC 5-140, Part II - NO_X Annual Trading Program)

a. The provisions of 9 VAC 5-140-1060 H were reformatted as 9 VAC 5-140-1061.

b. The provisions of 9 VAC 5-140-1061 related to compliance in nonattainment areas were revised to establish an independent annual emissions cap equivalent to the number of allowances issued to the affected unit under the CAIR program. Compliance must be demonstrated on an annual basis for the preceding control period, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each unit and (ii) the annual emissions cap for the unit.

c. The provisions of 9 VAC 5-140-1061 that would have allowed for a waiver from the prohibition on trading allowances to demonstrate compliance in nonattainment areas were removed.

d. The provisions of 9 VAC 5-140-1062 were added to allow the compliance demonstration to be made in the aggregate for all units at a single source or facility.

2. 9 VAC 5-140-2061 and 9 VAC 5-140-2062 (9 VAC 5-140, Part III - NO_X Ozone Season Trading Program)

a. The provisions of 9 VAC 5-140-2060 H were reformatted as 9 VAC 5-140-2061.

b. The provisions of 9 VAC 5-140-2061 related to compliance in nonattainment areas were revised to establish an independent ozone season emissions cap equivalent to the number of allowances issued to the affected unit under the CAIR program. Compliance must be demonstrated on an annual basis for the preceding control period, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each unit and (ii) the ozone season emissions cap for the unit.

c. The provisions of 9 VAC 5-140-2061 that would have allowed for a waiver from the prohibition on trading allowances to demonstrate compliance in nonattainment areas were removed.

d. The provisions of 9 VAC 5-140-2062 were added to allow the compliance demonstration to be made in the aggregate for all units at a single source or facility.

3. 9 VAC 5-140-3061, and 9 VAC 5-140-3062 (9 VAC 5-140, Part IV - SO_2 Annual Trading Program)

Provisions have been added to address compliance in nonattainment areas similar to those for the NO_X trading programs (Parts II and III).

SUMMARY OF PUBLIC PARTICIPATION PROCESS

A public meeting was held in Richmond, Virginia on June 18, 2007. Five persons attended the meeting, one of whom offered testimony; and additional written comments were received from 146 persons or organizations during the public comment period. As required by law, notice of this meeting was given to the public on or about May 14, 2007 in the Virginia Register. In addition, personal notice of this meeting and the opportunity to comment was given by mail to those persons on DEQ's list to receive notices of proposed regulation revisions. A list of meeting attendees and the complete text or an account of each person's testimony is included in the meeting report which is on file at DEQ.

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: See comments 5, 6, 7, 8, 13 and 17

TEXT: The commenters object to, or object to the absence of, certain provisions in the CAIR nonattainment area requirements of Parts II, III and IV of 9 VAC 5 Chapter 140. Specifically, the commenters request that (i) provisions be included that would allow averaging among facilities under common ownership as a compliance option to meet the emission caps imposed for sources located in the same nonattainment area (federal or state designated) and (ii) waiver provisions be reinstated. The commenters also allege that the nonattainment area requirements (i) will interfere with administration of the Federal CAIR Program by EPA and (ii) serve as a barrier to participation by Virginia regulated entities in the EPA-administered trading program. See comments 5, 6, 7, 8, 13 and 17 for additional details.

RESPONSE: This is for the purpose of providing responses to the above cited issues raised by commenters. Preceding the responses is a summary of the actions of the State Air Pollution Control Board and the statutory authority for the regulations and an explanation of the need for the nonattainment area requirements.

Summary of Board Actions and Statutory Authority

The State Air Pollution Control Board approved its CAIR proposal on December 8, 2005. The proposal consisted of three rules as listed below. It was published in the Virginia Register on July 10, 2006 and released for public comment that same day. The public comment period ended on September 8, 2006.

Part II of 9 VAC 5 Chapter 140 [NOx Annual Trading Program]

Part III of 9 VAC 5 Chapter 140 [NOx Ozone Season Trading Program]

Part IV of 9 VAC 5 Chapter 140 [SO_2 Annual Trading Program]

The statutory authority for the proposal is in § 10.1-1322.3 (Emissions trading programs; emissions credits; Board to promulgate regulations) of the Code of Virginia and provides the following authority:

> In accordance with § 10.1-1308, the Board may promulgate regulations to provide for emissions trading programs to achieve and maintain the National Ambient Air Quality Standards established by the United States Environmental Protection Agency, under the federal Clean Air Act. The regulations shall create an air emissions banking and trading program for the Commonwealth, to the extent not prohibited by federal law, that results in net air emission reductions, creates an economic incentive for reducing air emissions, and allows for continued economic growth through a program of banking and trading credits or allowances. The regulations applicable to the electric power industry shall foster competition in the electric power industry, encourage construction of clean, new generating facilities, provide without charge new source set-asides of five percent for the first five plan years and two percent per year thereafter, and provide an initial allocation period of five years. In promulgating such regulations the Board shall consider, but not be limited to, the

> inclusion of provisions concerning (i) the definition and use of emissions reduction credits or allowances from mobile and stationary sources, (ii) the role of offsets in emissions trading, (iii) interstate or regional emissions trading, (iv) the mechanisms needed to facilitate emissions trading and banking, and (v) the role of emissions allocations in emissions trading. No regulations shall prohibit the direct trading of air emissions credits or allowances between private industries, provided such trades do not adversely impact air quality in Virginia.

§ 10.1-1322.3 was originally put in the Code in 1994 to provide the Board with the legal authority to adopt regulations to implement an open market emissions trading program. Amendments were passed in 1999 in order to provide the necessary legal authority to adopt a cap and trade program, thus enabling the Board to adopt regulations to implement the EPA NOx SIP Call budget trading program.

Following promulgation of the proposal, the 2006 Acts of Assembly were enacted which includes a new section § 10.1-1328 (Emissions rates and limitations) and provides the following authority:

> A. To ensure that the Commonwealth meets the emissions budgets established by the federal Environmental Protection Agency (EPA) in its CAIR, the Board shall promulgate regulations that provide:
>
> 1. Beginning on January 1, 2009, and each year continuing through January 1, 2014, all electric generating units within the Commonwealth shall collectively be allocated allowances of 36,074 tons of nitrogen oxide (NOx) annually, and 15,994 tons of NOx during an ozone season;
>
> 2. Beginning on January 1, 2010, and each year continuing through January 1, 2014, all electric generating units within the Commonwealth shall collectively be allocated allowances of 63,478 tons of sulfur dioxide (SO2) annually, unless a different allocation is established by the Administrator of the EPA;
>
> 3. Beginning on January 1, 2015, all electric generating units within the Commonwealth shall collectively be allocated allowances of 44,435 tons of SO2 annually, 30,062 tons of NOx annually, and 13,328 tons of NOx during an ozone season, unless a different allocation is established for SO2 by the Administrator of the EPA;
>
> 4. The rules shall include a 5% set-aside of NOx allowances during the first five years of the program and 2% thereafter for new sources, including renewables and energy efficiency projects; and
>
> 5. The regulation shall provide for participation in the EPA-administered cap and trade system for NOx and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

Unlike § 10.1-1322.3 which provided general authority to adopt emissions trading programs, the new provisions in the 2006 Acts of Assembly were directed specifically toward addressing how the Board should adopt regulations to implement the EPA CAIR program requirements.

Based upon the new provisions of the Code of Virginia and public comments, the proposed CAIR nonattainment area requirements were modified. The most significant changes were a result of comments received by EPA; particularly their concerns that the state CAIR regulation not contain any provisions that would hinder EPA's approval of the state regulation and may affect the ability of sources to participate in the EPA-administered trading program.

As explained below, the DEQ worked very closely with EPA to make changes to the proposed regulation as necessary to ensure that the provisions of the final regulation would not interfere with the EPA trading program and would meet EPA requirements for approval by ensuring that all sources could participate in the EPA trading program. The DEQ also made changes to the proposal to ensure that the provisions of the final were in compliance with the changes to the Code.

The State Air Pollution Control Board adopted its final regulation to implement the federal CAIR program on December 6, 2006. The final regulation was published in the Virginia Register on March 19, 2007 and

became effective on April 18, 2007. The submittal (regulation and allocations) for the state CAIR program was made on March 30, 2007. The submittal did not include the nonattainment area requirements.

Need for Nonattainment Area Requirements

Introduction

Among the primary goals of the federal Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The NAAQS, which are developed and promulgated by the U.S. Environmental Protection Agency (EPA), are standards which establish the maximum limits of certain pollutants that are permitted in the outside ambient air. These standards are designed to protect public health and welfare, and apply to six pollutants.

Ozone is one of the pollutants for which EPA has established a NAAQS. Ozone is formed when ozone precursors--volatile organic compounds (VOCs) and nitrogen oxides (NO_X)--react together in the presence of sunlight. VOCs are chemicals contained in gasoline, polishes, paints, varnishes, cleaning fluids, inks, and other household and industrial products. NO_X emissions are a byproduct from the combustion of fuels (primarily for power generation) and industrial processes. In order to reduce ozone concentrations to levels at or below the NAAQS, emissions of ozone precursors must be reduced through controls on stationary, mobile, and area sources. To date, there have been two ozone NAAQS: a 1-hour standard of 0.12 parts per million that was established in 1990, and an 8-hour standard of 0.08 parts per million that was established in 1997. EPA is now in the process of evaluating whether the current 8-hour standard is sufficiently protective of public health, and may issue a more restrictive standard in the near future.

When concentrations of a particular pollutant in the ambient air exceed the standards, the area is considered to be out of compliance and is classified as "nonattainment." Under § 110 of the Clean Air Act, states are required to submit a plan (the State Implementation Plan or SIP) in order to implement, maintain, and enforce the NAAQS. EPA requires that each SIP, including any laws and regulations necessary to enforce the plan, demonstrate how the air pollution concentrations will be reduced to levels at or below the standard (attainment). Once the pollution levels are within the standard, the SIP must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (maintenance). The SIP must also address a state's significant contribution of pollution in other states.

States have two primary obligations under the Clean Air Act with respect to bringing areas into compliance with the NAAQS for ozone and ensuring that the areas remain in compliance.

First, states are obligated to address the transport of ozone across state lines. EPA allows states to achieve the required emission reductions to address interstate transport by using one of two compliance options: (i) meet the state's emission budget by requiring power plants to participate in an EPA-administered interstate cap and trade system, or (ii) meet an individual state emissions budget through measures of the state's choosing.

EPA promulgated the Clean Air Interstate Rule (CAIR), which establishes SIP requirements for the affected upwind states to address interstate transport of ozone. These SIP requirements include a model cap and trade rule that states may use if they select the first option to meet their obligation to address the interstate transport of ozone. EPA provides many options for the states to deviate from the model rule and still participate in the EPA administered trading program.

The State Air Pollution Control Board approved a proposal to implement the federal CAIR program. The proposal included three new programs: the NO_X Annual Trading Program, the NO_X Ozone Season Trading Program, and the SO_2 Annual Trading Program.

Second, states are also obligated to address local ozone nonattainment areas. In order to address this need, the proposal also contained additional requirements, which would limit the emissions of NO_X in nonattainment areas.

These nonattainment area requirements were included in two of the proposed trading programs: the NO_X Annual Trading Program in 9 VAC 5-140-1060 H (recodified as 9 VAC 5-140-1061 and 9 VAC 5-140-1062 in the final version) and the NO_X Ozone Season Trading Program in 9 VAC 5-140-2060 H (recodified as 9 VAC 5-140-2061 and 9 VAC 5-140-2062 in the final version)

While the primary purpose of the CAIR proposal was to meet the obligation to control interstate transport, it was recognized that the program could also be extended to enable the state to achieve its emission reduction goals for nonattainment areas, which would require the adoption of additional, local controls. The Commonwealth took the opportunity to use the CAIR regulation as a tool for addressing local nonattainment goals. This approach takes advantage of a required regulatory regime by also providing an efficient means of meeting an additional specific need while avoiding the administrative necessity for new regulations (or other enforceable mechanism) and their associated costs. It will also make the additional requirements easier to understand and comply with. To this end, the provisions are structured to be an element of the CAIR regulation that are implemented in conjunction with the regulation but still operate independently.

The proposed SO_2 Annual Trading Program did not contain any nonattainment area requirements. The nonattainment area requirements were included in the final version reflecting the Board's authority under the new legislation and codified in 9 VAC 5-140-3061, and 9 VAC 5-140-3062.

A more detailed explanation of these two primary obligations follows.

State's obligation to address the interstate transport of ozone

States are obligated under § 110(a)(2)(D)(i) of the Clean Air Act to address interstate transport of ozone across state lines. One of the strategies that states may use in order to address the transport of ozone is implementation of "cap-and-trade" programs. EPA has promulgated a number of cap-and-trade program regulations that specifically address the issue of regional transport, and provides states with a means to meet their ozone nonattainment SIP obligations on an interstate basis. Other sections of the Act address the requirements for addressing specific local nonattainment issues.

The NO_X SIP Call is a cap-and-trade program that was promulgated 1998 to address interstate ozone transport problems in the eastern United States. At the time EPA promulgated the NO_X SIP Call, states already had SIPs for the 1-hour ozone NAAQS in place. In the NO_X SIP Call, EPA determined that the 1-hour SIPs for the affected states were deficient, and EPA called on these states, under § 110(k)(5) of the Clean Air Act, to submit SIP revisions to cure the deficiency by complying with the NO_X SIP Call. In the NO_X SIP Call, EPA relied primarily on the application of highly cost-effective controls in determining the amount of emissions that the affected states were required to eliminate.

On May 12, 2005, EPA promulgated the final Clean Air Interstate Rule (CAIR), which established SIP requirements for the affected upwind states under § 110(a)(2) of the Clean Air Act. Section 110(a)(2)(D) of the Act requires SIPs to contain adequate provisions prohibiting air pollutant emissions from sources or activities in those states that contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to a NAAQS.

For SIPs due under the 8-hour ozone NAAQS, EPA did not incorporate a § 110(k)(5) SIP call, but instead required states to submit SIP revisions, under § 110(a)(1)-(2), to fulfill the requirements of § 110(a)(2)(D). EPA required these 8-hour ozone SIPs to be submitted--and the controls mandated therein to be implemented--on the same schedule as the 1-hour SIPs.

EPA also followed the statutory interpretation and approach under § 110(a)(2)(D) developed in the NO_X SIP Call rulemaking. Under this interpretation, the emissions in each upwind state that contribute

significantly to nonattainment are identified as being those emissions that can be eliminated through highly cost-effective controls. However, in CAIR, EPA proposed criteria for determining appropriate levels of annual emissions reductions for SO_2 and NO_X and ozone-season emissions reductions for NO_X.

While § 110(a)(2)(D) requires upwind states to prohibit the amount of emissions that contribute significantly to downwind nonattainment, it does not require upwind states to prohibit emissions sufficient to assure that downwind areas attain. Rather, downwind areas continue to bear the responsibility of addressing remaining nonattainment. In other words, states may not rely solely on implementation of interstate transport controls if additional reductions are needed to meet the NAAQS.

The Clean Air Act and the Code of Federal Regulations allow states to implement rules that are more protective than federal rules. For many EPA regulations, as long as the baseline elements of the program are included, states have some flexibility in tailoring the federal rules to meet state needs. If EPA had intended for the CAIR rule to be adopted by the states precisely in the form it was issued, EPA would have written it as a standard, or issued a SIP call, and the states would have simply incorporated the rule without change. Indeed, states are obligated, as discussed above, to take additional measures beyond the specifics mandated by federal law and regulation in order to protect public health and welfare, which is the objective of both the federal Clean Air Act and the Virginia State Air Pollution Control Law.

State's obligation to address local nonattainment issues

Section 110(a) of the Clean Air Act mandates that each state adopt and submit to EPA a SIP which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The SIP can be adopted only after reasonable public notice is given and public hearings are held. Among other things, the plan must:

- establish enforceable emission limitations and other control measures as necessary to comply with the Act, including economic incentives such as fees, marketable permits, and auctions of emissions rights;
- establish schedules for compliance;
- prohibit emissions that would contribute to nonattainment of the standards or interference with maintenance of the standards by any state; and
- require sources to install, maintain, and replace monitoring equipment as necessary and to report periodically on emissions-related data.

A SIP is the key to the state's air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA will promulgate and implement an air quality plan for that state. EPA is also required to by law to impose sanctions in cases where there is no approved plan or the plan is not being implemented, including loss of federal funds for highways, and more restrictive requirements for new industry. Generally, the plan is revised as needed based upon changes in the Act and associated EPA regulations and policies.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The heart of the SIP is the control strategy. The control strategy describes the emission reduction measures to be used by the state to attain and maintain the air quality standards. There are three basic types of measures: stationary source, mobile source, and transportation source. Stationary source

control measures limit emissions primarily from commercial/industrial facilities and operations, and may include emission limits, control technology requirements, preconstruction permit programs, and source-specific control requirements. Stationary source control measures also include area source control measures which are directed at small businesses and consumer activities. Mobile source control measures are directed at tailpipe and other emissions from motor vehicles, and transportation source control measures limit the location and use of motor vehicles.

For the most part, the SIP has worked, and the standards have been attained for most pollutants in most areas. However, attainment of NAAQS for ozone has proven problematic. The Clean Air Act includes a process for identifying and classifying each ozone nonattainment area according to the severity of its air pollution problem: marginal, moderate, serious, severe and extreme. Marginal areas are subject to the least stringent requirements and each subsequent classification is subject to successively more stringent control measures. In addition to the general SIP-related sanctions, ozone nonattainment areas have their own unique sanctions.

Once a nonattainment area is defined, each state is obligated to submit a plan demonstrating how the area will attain the air quality standards. After an area attains the NAAQS, the state may request that the area be redesignated attainment; in doing so, the state must demonstrate that it will maintain the improved air quality. A maintenance plan must include commitments to continue the controls that enabled the area to become attainment, as well as contingency measures that will be implemented if the area again fails to meet the standard.

Since the Clean Air Act Amendments of 1990, 34 localities throughout Virginia have been designated nonattainment for ozone in different classifications. These areas have prepared appropriate SIPs, implemented controls, attained the NAAQS, and have been redesignated as attainment. More than 25 of these attainment and maintenance plan submittals have been made, over 10 of which were for the northern Virginia region alone.

In contrast, the northern Virginia region has consistently been designated nonattainment for ozone despite implementation of numerous control measures as prescribed by the various plans. Currently, the Northern Virginia Ozone 8-hour Moderate Nonattainment Area consists of the localities of Arlington, Fairfax, Loudoun, and Prince William Counties, and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. In addition to meeting all of the planning and control requirements for the 8-hour ozone standard, the area continues to be subject to controls imposed for the purpose of meeting the requirements for the 1-hour standard. The 8-hour ozone standard is currently being evaluated by EPA, and the area may become subject to yet an even more restrictive ozone standard for which it will need to develop another attainment plan. As mentioned above, numerous attainment plan submittals have been made over the years for this region, and more will be required as standards change.

While the Commonwealth has met and continues to meet its overall SIP requirements, nothing in the federal code or regulations prevents states from taking additional steps in the SIP as needed to meet the NAAQS. A state may have a complete and approved SIP while continuing to experience violations of the NAAQS, which is very much the case in Virginia. EPA's overall requirements, and the flexibility built into the CAIR rule, allow the state some latitude in determining how to meet the NAAQS, and Virginia has taken the opportunity to do so using the CAIR rule as a tool toward that end. While Virginia continues to meet the specific federal requirements for controlling criteria pollutants such as the CAIR rule, the state must also continue to take additional steps to reduce its persistent ozone problem in the northern part of the state.

Control strategies and control measures

Attainment and maintenance plans must contain certain components as specified by the Clean Air Act, and EPA regulations and policy. First, a nonattainment area must develop an emissions inventory in order to determine the amount and nature of pollution being emitted. This inventory is compared to a level of emissions projected to attain the NAAQS, which becomes the basis for emissions budgets to

meet reasonable further progress requirements. Ultimately, the goal of an attainment plan is for the state to implement whatever combination of mandatory and optional control measures is needed to meet the attainment emissions budget—that is, the amount of pollution that is demonstrated to provide for attainment of the NAAQS. A measure of this goal is demonstration of "reasonable further progress": a gradual yet permanent reduction of emissions over an extended period of time. Continuing monitoring of emissions on an annual basis is conducted in order for the state to meet the obligation to keep emissions within the budgets.

The first step in choosing the combination of control measures needed to reduce emissions to and maintain emissions at a level within the emissions budget is to ensure that all federally-mandated measures are included in the plan, and their effect factored into the necessary emissions reductions. The next step is to identify other control measures that may be needed to make up any difference between the emissions reductions achieved by the federal measures and the reductions needed to meet reasonable further progress requirements. These additional control measures are determined by and implemented at the states' discretion.

When an area attains the NAAQS, the state may request redesignation to attainment, which then obligates it to submit a plan that demonstrates that the area will maintain the improved air quality. A maintenance plan must include commitments to continue the controls that enabled the area to become attainment, as well as contingency measures that will be implemented if the area again fails to meet the standard. As with attainment plans, maintenance plans also contain a budget under which emissions levels must remain and the state must monitor compliance with the emissions budgets.

One of the control measures included in a previous attainment plan for the northern Virginia area was a cap on emissions from two large electric utilities. This control measure was implemented by issuing permits that capped facility emissions to remain within the area's budget. Over time, problems with the implementation and enforcement of these permits have emerged, making it difficult for the area to stay within its budget.

In order to address the problems associated with this permitting control measure, the Commonwealth took the opportunity to implement a different approach based on the CAIR regulation. The CAIR regulation establishes a regulatory mechanism to impose independent emission caps on affected units to address local air quality needs in nonattainment areas. No trading activities could be used to comply with the emissions cap. Compliance with the emissions cap would be demonstrated by comparing the actual emissions with the emissions cap. The only connection between the two is the use of the number of allowances to establish the emissions caps and the use of the emissions data to determine the amount of emissions to compare with caps. This provides a clear regulatory structure to allow the Commonwealth to address local nonattainment area needs via the nonattainment area requirements without being hampered by regulatory interpretation disputes as to the authority to do so.

The regulation also establishes a mechanism (nonattainment area permit) to impose more restrictive caps than the annual emissions caps set by regulation, as may be necessary to accommodate air quality planning needs or the endangerment of human health or welfare. The nonattainment area permits may also be issued to supplement the implementation of the annual emissions caps. Additionally, the regulation ensures that there is a common understanding that emissions trading may not be used to comply with any emissions caps in the permit. However, the permit may not contain any restrictions on participation by any affected unit in the EPA trading program.

Allow Averaging Among Facilities under Common Ownership as a Compliance Option to Meet the Emission Caps Imposed for Sources Located in the same Nonattainment Area (federal or state designated)

Introduction

In summary, the final version of the state regulation included changes to the proposal to incorporate the new provisions of the Code of Virginia and address the comments of EPA to ensure that the regulations would not interfere with the EPA-administered trading program.

In conclusion, the Code gives the Board the authority to include a provision that prohibits averaging among facilities (under common ownership or not) as a compliance option to meet the emission caps imposed for sources located in the same nonattainment area (either interstate or not). EPA has expressed its concern that such a provision is contrary to federal law to the extent that it would interfere with its administered trading program.

EPA comments

The nonattainment area requirements as proposed were contained in 9 VAC 5-140-1060 H of the NO_X Annual Trading Program. Similar provisions were included in 9 VAC 5-140-2060 H for the NO_X Ozone Season Trading Program; however, this discussion is limited to those provisions in the NO_X Annual Trading Program since both programs are the same in substance.

As proposed, the requirements applied to "any CAIR NO_X unit or CAIR NO_X source located in a nonattainment area designated in 9 VAC 5-20-204." [see introductory text 9 VAC 5-140-1060 H] The designated areas in 9 VAC 5-20-204 include only localities in the Commonwealth of Virginia. There was never any intent that the provisions would apply in any locality beyond the borders of the Commonwealth of Virginia.

The proposal only addressed a single unit or single source, thus permitting averaging between individual units at a source (i.e., facility). There was never any intent that the provisions would allow any trading or averaging beyond a source located in the Commonwealth of Virginia.

This is reflected in 9 VAC 5-140-1060 H 1:

> No owner, operator or other person shall cause or permit to be discharged into the atmosphere from any CAIR NO_X unit or CAIR NO_X source any NO_X emissions in excess of the NO_X allowances allocated for the CAIR NO_X unit or CAIR NO_X source in accordance with 9 VAC 5-140-1420.

and 9 VAC 5-140-1060 H 3:

> No NO_X allowances other than those issued to a CAIR NO_X unit or CAIR NO_X source in accordance with 9 VAC 5-140-1420 may be used to demonstrate compliance with the emission standard in subdivision 1 of this subsection. Compliance with this subsection shall be demonstrated annually, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each CAIR NO_X unit during the preceding control period, as determined in accordance with Article 8 (9 VAC 5-140-1700 et seq.) of this part and (ii) the number of NO_X allowances (expressed in tons) allocated for the CAIR NO_X unit for the preceding control period in accordance with 9 VAC 5-140-1420. However, this subsection does not otherwise prohibit any CAIR NO_X unit or CAIR NO_X source from participating in the CAIR NO_X Annual Trading Program.

EPA found the language in the proposal to be unclear and confusing with respect to applying the requirements to both units and sources in the same regulatory provisions.

EPA comments, September 8, 2006:

> Subdivision H.1 appears to apply to both CAIR NOx "units" and CAIR NOx "sources." However, the emission cap specified in this subdivision would apply differently to a "unit" than to a "source." An emission cap on a source provides flexibility with respect to the emissions from the individual units located at that source, while a per unit cap removes that flexibility. Moreover, as you know, CAIR allowances are allocated directly to units, rather than sources. We recommend this

provision be clarified to reflect the precise type of cap envisioned (source cap or unit cap) consistent with the flexibility (or lack thereof) desired.

In order to address EPA's concerns and bring clarity to the provisions, the nonattainment area requirements were recodified into two new sections, 9 VAC 5-140-1061 addressing compliance at a single unit and 9 VAC 5-140-1062 addressing the option of demonstrating compliance at a single source.

Changes to Code of Virginia

In addition to the public comments, the Code of Virginia (Code) was amended in 2006 to add provisions that specifically addressed the relationship of state emissions trading regulations (to implement the federal CAIR) to the requirements of the federal CAIR program.

The General Assembly provided specific guidance regarding the Board's regulations pertaining to emissions trading for facilities located in nonattainment areas. In particular, this legislative action granted explicit authority for the Board to prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

A new section (§ 10.1-1328 Emissions rates and limitations) was added to the Code. This section includes new subsection (subsection A) with a provision (i) to ensure that the Commonwealth meets the emissions budgets established by the EPA CAIR program for NO_X and SO_2 and (ii) that requires that the Board promulgate regulations that provide for the allocation of allowances that would keep the affected units within the budgets established in the Code. The new subsection also includes a provision (subdivision A 5) that allows the Board, at its discretion, to include in the state regulations certain prohibitions regarding participation in the federal CAIR program for facilities (i.e. sources) located in nonattainment areas.

Subdivision A 5 reads as follows:

The regulation shall provide for participation in the EPA-administered cap and trade system for NOx and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

The new Code provisions require that the state regulations must provide for participation in the EPA-administered cap and trade system for NOx and SO_2 to the fullest extent permitted by federal law, with an exception that the state regulations may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

The proposal promulgated by the board was, with regard to the trading prohibition, consistent with the new Code provisions (with some exceptions), as explained below:

1. The Code refers to the regulated entity as "facility" whereas the state regulation (to be consistent with federal regulations) refers to the regulated entity as "source". The definitions are substantively the same:

"Electric generating facility" means a facility with one or more electric generating units. [Code §10.1-1327]

"CAIR NO_X source" means a source that includes one or more CAIR NO_X units. [9 VAC 5-140-1020 B]

"Source" means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. For purposes of §

> 502(c) of the Clean Air Act, a "source," including a "source" with multiple units, shall be considered a single "facility." [9 VAC 5-140-1020 B]

2. The Code refers to the affected area as “nonattainment area in the Commonwealth”. The state regulation limits the trading prohibition to comply with the state cap to localities in the Commonwealth that are designated nonattainment. The language referring to nonattainment in both the Code and the regulation is essentially the same and precludes a source located in the Northern Virginia nonattainment area from obtaining emissions allowances from other sources outside of Virginia, even if those sources were located in the same interstate nonattainment area, to use for compliance purposes with the nonattainment provisions of the Virginia regulation, (i.e., the cap). However, a source may still purchase allowances from any source subject to the CAIR NOx Annual, CAIR NOx Seasonal or CAIR SO_2 programs as administered by EPA.

3. The Code provides the authority for the Board to require that facilities (i.e. sources) in nonattainment areas be prohibited from meeting their compliance obligations through the purchase of allowances from in-state or out-of-state facilities whereas the state regulation limits the use of trading to within a source, which is conceptually the same, as explained below (see *Prohibition on the purchase of allowances to meet compliance obligation*):

4. The Code provides that the trading prohibition may be applied to SO_2 emissions, as well as NOx; the proposed state regulation lacked such a provision.

5. The Code requires that state regulations provide for participation in the EPA-administered cap and trade system to the fullest extent permitted by federal law but includes an exception that allows the state regulations to include certain prohibitions regarding participation in the federal CAIR program for facilities (i.e. sources) located in nonattainment areas. Every effort was made to ensure that the proposal would not interfere with participation by Virginia regulated entities in the EPA-administered trading program; but as explained in the next section (*see Participation in and Interference with Federal CAIR Program*), EPA found fault in the approach used in the proposal.

Prohibition on the purchase of allowances to meet compliance obligation

Article 3 (§ 10.1-1327 et seq.) of the Virginia Air Pollution Control Law specifically addresses the relationship of state emissions trading regulations to the requirements of the EPA CAIR program and EPA CAMR program. Article 3 also contains provisions requiring the development of state-only regulations to further protect Virginia's environment by regulating mercury emissions. Regarding the development of these regulations, Article 3 contains several provisions that prohibit a facility from meeting its emissions trading program compliance obligations through the purchase of allowances from another facility. The issue becomes what does the term "purchase" mean in the context of Article 3? One could assume that the meaning ascribed to it by recognized authorities (to obtain for money or by paying a price) would be appropriate; if this were the case, any transfer that did not involve the payment of a price would not qualify as a purchase. However, an examination of the use of the term and associated exemptions throughout Article 3 leads one to a different interpretation. Given that the provisions of Article 3 for both the CAIR program and the CAMR program were added to the Code of Virginia via a single legislative action and that nothing in Article 3 indicates that the meaning of the term “purchase” would differ from one program as compared to another, the meaning of the term "purchase" is intended to be consistent throughout Article 3.

The first such prohibition pertaining to the purchase of allowances appears in § 10.1-1328 A 5 relating to the development of state regulations to implement the EPA CAIR program:

> The regulation shall provide for participation in the EPA-administered cap and trade system for NO_X and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NO_X and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

The CAIR provisions of Article 3 provide no exemptions or limiting factors regarding the prohibition of the purchase of allowances to meet compliance for NO_X and SO_2 emissions for facilities located in nonattainment areas. If the Board chooses to include the prohibition, it must prohibit the purchase of allowances from in-state or out-of-state facilities for compliance purposes.

The second such prohibition appears in § 10.1-1328 D 3 relating to the development of a state-specific rule to further protect Virginia's environment by regulating mercury emissions:

> The owners subject to the state-specific rule shall not be permitted to purchase allowances to demonstrate compliance with the regulations the Board adopts to implement this subsection. This prohibition does not include the transfer of credits authorized by subdivision 2.

The subdivision 2 cited above is § 10.1-1328 D 2 which states:

> The owner of one or more electric generating units … shall be permitted to satisfy its compliance obligations under the state-specific rule through the surrender of CAMR allowances that meet the following requirements: the allowances to be used are allocated to a facility under the control of the same owner or operator or under common control by the same parent corporation; …

These provisions, when taken together, clearly state that owners may not be permitted to purchase allowances to demonstrate compliance with the exception of allowances allocated to facilities under control of the same owner or by the same parent corporation.

The final such prohibition appears in § 10.1-1328 F relating to the development of a rule to address compliance in nonattainment areas by regulating mercury emissions:

> To further protect Virginia's environment, the Board shall prohibit any electric generating facility located within a nonattainment area from meeting its mercury compliance obligations through the purchase of allowances from another facility, except that such facilities shall be able to demonstrate compliance with allowances allocated to another facility that is under the control of the same owner or operator or under common control by the same parent corporation and is located within 200km of Virginia's border.

This restriction is similar to the prohibition identified in § 10.1-1328 D 2 and 3. Purchased allowances may not be used for compliance unless those allowances are allocated to facilities under common ownership. An additional stipulation is added; the facilities under common ownership must be located within 200 km of Virginia's border.

If one assumes that the term "purchase" means an exchange of money is necessary, neither of the two exemptions provided under § 10.1-1328 D and F would be necessary, as no owner would need to spend money for allowances he already has under his control. The General Assembly provided additional language under § 10.1-1328 D and F that makes it clear that the term "purchase" should be interpreted to mean any transfer or exchange of allowances among facilities under common ownership, and expressly provided an exemption for those facilities.

The General Assembly was very clear in providing an exemption for facilities under common ownership subject to § 10.1-1328 D and F but not for facilities under common ownership subject to § 10.1-1328 A. In light of such specific legislative language, it would not be prudent to assume that such an exemption could or should be included in the regulations for CAIR.

Finally, the Supreme Court has recognized that "where Congress includes particular language in one section of a statute and omits it in another section of the same Act, it is generally presumed that Congress acts intentionally . . . in the disparate inclusion or exclusion." Russello v. United States, 464 U.S. 16, 23 (1983). Also, there is an applicable statutory construction principle as follows: "[W]here the legislature has carefully employed a term in one place and excluded it in another, it should not be implied

where excluded." Volume 2A, Sutherland Statutory Construction (Singer, 6th Ed.) section 46.06. Without a compelling reason to suggest otherwise, it is reasonable to assume that the General Assembly acts with the same deliberation when it crafts legislative language.

Participation in and Interference with Federal CAIR Program

Introduction

States are obligated under § 110(a)(2)(D)(i) of the Clean Air Act to address interstate transport of ozone across state lines. EPA allows states to achieve the required emission reductions to address interstate transport by using one of two compliance options: (i) meet the state's emission budget by requiring power plants to participate in an EPA-administered interstate cap and trade system, or (ii) meet an individual state emissions budget through measures of the state's choosing.

EPA promulgated the Clean Air Interstate Rule (CAIR), which establishes SIP requirements for the affected upwind states to address interstate transport of ozone. These SIP requirements include a model cap and trade rule that states may use if they select the first option to meet their obligation to address the interstate transport of ozone. EPA provides many options for the states to deviate from the model rule and still participate in the EPA administered trading program.

The State Air Pollution Control Board approved its proposal to implement the federal CAIR program. The state regulation was, for the most part, patterned after the EPA model rule; however, more restrictive requirements were included for nonattainment areas. Every effort was made to ensure that the proposed nonattainment area requirements would not interfere with participation by Virginia-regulated entities in the EPA-administered trading program.

Following promulgation of the proposal, the 2006 Acts of Assembly were enacted which specifically addressed how the Board should adopt regulations to implement the EPA CAIR program requirements, including the more restrictive provisions relating to nonattainment areas.

The proposed provisions of the CAIR nonattainment area requirements were changed based upon the new provisions of the Code of Virginia and public comment. The most significant changes were a result of comments received by EPA, particularly their concerns that the state CAIR regulation not contain any provisions that would hinder EPA's approval of the CAIR SIP or affect the ability of sources to participate in the EPA-administered trading program.

As explained below, the DEQ worked very closely with EPA to make changes to the proposed regulation as necessary to ensure that the provisions of the final regulation would not interfere with the EPA trading program and would meet EPA requirements for SIP approval by ensuring that all sources could participate in the EPA trading program to the fullest extent permitted by federal law.

Core Nonattainment Area Requirements

The proposed Virginia regulation prohibited the use of emissions trading to comply with emission limits in nonattainment areas. This provision was included to ensure that Virginia is able to meet its obligation to restrict emissions that contribute to nonattainment or interfere with maintenance of the NAAQS within the Commonwealth, while still providing the affected sources the ability to participate in the regional EPA administered emissions trading program.

For units in nonattainment areas, provisions were included to automatically convert (by regulation) the CAIR NO_X allowances to an emissions limit. Use of allowances, other than those allocated to the unit or source by the board, could not be used to comply with the emissions limit in nonattainment areas. Compliance would be demonstrated on an annual basis, based on a comparison of (i) the total NO_X

emissions (expressed in tons) from each EGU during the preceding control period and (ii) the number of NO_X allowances (expressed in tons) allocated for the EGU for the preceding control period.

This was reflected in 9 VAC 5-140-1060 H 1:

> No owner, operator or other person shall cause or permit to be discharged into the atmosphere from any CAIR NO_X unit or CAIR NO_X source any NO_X emissions in excess of the NO_X allowances allocated for the CAIR NO_X unit or CAIR NO_X source in accordance with 9 VAC 5-140-1420.

and 9 VAC 5-140-1060 H 3:

> No NO_X allowances other than those issued to a CAIR NO_X unit or CAIR NO_X source in accordance with 9 VAC 5-140-1420 may be used to demonstrate compliance with the emission standard in subdivision 1 of this subsection. Compliance with this subsection shall be demonstrated annually, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each CAIR NO_X unit during the preceding control period, as determined in accordance with Article 8 (9 VAC 5-140-1700 et seq.) of this part and (ii) the number of NO_X allowances (expressed in tons) allocated for the CAIR NO_X unit for the preceding control period in accordance with 9 VAC 5-140-1420. However, this subsection does not otherwise prohibit any CAIR NO_X unit or CAIR NO_X source from participating in the CAIR NO_X Annual Trading Program.

Every effort was made to ensure that the proposed nonattainment area requirements (9 VAC 5-140-1060 H and 9 VAC 5-140-2060 H) would not interfere with participation by Virginia-regulated entities in the EPA-administered trading program; but as explained below, EPA found fault in the approach used in the proposal.

EPA acknowledged that states (i) have the flexibility to choose the means to meet the requirements of CAIR, including whether to allow sources to trade or not, and (ii) may exercise certain flexibilities in EPA's model trading rule and still participate in the EPA-administered trading program. However, EPA related the view that the nonattainment area requirements appear to allow the state to impose restrictions on a trading program that may affect EPA's ability to approve Virginia's emissions trading regulation and to allow participation in the EPA-administered trading program.

EPA comments, September 8, 2006:

> States have flexibility in how they choose to meet the requirements of CAIR, including whether to allow sources to trade or not. As one option, EPA's model trading rule allows certain flexibilities (for NOx trading programs) that States may exercise, and still participate in the EPA-administered trading program. These flexibilities pertain to NOx allocations, the compliance supplement pool, opt-in provisions, and inclusion of non-EGUs from the NOx SIP Call trading program. Additional information on state flexibilities pertaining to allocations may be found at http://www.epa.gov/airmarkets/cair/allocations.html. The provisions in subsections H, I, and J of 9 VAC 5-140-1060 of the NOx Annual Trading Program and 9 VAC 5-140-2060 of the NOx Ozone Season Program appear to allow the state to impose restrictions on a trading program that, whether the provisions are submitted as part of the State's CAIR SIP or not, may affect EPA's ability to approve Virginia's Emissions Trading regulation to allow participation in the EPA-administered trading program. EPA is willing to work with the State on revisions that may address these approvability issues. EPA has the following specific comments on these subsections:
>
> Subdivision H.1 may be construed as expressing an intent to prohibit a unit/source from selling or trading excess allowances, rather than simply as a cap on emissions in excess of the amount of allowances allocated (rather than allowances held) for the control period involved. EPA would not be able to approve Virginia's participation, under the State's NOx trading rules, in the EPA-administered NOx trading programs, if any provision limiting trading is included in the Virginia regulations, even if Virginia does not intend to include this provision in its CAIR SIP. Thus

any provision limiting trading is inconsistent with EPA's CAIR regional trading program and must be deleted from Virginia's state regulations. In order to avoid the possibility of interpreting this provision as a trading restriction rather than a cap, we suggest adding clarifying language to H.1 explicitly stating that this provision is not intended to prohibit the trading, transfer or banking of allowances in excess of the unit/source allocation.

The first sentence in Subdivision H.3 seems to be a redundant restatement of the emissions cap we infer to be intended by Subdivision H.1, although it is likely to confuse the regulated community by using different language to describe the same concept. If Subdivision H.1 limits emissions to no more than a unit's/source's allocation, then only that unit's/source's allocation is considered in determining the unit/source emissions limit, and H.3 merely reiterates the cap we infer in H.1, making the first sentence of H.3 is unnecessary; we strongly recommend that it be deleted. Further, since the emissions limit is a fixed number of tons (i.e., the allocation), no allowances are "used" in demonstrating compliance. The unit/source emissions are simply compared with the allocation (as provided in the second sentence in Subdivision H.3). The first sentence might also be read to imply a limitation on the "use" of out-of-state allowances that does not seem to be intended. This is reinforced by the last sentence in Subdivision H.3, which could be read in conjunction with the first sentence to prohibit a CAIR NOx unit or source from participating in the CAIR NOx annual or ozone season trading program. If this provision is intended to restrict the use of out-of-state allowances and thus on trading, EPA would not be able to approve Virginia's participation, under the State's NOx trading rules, in the EPA-administered NOx trading programs, if this provision remains a part of the Virginia regulation, even if Virginia does not submit this provision as part of its CAIR SIP. Accordingly, if Virginia wants to be a part of the EPA-administered NOx trading program, the redundant first sentence of H.3 should be deleted in order to alleviate concerns that H.3 can potentially be interpreted as a restriction on trading.

In order to clearly separate the nonattainment area requirements from the remainder of the CAIR regulations, subsection H was recodified as 9 VAC 5-140-1061 A (summary follows).

This provision establishes an NO_X annual emissions cap equivalent to the number of NO_X allowances issued to the affected unit for the preceding control period under the EPA annual trading program. The cap may vary from year to year depending on the availability of allowances under the EPA annual trading program. The affected unit would not be allowed to have any emissions in excess of the annual emissions cap. Compliance would be determined by comparing the NO_X emissions from the unit with the NO_X annual emissions cap. Emissions would be determined using the data generated by the emissions monitoring requirements of the EPA annual trading program. The owner is required by July 1 of each year to submit the necessary documentation to demonstrate compliance with the NO_X annual emissions caps.

In order to address EPA's specific concerns, the provisions related to the emissions limit were revised to establish a regulatory mechanism to impose annual independent emission caps on affected units to address local air quality needs in nonattainment areas. The emissions cap would be equivalent to the number of allowances issued to the affected unit for the preceding control period. No trading activities could be used to comply with the emissions cap. Compliance with the emissions cap would not rely on the use of allowances under the EPA trading program but would be accomplished by comparing the actual emissions with the emissions cap for the preceding control period. The only connection between the two is the use of the number of allowances to establish the emissions caps and the use of the emissions data to determine the amount of emissions to compare with caps. This provision would place no restrictions on participation by any affected unit in the EPA trading program. Compliance with the EPA trading program and any nonattainment area caps would be determined separately and in accordance with the terms of the provisions of each.

In order to provide the option of allowing compliance to be demonstrated in the aggregate for all units located at a single source, 9 VAC 5-140-1062 was added.

Authority to issue permits with provisions more stringent that core requirements

The proposed Virginia regulation included provisions to allow permits to be issued to impose more stringent emissions limit if necessary.

This is reflected in 9 VAC 5-140-1060 I:

> Nothing in this article shall prevent the board from issuing a state operating permit in order to:
> 1. Cap the emissions of a CAIR NO_X unit or CAIR NO_X source contributing to a violation of any air quality standard or a nonattainment condition;
> 2. Remedy a situation that may cause or contribute to nonattainment condition or the endangerment of human health or welfare; or
> 3. Establish a source-specific emission standard or other requirements necessary to implement the federal Clean Air Act or the Virginia Air Pollution Control Law.

EPA related the view that this subsection was sufficiently broad in scope as to allow the state to impose restrictions via the permit on participation in the EPA-administered trading program.

EPA comments, September 8, 2006:

> Subsection I allows the board to unilaterally issue permits in three enumerated situations. The provision as currently drafted could be read to allow the board to impose a permit condition restricting or prohibiting trading. As with our comment on Subdivision H.4, to be approvable, the provision must contain language clarifying that any state operating permit issued to address any of the 3 listed situations may not interfere with trading under the EPA-administered CAIR trading program. We suggest the following language be added at the beginning of this subsection:
>
> > "Nothing in this article shall prevent the board from issuing a state operating permit for the following, except that the operating permit may not include provisions that restrict trading under the CAIR NOx trading program."

In order to clearly separate the nonattainment area requirements from the remainder of the CAIR regulations, subsection I was recodified as 9 VAC 5-140-1061 B (summary below).

> This provision provides the authority to issue nonattainment area permits as may be necessary to (i) cap the emissions of an affected unit or source contributing to a violation of any air quality standard or a nonattainment condition or (ii) remedy a situation that may cause or contribute to nonattainment condition or the endangerment of human health or welfare.

Subsection I was further revised to accommodate this separation by clearly identifying mechanism (nonattainment area permit) that would be used to impose more restrictive caps than the annual emissions caps set by regulation, as may be necessary to accommodate air quality planning needs or the endangerment of human health or welfare. However, the nonattainment area permits may be issued to supplement the implementation of the annual emissions caps.

In order to address EPA's concerns regarding interference in the EPA-administered CAIR trading program, 9 VAC 5-140-1061 D (see *Assurance of noninterference in EPA emissions trading program* below) was added.

Prohibition on emissions trading to comply with provisions of permits

The proposed Virginia regulation included provisions prohibiting the affected unit from engaging in any emissions trading activities or using any emissions credits obtained from emissions reductions external to the unit to comply with the requirements of the permit.

This is reflected in 9 VAC 5-140-1060 J

> Nothing in this article shall prevent the board from including in any permit issued to implement subsection I of this section any terms and conditions that would prohibit any CAIR NO_X unit or CAIR NO_X source subject to this article from engaging in any emissions trading activities or using any emissions credits obtained from emissions reductions external to the CAIR NO_X unit or CAIR NO_X source to comply with the requirements of this article.

EPA found that this subsection was also sufficiently broad in scope as to allow the state to impose restrictions via the permit on participation in the EPA-administered trading program.

EPA comments, September 8, 2006:

> Subsection J allows the State discretion to issue a permit that would include terms and conditions that would "prohibit any CAIR NOx unit or CAIR NOx source subject to this article from engaging in any emissions trading activities…." As explained in our comment on Subdivision H.4 and Subsection I, any state operating permit issued may not interfere with trading under the EPA-administered CAIR trading program. As this provision clearly restricts the use of out-of-state allowances and thus on trading, EPA would not be able to approve Virginia's participation, under the State's NOx trading rules, in the EPA-administered NOx trading program, even if Virginia does not submit this provision as part of its CAIR SIP. Accordingly, if Virginia wants to be a part of the EPA administered NOx trading program, this provision must be deleted from the Virginia regulation.

In order to clearly separate the nonattainment area requirements from the remainder of the CAIR regulations, subsection J was recodified as 9 VAC 5-140-1061 C (summary below).

> This provision provides that nothing in this CAIR NO_X Annual Trading Program rule shall prevent the board from including in the nonattainment area permit any terms and conditions that would prohibit any affected unit or source subject to this rule from engaging in any emissions trading activities or using any emissions credits obtained from emissions reductions external to the unit or source to comply with the NO_X annual emissions cap or any emissions cap in the nonattainment area permit, except that such terms and conditions may not prohibit any affected unit or source from engaging in any emissions trading activities unrelated to compliance with the NO_X annual emissions cap or any emissions cap in the nonattainment area permit.

Subsection J was also revised to ensure that there is a common understanding that emissions trading may not be used to comply with any emissions caps in the permit. This subsection provides a clear regulatory structure to allow the Commonwealth to address local nonattainment area needs via the nonattainment area permit without being hampered by regulatory interpretation disputes as to the authority to do so. In order to address EPA's concerns, provisions were added to prohibit the permit from containing any restrictions on participation by any affected unit in the EPA trading program.

Assurance of noninterference in EPA emissions trading program

In order to ensure (i) that the implementation of the nonattainment area requirements will not interfere with operation of the EPA CAIR trading program and (ii) that compliance with the EPA trading program and any nonattainment area caps will be determined separately and in accordance with the terms of the provisions of each, 9 VAC 5-140-1061 D (summary below) was added in the final version.

> This provision provides that nothing in this section shall be construed to prohibit any CAIR NOX unit or CAIR NOX source from participating in the CAIR NOX Annual Trading Program. Notwithstanding any other provision of this section or any regulation of the board, the permitting authority may not include in any permit any terms and conditions that restrict any emissions trading activities under the CAIR NOX Annual Trading Program. Compliance with the CAIR NOX Annual Trading Program and this section (including any nonattainment area permits issued

pursuant to this section) shall be determined separately and in accordance with the terms of the provisions of each.

Applicability of requirements upon redesignation of an area to attainment

A public commenter (other than EPA) requested that the regulations clarify that any restrictions imposed under the nonattainment area requirements apply relative to an area's nonattainment designation status at the time when the emission caps are actually imposed/implemented.

In order to clarify applicability of the nonattainment area requirements once an area is redesignated attainment, 9 VAC 5-140-1061 E (summary below) was added in the final version.

> This provision provides that the nonattainment area requirements shall not apply once an area is no longer listed as nonattainment for any pollutant; however, regardless of the attainment status of the area, any nonattainment area permits issued to implement this section shall remain in effect until revoked by the permitting authority.

Reinstate the Nonattainment Area Waiver Provisions

As explained above (see *Need for Nonattainment Area Requirements*), the CAIR proposal was expanded beyond its primary purpose of controlling interstate transport to also contribute to meeting nonattainment area emission budgets through the adoption of local controls. This approach provides an efficient means of meeting an additional specific need while avoiding the administrative burden for new regulations. To this end, the provisions are structured to be an element of the CAIR rule that are implemented in conjunction with the rule but still operate independently—that is, these provisions are designed to be self-implementing.

One of the control measures included in a previous attainment plan was a cap on emissions from two large electric utilities. This control measure was implemented by issuing permits that capped facility emissions to remain within the area's budget. In order to address problems associated with this control measure, the Commonwealth included in the CAIR regulation a regulatory mechanism to impose independent emission limits on affected units. For units in nonattainment areas, provisions were included to automatically convert (by regulation) the CAIR NO_X allowances to an emissions limit. Use of allowances, other than those allocated to the unit or source by the board, could not be used to comply with the emissions limit in nonattainment areas. Compliance would be demonstrated on an annual basis, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each EGU during the preceding control period and (ii) the number of NO_X allowances (expressed in tons) allocated for the EGU for the preceding control period. This provides a clear structure for addressing local nonattainment area needs without creating regulatory interpretation or permit disputes between DEQ and affected sources.

Because imposing the emission limits was designed to be self-implementing, it created the possibility that the limits selected might ultimately be more restrictive than needed to meet the emission budgets. Therefore, if this situation were to occur, the following language was added in 9 VAC 5-140-1060 H 4 in order to allow the board to waive the nonattainment area requirements if necessary:

> If the board determines that the provisions of this subsection may be waived for a CAIR NO_X unit or CAIR NO_X source without the CAIR NO_X unit or CAIR NO_X source causing or contributing to a violation of any air quality standard or a nonattainment condition, the board may issue a state operating permit granting relief from the requirements of this subsection. The board may include in any permit issued to implement this subdivision any terms and conditions the board determines are necessary to ensure that the CAIR NO_X unit or CAIR NO_X source will not cause or contribute to a violation of any air quality standard or a nonattainment condition.

Once again, EPA expressed concern that the permit provisions were sufficiently broad in scope as to allow the state to impose restrictions on participation in the EPA-administered trading program.

EPA comments, September 8, 2006:

> Subdivision H.4 allows the board to issue a permit that includes "any terms and conditions that the board determines are necessary to ensure that the CAIR NOx unit or CAIR NOx source will not cause or contribute to a violation of any air quality standard or a nonattainment condition." The quoted language is broad enough to encompass permit terms or conditions to restrict or prohibit trading in a manner that makes Virginia's NOx trading program with the provision as written unapprovable for inclusion in the EPA-administered CAIR trading program. To be approvable, this language must be revised to prohibit the board from issuing permit terms or conditions that would interfere with trading under the EPA administered CAIR trading program. We suggest adding language at the end of this subsection as follows:
>
> > "The board may include in any permit issued to implement this subdivision any terms and conditions that do not restrict trading under the CAIR NOx trading program."

Subsection H 4 was deleted for two reasons.

First, between the proposed and final regulations, the General Assembly passed a law governing the state regulations to implement the federal CAIR program. These new provisions of the state code allowed the board to either include or exclude nonattainment area requirements at its discretion. However, if the board chooses to include the nonattainment area requirements, the new Code provisions do not include any procedures specifying how the board should individualize the nonattainment requirements to accommodate the needs of a particular regulated entity. The waiver provision in the proposal was, in effect, a creation of the Board. On the other hand, there is already present in the Code and the regulations of the Board, an administrative mechanism to provide regulatory relief on a case-by-case basis. Variances are a recognized administrative mechanism for regulatory relief at both the federal and state level. Additionally, there are specific procedures, including public participation, associated with variances. The proposed provisions of 9 VAC 5-140-1060 H 4 did not meet those requirements.

2. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Metropolitan Washington Air Quality Committee (MWAQC)

TEXT: MWAQC members support the Virginia CAIR provisions (9 VAC 5-140) that prohibit trading of emissions allowances by electric generating units in nonattainment areas. MWAQC is certified by the governors of Maryland and Virginia and the mayor of the District of Columbia to develop regional air pollution control strategies for the Washington, DC-MD-VA region. Virginia jurisdictions represented on MWAQC include Arlington, Fairfax, Loudoun, and Prince William counties and the Cities of Falls Church, Alexandria, and Fairfax.

MWAQC and the states have approved an air quality plan (SIP) to meet the National Ambient Air Quality Standard (NAAQS) for ozone. The SIP contains provisions for significant reductions from the electric generating facilities located in the region. The Virginia CAIR rule contains provisions that do not allow trading of NO_X and SO_2 within the nonattainment areas, thereby requiring facilities within the nonattainment area to reduce their emissions. The Maryland Healthy Air Act sets strict caps on coal fired power plants and also restricts trading. Photochemical modeling in the SIP shows that the NO_X emission reductions associated with the ban on emissions trading are needed to bring the Washington, DC-MD-VA region into attainment of the ozone standard.

The NO_X reductions from the Virginia CAIR regulation with its no trading provision are a critical part of the region's attainment plan. We strongly urge the State Air Pollution Control Board to keep the no trading provisions in the Virginia CAIR regulation.

RESPONSE: Support for the proposal is appreciated.

3. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: City of Alexandria, Department of Transportation and Environmental Services.

TEXT: The City of Alexandria supports the prohibition of emissions trading in nonattainment areas, as stipulated by the Virginia CAIR rule in its present form. Specifically, Alexandria strongly supports the Board's decision to eliminate provisions of 9 VAC 5-140-1061/2061 that would have allowed for a waiver from the prohibition on trading allowances (with respect to annual NO_X, and ozone-season NO_X, emission caps) to demonstrate compliance in nonattainment areas.

MWAQC and the states have approved a SIP to meet the National Ambient Air Quality Standard for ozone. The SIP contains provisions for significant reductions from the electric generating facilities located in the region. The Maryland Healthy Air Act sets strict caps on coal fired power plants and restricts emissions trading. According to information from MWAQC, photochemical modeling in the SIP shows that the NO_X, emission reductions associated with the prohibition of emissions trading are required to bring the Washington DC-VA-MD region into attainment of the ozone standard.

It has been well documented from EPA benefit-cost analyses and other similar studies that $PM_{2.5}$ emissions contribute the majority of health impacts from air pollution. A case study of five power plants located near the Washington D.C. area found that, on an annual basis, $PM_{2.5}$ emissions from these plants were responsible for 270 deaths, 78 cardiovascular hospital admissions (CHA), and 190 pediatric asthma emergency room visits (ERV). More importantly, the health benefits from reduced $PM_{2.5}$ emissions resulting from the implementation of Best Available Control Technology were estimated to be 210 fewer deaths, 59 fewer CHA and 140 fewer pediatric asthma ERV annually. Since NO_X and SO_2 are precursors of secondary $PM_{2.5}$, it is essential that these emissions be significantly reduced in this area. The no-trading provision in the Virginia CAlR regulation for nonattainment areas will allow this to happen in a timely manner.

Mirant Potomac River Generating Station (PRGS) located in Alexandria, is one of the five power plants referenced above. It was estimated to be the single largest source that contributes most to $PM_{2.5}$ levels in Alexandria. It was also determined to contribute 37% of the total health impacts in Alexandria from the five power plants studied. Alexandria requests that the Virginia CAlR rule require all sources within nonattainment areas including PRGS to achieve emissions reductions through in-plant controls rather than through trading with plants that are outside the nonattainment areas. Therefore, Alexandria supports the Board's decision to add provisions in 9 VAC 5-140-3061 that prohibit SO_2 trading as a means to demonstrate compliance in nonattainment areas.

In summary, NO_X, and SO_2 reductions resulting from the Virginia CAlR regulation with its no-trading provision are critical to achieving attainment of ozone and $PM_{2.5}$ NAAQS in Northern Virginia. Alexandria strongly urges the Board to uphold the no-trading provisions in the Virginia CAlR regulation.

RESPONSE: Support for the proposal is appreciated.

4. **SUBJECT:** Unintended consequence of prohibition of emissions trading in SO_2 nonattainment areas.

COMMENTER: Doswell Limited Partnership (DLP)

TEXT: Our comments address the sulfur dioxide (SO_2) nonattainment area requirements (9 VAC 5-140-3061) that were added to the rule following the close of the previous comment period. The SO_2 nonattainment area requirements in the final rule cap SO_2 emissions from each affected unit located in a nonattainment area to the number of allowances that it was issued under the federal Acid Rain Program. This means that SO_2 emissions from affected units that do not receive SO_2 allowances under the Acid Rain Program have a cap of zero. While some relief is provided in the SO_2 compliance demonstration (9

VAC 5-140-3062), the alternative compliance demonstration is useful only if one or more of the affected units in the facility are allocated Acid Rain SO_2 allowances.

DLP is the owner and operator of electric generating units that are affected units as defined by the CAIR Emission Trading Program (9 VAC 5-140). The DLP facility consists of a 725 MWe combined cycle plant and a 190 MWe simple cycle turbine. The combined cycle facility has been in operation for fifteen years, and is exempt from the requirements of the Acid Rain Program due to its status as an existing Independent Power Producer (IPP). The simple cycle turbine, which began operations in June 2001, is an affected new unit under title IV. As a new unit, the simple cycle turbine is not allocated any allowances under the Acid Rain Program. Since neither the combined cycle plant nor the simple cycle turbine receives SO_2 allowances under the Acid Rain Program, the SO_2 annual cap for the facility as defined in 9 VAC 5-140-3061 would be zero. Therefore, if Hanover County becomes nonattainment, the only way for DLP to comply with the SO_2 nonattainment area requirements in the Regulation for Emissions Trading would be to not operate at all.

Although Hanover County has been recently redesignated as attainment for the NAAQS for ozone, it will once again become nonattainment if either higher ozone concentrations are monitored or the standard is made more stringent. We believe that it is likely that either or both of these situations will occur.

As noted earlier, if Hanover County becomes nonattainment, the only way for DLP to comply with the SO_2 nonattainment area requirements in the Regulation for Emissions Trading would be to not operate at all. We believe that not allowing CAIR affected units to operate unless they are allocated SO_2 allowances under the Acid Rain Program is an unintended consequence of adding the SO_2 nonattainment area requirements to the Emission Trading Rule. Therefore, we recommend that the SO_2 nonattainment provision be stricken from the final rule. Compliance with the NOx, nonattainment area requirements should provide the added restrictions that the DEQ intended for nonattainment areas.

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

5. **SUBJECT:** Allow Facilities Located in Nonattainment Areas to Satisfy CAIR Allowance Requirements through Transfers of Credits from Other Facilities under Common Ownership and Located in the Same Federally Designated Nonattainment Area

COMMENTER: Mirant Potomac River, LLC (“Mirant”) (oral comments at public meeting)

TEXT: Mirant requests that facilities located in nonattainment areas be allowed to satisfy its CAIR allowance requirements through transfers of credits from other facilities under common ownership and located in the same federally designated nonattainment area. This request is supported by the following information:

1. Virginia law requires that trading be allowed among private entities unless such trading would have an adverse effect on air quality. A study prepared by ENVIRON and submitted with our written comments demonstrates that allowing trading will not have an adverse impact on air quality.

2. ENVIRON’s findings are consistent with those of the DEQ in approving a Consent Decree among the Commonwealth of Virginia, Maryland, and USEPA to address NO_X emissions from the Mirant facilities in Maryland and Virginia. That Consent Decree was entered in Federal district court. In support of that entry, DEQ specifically found that what amounts to emission allowance trading -- over control of NO_X emissions at the Mirant facilities in Maryland to compensate for higher emissions at PRGS -- would have a beneficial effect on ozone levels in Alexandria, the Greater Washington D.C. nonattainment area and on water quality in the Chesapeake Bay. Both ENVIRON and DEQ’s findings on this subject are consistent with EPA’s intent in developing CAIR as a tool for addressing regional rather than local ozone issues.

3. PRGS is important to the reliable and efficient generation of electricity in the Washington D.C. area. For example, PRGS is operating under a Department of Energy emergency order to supply power while

transmission lines are being upgraded. Moreover, PRGS is in proximity to the high and growing load of the Washington D.C. area. Therefore it helps to meet voltage demand, especially during the summer months when load is high and transmission efficiency is limited by hot weather.

4. PRGS has installed separated overfire air and low NO_X Burners in compliance with the Consent Decree. There are limited opportunities for any further NO_X emission reductions due to space limitations and restrictions imposed by the City of Alexandria, which has publicly stated its intent to put PRGS out of business. Given these constraints, prohibiting transfer of allowances to PRGS to comply with the CAIR Rule calls into question the ability of PRGS to continue operations. This is due to the fact that the fixed CAIR budget for Virginia is allocated annually based on actual heat input of the units subject to CAIR. If PRGS is not able to control to the average emission level or procure allowances, each year its share of the budget will shrink. This 'death spiral' is exacerbated because PRGS emissions would be capped while other facilities can procure allowances and increase generation to meet load demand growth.

Based on these considerations, Mirant requests that the Virginia CAIR rules allow for transfer of allowances among commonly controlled units in a federally designated nonattainment area.

RESPONSE: These comments presented at the public hearing are a synopsis of more detailed comments submitted by Mirant via letter dated June 18, 2007. These same issues are addressed in more detail in the agency response to the Mirant written comments. For the response to the introductory request, please see response to comment 1. For the response to item number one, please see response to comment 8. For the response to item number two, please see response to comment 9. For the response to item numbers three and four, please see response to comment 10.

6. **SUBJECT:** Background

COMMENTER: Mirant Potomac River, LLC ("Mirant") (written comments by letter)

TEXT: In December 2003 (published January 2004), EPA first proposed the CAIR. It was designed to cut emissions of SO_2 and NO_X in the eastern United States. CAIR was intended to be a tool to implement the new national ambient air quality standards for fine particle matter and 8-hour ozone. A cap and trade program for power plants was envisioned as the means of implementing the CAIR emission reductions. The rule was finalized in March 2005 and published in the Federal Register on May 12, 2005. Numerous petitions for reconsideration were filed. In response, EPA determined that its decisions in the final CAIR were reasonable and should not be changed.

States are required to develop their own regulations implementing CAIR or they become subject to a federal implementation plan ("FIP"). The Virginia General Assembly passed legislation governing the manner in which the Board could implement CAIR. The statute provides that the state-specific CAIR regulation must provide for participation in the EPA-administered cap and trade system for NO_X and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit EGUs located within a nonattainment area from meeting their NO_X and SO_2 compliance obligations through the purchase of allowances. Va. Code § 10.1-1328(A)(5).

Based on this provision, the Board initially developed regulations that prohibited electric utilities within nonattainment areas in the Commonwealth from trading credits. Those regulations did allow the Board to waive the trading restriction in certain circumstances and also arguably allowed sources under common ownership to trade allowances. At its December 2006 meeting, the Board altered the nonattainment area provision to remove the waiver option and to restrict the trading of allowances to units within a single source. The Board then finalized the regulations at that meeting.

RESPONSE: Mirant's description of the federal role involving CAIR is accurate; however, the information in the last paragraph describing events at the state level is inaccurate.

The development of the regulations to address CAIR began shortly after EPA promulgated the final federal CAIR regulations in the spring of 2005, not after the Virginia Assembly passed legislation

concerning CAIR. The Board approved a proposed regulation in December 2005 which was predicated under the statutory authority of §10.1-1322.3. Article 3, Air Emissions Control, which contains § 10.1-1327 and 1328, was enacted after the Board approved the proposed regulation for public comment. It should be noted that during the development phase every attempt was made to ensure full public participation during process including the Notice of Initial Regulation Action, use of an ad hoc group, and public comment on the proposed regulation. Mirant did not request to participate in the ad hoc group nor provide any public comment on the proposed CAIR regulations.

The General Assembly has consistently provided very specific guidance regarding the Board's regulations pertaining to emissions trading and the situation with CAIR is no different, evidence the entire new section of law to address the substance of the state regulation to implement the federal CAIR program. This particular legislative action granted explicit authority under §.10.1-1328 A 5 for the Board to "prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities." As explained in the response to comment 1, this language authorizes the board to prohibit a source located in the Northern Virginia area from obtaining emissions allowances from other sources outside of Virginia even if those sources were located in the same federal nonattainment area to use for compliance purposes with Virginia regulation.

The proposed regulations were changed based upon two criteria: (1) new provisions of state law: Article 3, Air Emissions Control, and (2) public comment. Significant changes were a result of comments received by EPA; particularly their concerns that the regulations not contain any provisions that may affect the ability of sources to trade. EPA indicated that "such provisions would hinder EPA approval of the state SIP and impact the state's participation in the EPA-administered CAIR program."

As explained in the response to comment 1, provisions were added to ensure that the implementation of the nonattainment area requirements would not interfere with operation of the EPA CAIR trading program. The addition of 9VAC 5-140-1061 and 2061 were the result of extensive collaboration with EPA to ensure that the regulations did not hinder EPA approval of the SIP and would not impact the state's participation in the EPA trading program.

Second, Mirant argues that the proposed regulations did allow the Board to waive the trading restriction in certain circumstances. The reasoning for removal of the waiver provision is found in the response to comment 1.

The third issue concerns the trading of allowances among sources of common ownership. Again, in the last paragraph Mirant states that the proposed regulations "… arguably allowed sources under common ownership to trade allowances." As explained in the response to comment 1, this interpretation is incorrect.

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

7. **SUBJECT:** Deviations from Federal CAIR Program

COMMENTER: Mirant Potomac River, LLC ("Mirant") (written comments by letter)

TEXT: EPA promulgated CAIR to address the interstate transport of SO_2 and NO_X from fossil-fueled EGUs. CAIR is not designed to address local nonattainment issues, but rather is designed to address ozone issues on a regional basis. See 70 Fed. Reg. 25163 (May 12, 2005). EPA believes that a cap and trade program is a cost-effective and efficient means of implementing CAIR. EPA encourages states to participate in the federal cap and trade program, although states are not required to do so.

If a state chooses to implement CAIR through EPA's trading program, then the state must adopt the model rule developed by EPA. A state may only deviate from the model rule in three areas. It may:

1. include all trading sources affected by the NO_X SIP Call in the ozone-season CAIR NO_X cap and trade program;

2. develop its own NO_X allocation methodologies; and

3. allow individual units to "opt-in" to the cap and trade programs.

State regulations that deviate from the model and cap and trade program in any other way cannot participate in the EPA-administered trading program. See 70 Fed. Reg. 25162, 25257 (May 12, 2005).

RESPONSE: The fact that CAIR is a tool to reduce the transport of emissions does not preclude the fact that it is a tool to achieve the NAAQS, as Mirant pointed out in comment 6,

> [CAIR] was designed to cut emissions of SO_2 and NO_X in the eastern United States. CAIR was intended to be a tool to implement the new national ambient air quality standards for fine particle matter and 8-hour ozone.

The over-arching goal of any air quality program is to reduce pollution to levels that do not impact public health. To argue that because EPA identifies a particular program as a tool to address regional transport, it therefore should not or cannot be used to also address nonattainment issues is a parochial view; a view that Virginia cannot afford as we address the very serious air quality issues facing the more than two million people in Northern Virginia. Protection of public health is the prime objective of all air quality programs, regardless of how they may be marketed.

Mirant suggests that there are only three areas for states to deviate from the EPA Model rule. As explained in the response to comment 1, EPA provided many options for states to deviate from the model rule and still participate in the EPA administered trading program besides the three indicated by Mirant.

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

8. **SUBJECT:** Authority and Goal for State CAIR Program

COMMENTER: Mirant Potomac River, LLC ("Mirant") (written comments by letter)

TEXT: The restriction on trading within nonattainment areas is contrary to the General Assembly's authorization for the Virginia CAIR, the goals of the regulatory program, and the administrative record.

1. Statutory Intent

The Virginia Code provides that Virginia's CAIR should provide for participation in the EPA-administered cap and trade system for NO_X and SO_2 to the fullest extent permitted by federal law. Va. Code § 10.1-1328(A)(5). The statute allows the Board to prohibit facilities located within a nonattainment area from meeting their NO_X and SO_2 obligations through the purchase of allowances from in-state or out-of-state facilities. Id. Accordingly, this provision must be read as providing that the Board may restrict trading within a nonattainment area so long as such restrictions do not interfere with Virginia's ability to participate in the EPA-administered cap and trade program.

The Virginia Code also provides that no regulations promulgated by the Board should prohibit the direct trading of air emissions credits of allowances between private industries unless the prohibition is necessary to prevent an adverse impact air quality in Virginia. Va. Code § 10.1-1322.3. Traditional rules of statutory construction provide that when there are a number of related statutes, they must be read and construed together in order to give full meaning, force and effect to each. See, e.g., Washington v. Commonwealth, 272 Va. 449, 455 (2006) (citing Ainslie v. Inman, 265 Va. 347, 353 (2003)). Accordingly, although Code § 10.1-1328 grants the Board the discretion to prohibit purchasing by facilities in the nonattainment areas, such discretion may only be exercised when a finding is made that the prohibition (i)

is necessary to prevent an adverse impact to air quality and (ii) does not impair participation in the EPA-administered trading program.

The regulations also must be supported by the record and must be consistent with the statutory authority for developing the regulations. Va. Code § 2.2-4027. The record does not contain any information or evidence that the prohibition of trading under the Virginia CAIR will serve the goals of the regulation or will improve air quality in Virginia. Accordingly, the regulatory change made by the Board at its December meeting is not based on the record nor was it consistent with the statutory authority for developing the regulations granted by the General Assembly.

2. Goal is Reduction of Regional Transport of Pollutants

The stated goal, throughout the development of the Virginia CAIR, is to protect against regional transport of pollution. The purpose statement included in the regulation itself provides that the goal is to mitigate "the interstate transport of ozone" and nitrogen oxides and sulfur dioxide. 9 VAC 5-140-10 (NO_X), 9 VAC 5-140-3010 (SO_2).

The record is replete with similar statements. The minutes from the Regulatory Ad Hoc Advisory Group includes the specific conclusion that CAIR is directed at regional transport of pollution, not local nonattainment issues. Minutes of Regulatory Ad Hoc Advisory Group on CAIR dated October 4, 2005 (summarizing September 29, 2005 meeting). Agency Statement TH-03 (January 2006) posted on the Virginia Regulatory Town Hall provides that "The most recent authoritative assessment of ozone control approaches have concluded that, for reducing regional scale ozone transport, a NO_X control strategy would be most effective, whereas VOC reductions are most effective in more dense urbanized areas." Such statements support a conclusion that restrictions on trading within nonattainment areas is contrary to the goal of CAIR and will not, in and of itself, result in local air quality benefits. The record of the Virginia CAIR rule (9 VAC 5-140) is incorporated by reference in these comments.

Accordingly, the changes made by the Board to the nonattainment area provisions during its December meeting are not consistent with the stated goals of the regulation. In fact, the changes are inconsistent with statements in the record made both by stakeholder groups established to aid in the development of the regulations and DEQ staff.

RESPONSE: As explained below, the restriction on trading within nonattainment areas is consistent with the Code of Virginia, the goals of the regulatory program, and the administrative record.

1. Statutory Intent

The Board disagrees with Mirant's conclusion that the Board's authority under Code § 10.1-1328 A 5 may be exercised only when a finding is made that the prohibition (i) is necessary to prevent an adverse impact to air quality and (ii) does not impair participation in the EPA-administered trading program. Mirant cites Washington v. Commonwealth, 272 Va. 449, 455 (2006) for the proposition that in a situation where there are a number of related statutes, they must be read and construed together in order to give full meaning, force and effect to each. That is simply one of many rules of statutory construction, rules employed by courts to ascertain the intent of the legislature when the meaning of a statute is not clear. Rules of statutory construction are not considered law in the traditional sense and, therefore, do not take priority over statutory language that is unambiguous. The language in §10.1-1328 A 5 is very clear and unambiguous; no statutory construction is necessary. Moreover, even if the language of Code § 10.1-1328 A 5 were deemed unclear, the intent of the legislature in enacting the language of Code § 10.1-1328 A 5 is best ascertained by considering the evolution of Virginia's emission trading statutory provisions and the application of relevant statutory construction principles applicable to that evolution and its most recent enactment of Article 3 of Chapter 13, Code Title 10.1. In that manner Code §§ 10.1-1328 A 5 and 10.1-1322.3 are appropriately reconciled and harmonized.

Mirant references specific language in § 10.1-1322.3 and takes the position that this specific section of the Code must be construed to limit the application of the new language of Code Title 10.1, Chapter 13,

Article 3. A review of Virginia legislative enactments dealing with emissions trading clearly indicates that the enactment of Code Title 10.1, Chapter 13, Article 3 was the latest in the evolution of legislative enactments dealing with emissions trading and was enacted to comprehensively deal with what the Board's regulations should and may address regarding the implementation of the federally mandated CAIR and CAMR programs.

Mirant states that the Board's discretion to prohibit trading can only be made if it "is necessary to prevent an adverse impact to air quality." The language in quotations is part of the last sentence of § 10.1-1322.3 which states: "No regulations shall prohibit the direct trading of air emissions credits or *allowances* between private industries, *provided such trades do not adversely impact air quality in Virginia.*" The italicized language was added to § 10.1-1322.3 in 1999 and was one of many amendments necessary to provide legal authority for the Board to adopt regulations that would meet the requirements of the federally mandated EPA NOx SIP Call program.

Section 10.1-1322.3 of the Code has been amended many times, each time addressing specific regulatory issues under current consideration by the Board. It was amended in 2001 by 2001 Acts of Assembly Chapter 580 to ensure a new source set-aside would be included in the Board's regulations to implement the federally mandated NOx SIP Call program. At the time, the regulations were in public comment and <u>did not</u> include a new source set-aside. The new amendment stated:

> The regulations applicable to the electric power industry shall foster competition in the electric power industry, encourage construction of clean, new generating facilities, provide new source set-asides of five percent for the first five plan years and two percent per year thereafter, and provide an initial allocation period of five years.

The General Assembly not only required that the Board's regulation include a new source set-aside but went so far as to include additional language to override certain requirements of the Administrative Process Act (APA). Subsection 2 of the 2001 Acts of Assembly Chapter 580 stated:

> 2. That the provisions of this act shall not be construed to require the State Air Pollution Control Board to reinitiate the regulatory process for the development of the regulations required by this act and that any changes made to comply with the provisions of this act may be made following the public comment period on the proposed regulations approved for public comment by the State Air Pollution Control Board on November 8, 2000.

This was done so that the Board could incorporate the requirements for the new source set-aside without restarting the entire regulatory process, as would have been required under the APA. The NOx SIP Call program had a federally mandated submittal deadline that states were required to meet. Failure to meet the deadline would result in federal sanctions. The General Assembly was deliberate and conscientious when it added the specific language to ensure that the Board's regulations would remain on track and be adopted in a timely manner so as not to jeopardize the state's ability to meet the federal deadlines for the SIP submittal.

Section 10.1-1322.3 was amended again in 2004 after language in the 2003 Acts of Assembly[1] authorized the auction of all the new source set-aside allowances under the NOx SIP Call. That auction was conducted before the end of the 2004 fiscal year; however, during the 2004 General Assembly session new language was added to ensure that no further auction of new source set-aside allowances could occur. On July 1 of that year the following amendment became effective:

> The regulations applicable to the electric power industry shall foster competition in the electric power industry, encourage construction of clean, new generating facilities, provide <u>*without charge*</u> new source set-asides of five percent for the first

[1] Subsection D of Item 383 of Chapter 1042

> five plan years and two percent per year thereafter, and provide an initial allocation period of five years.(Emphasis added.)

As demonstrated, the General Assembly has consistently provided very specific and very deliberate legislative mandates regarding the Board's regulations pertaining to emissions trading, ensuring no ambiguities of its intent. The situation with CAIR is no different: evidence the entire new section of law adopted in 2006: Code Title 10.1, Chapter 13, Article 3. While this particular legislative action does require that Virginia's CAIR regulation must provide for participation in the EPA-administered cap and trade system to the fullest extent permitted by federal law, it also provides an exception that grants explicit authority under §10.1-1328 A 5 for the Board to "prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOx and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities."

If statutory construction is necessary, the ultimate objective is to ascertain and give effect to the intent of the legislature. The Virginia Supreme Court has said, "In the construction of statutes, the courts have but one object, to which all rules of construction are subservient, and that is to ascertain the will of the legislature, the true intent and meaning of the statute, which are to be gathered by giving to all the words used their plain meaning, and construing all statutes in pari materia in such manner as to reconcile, if possible, any discordant feature which may exist, and make the body of the laws harmonious and just in their operation." Lucy v. County of Albemarle, 258 Va. 188, 129-130 (1999).

The courts determined in Southern R. Co. v. Commonwealth, 124 Va. 36, 56 (1918), that a statute applicable to a special or particular state of facts must be treated as an exception to a general statute that is so comprehensive in its language as to cover all cases within the purview of the language used. In this way, and no other, can the two statutes be harmonized. Under this statutory rule of construction, the language of Code §10.1-1328 which is "applicable to a special or particular state of facts" i.e., the Board's regulations for CAIR, must be treated as an exemption to Code §10.1-1322.3, which provides very general guidance for emissions trading and even makes reference to the Board's comprehensive authority to adopt regulations under Code §10.1-1308.

In Seehorn v. Seehorn, 7 Va. App. 375, 383 (1988), the courts ruled that a related statute cannot be utilized to create doubt in an otherwise clear statute. The statutory construction presented by Mirant attempts to do just that. Mirant states that the language in Code §10.1-1328 A 5 must be construed with language in Code §10.1-1322.3 and under their rule of construction determines the following:

> Accordingly, although Code § 10.1-1328 A 5 grants the Board the discretion to prohibit purchasing by facilities in the nonattainment areas, such discretion may only be exercised when a finding is made that the prohibition (i) is necessary to prevent an adverse impact to air quality and (ii) does not impair participation in the EPA-administered trading program..

Mirant provides no explanation to warrant its particular interpretation which places two constraints on the Board's discretion granted in Code §10.1-1328 A 5. These constraints are predicated upon: (i) provisions of Code §10.1-1322.3 pertaining to the prevention of adverse impact to air quality and (ii) participation in the EPA administered trading program. To restrict the Board's discretion, granted within statutory language specific to development of the CAIR regulation (Code §10.1-1328 A 5) to statutory language that is general to the full compliment of emissions trading programs for any National Ambient Air Quality Standard (Code §10.1-1322.3) is flawed statutory construction based upon the courts decision in Ingram v. Commonwealth, 1 Va. App. 335, 341 (1986). Ingram v. Commonwealth states that a statute of specific or particular application is not controlled or nullified by a statute of general application *unless the legislature clearly intended such a result* (emphasis added). Code § 10.1-1328, which is specific to CAIR and the Board's authority to prohibit trading in nonattainment areas, is clearly "a statute of specific or particular application" and is, therefore, not controlled by the provisions of Code §10.1-1322.3, a statute of general application for emissions trading. Nor is there any legislative language suggesting that the more general statute (Code §10.1-1322.3) should effect control as Code §10.1-1322.3 has not been amended since 2004.

The courts have also determined in Virginia Department of Labor & Industry v. Westmoreland Coal Co., 233 Va. 97, 103 (1987), that the General Assembly is presumed to have been cognizant, at the time it acted, of all existing facts and circumstances bearing upon and relating to its enactments. This must be presumed to be true with regard to the General Assembly's actions with regard to the adoption of Code Title 10.1, Chapter 13, Article 3 including the Board's authority to prohibit trading in nonattainment areas found in Code §10.1-1328 A 5.

The second caveat in the Mirant interpretation, subpart (ii), predicated the Board's discretion with participation in the EPA administered trading program. Every effort was made during the development of the proposal to ensure that the nonattainment area requirements would not interfere with participation by Virginia-regulated entities in the EPA-administered trading program; however, EPA expressed concerns with the approach used in the proposal. In particular, EPA was concerned that the state CAIR regulation not contain any provisions that would hinder EPA's approval of the CAIR regulation and may affect the ability of sources to participate in the EPA-administered trading program.

The regulations, after careful negotiations with EPA, were modified prior to final adoption of the Board to ensure that they would be consistent with all of the new provisions of §10.1-1328, including full participation in the EPA-administered trading program. In addition, the regulations do not prohibit the direct trading of air emissions credits or allowances between private industries as required under 10.1-1322.3. Every electric generating company within the Commonwealth may participate fully within the EPA trading program and may trade or bank allowances between private industries as provided under §10.1-1322.3. However, the only mechanisms currently in place for such trading is through either the EPA administered NOx SIP Call program or, beginning in 2009, through the EPA-administered CAIR program. Therefore, the Commonwealth and EPA are now in agreement that the state CAIR regulation does provide for participation in the EPA-administered cap and trade system to the fullest extent permitted by federal law.

Even if one were to accept the interpretation of statutory construction as presented by Mirant, the response to comment 9 clearly identifies the need to prohibit trading to prevent adverse air quality impacts in the Northern Virginia nonattainment area; therefore, both provisions of the Board's discretion as identified by Mirant are met.

The last sentence in Code §10.1-1322.3 proscribes regulations that prohibit direct trading of allowances between private individuals. The sentence also makes an exception: "provided such trades do not adversely affect air quality in Virginia." Code §10.1-1328.A.5, however, specifically authorizes the Board to prohibit electric generating facilities from purchasing NOx or SO_2 allowances to meet the CAIR compliance obligations. It is not plausible to ascribe an intent to the legislature that the exception to the proscription against *prohibiting* trading in the last sentence of Code §10.1-1322.3 should apply to its *authorization for the Board* to prohibit trading in Code §10.1-1328.A.5. This would present an unlikely intent for a legislative body that has demonstrated its specific and deliberate actions regarding emissions trading. The more plausible reading, supported by the evolution of the emissions trading statutes and other rules of statutory construction, is that the authorization to prohibit trading in Code §10.1-1328.A.5 is intended by the General Assembly to be a stand-alone additional exception to the proscription against prohibiting trading in the last sentence of Code §10.1-1322.3.

2. Goal is Reduction of Regional Transport of Pollutants

Mirant identifies this goal as the only reason for the Virginia CAIR regulations and extrapolates very limited aspects of the record to support this position. However, the record is overwhelmingly clear that the protection of air quality is paramount and that trading for compliance with established emissions caps, in some circumstances, would be prohibited; making clear that regional transport is not the only objective of the regulations.

Townhall document (dated 8/05) makes numerous references to the explicit objectives for the regulations and addresses additional issues other than "to protect against regional transport of pollution", including the prohibition of trading in nonattainment areas. (Pertinent references have been underlined.)

Section titled: Purpose
This section makes reference to the need to "protect Virginia's air quality, its natural resources and public health and welfare."

Section titled: Substance, NOx Annual Program
16: Use of allowances other than those allocated to the source by the board may not be used to comply in nonattainment areas. Compliance must be demonstrated on an annual basis, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each EGU during the preceding control period and (ii) the number of NO_X allowances (expressed in tons) allocated for the EGU for the preceding control period."

Section titled: Substance, NOx Seasonal Program
22: Use of allowances other than those allocated to the source by the board may not be used to comply in nonattainment areas. Compliance must be demonstrated on an annual basis, based on a comparison of (i) the total NO_X emissions (expressed in tons) from each EGU during the preceding control period and (ii) the number of NO_X allowances (expressed in tons) allocated for the EGU for the preceding control period."

Section titled: Issues under Impact to Public
The NOx seasonal budget for 2009 is 1097 tons less than the current NOx SIP Call budget and state law requires that five percent of the budget be reserved for new sources. Some sources may need to install additional control equipment, particularly those in nonattainment areas as they will be unable to use purchased credits for compliance with the state program."

Section titled: Issues under impact to Department
Disadvantages include the need for the Department to review the compliance demonstrations. More time may be involved to ensure compliance with the program for sources located in nonattainment areas as they may only use Board allocated credits for compliance. New allocations will need to be computed every year after the initial five year initial allocation. The new allocations will need to be incorporated into the source's budget permit.

Section titled: Economic impact
Source specific situations, i.e. age of equipment, type and availability of control equipment, available space to install equipment, etc. will vary from source to source. Therefore, the estimate of cost per ton may very wildly from source to source and some sources may choose to take advantage of the option to purchase allowances except sources located in nonattainment areas.
"

Section titled: Economic impact, beneficial impact the regulation is designed to produce
These emissions reductions will also enable the Commonwealth to meet the requirements under the contingency measures of the maintenance plan for the Richmond area; thus ensuring the maintenance of air quality in central Virginia and throughout the state. The projected emissions reductions from sources in Virginia are 33,143 tons of NOx and 100,000 tons of SO_2."

Section titled: Comparison with federal requirements, NOx Annual Trading Program (Part II)
The Virginia regulation provides that NOx allowance allocations other than those allocated to the unit by the board are not to be used to comply in nonattainment areas. This provision is included in order to ensure that Virginia is able to meet its obligation to restrict emissions that contribute to nonattainment or interfere with maintenance of the NAAQS within the Commonwealth, while still providing the ability of the affected sources to participate in the EPA administered emissions trading program.

Section titled: Comparison with federal requirements, NOx Seasonal Trading Program (Part III) The Virginia regulation provides that NOx allowance allocations other than those allocated to the unit by the board are not to be used to comply in nonattainment areas. This provision is included in order to ensure that Virginia is able to meet its obligation to restrict emissions that contribute to nonattainment or interfere with maintenance of the NAAQS within the Commonwealth, while still providing the ability of the affected sources to participate in the EPA administered emissions trading program."

Section titled: Periodic review
3. To prohibit emissions which would cause or contribute to nonattainment of the National Ambient Air Quality Standards (NAAQS) or interfere with maintenance of the standards.
5. To protect Virginia's air quality, its natural resources and public health and welfare.

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

9. **SUBJECT:** Nonattainment Area Restrictions Will Not Improve Air Quality

COMMENTER: Mirant Potomac River, LLC ("Mirant") (written comments by letter)

TEXT: There is no technical support in the record for the proposition that restricting trading in the nonattainment areas will improve local air quality. There is a naked assertion on the Virginia Regulatory Town Hall that although the Virginia CAIR regulation addresses regional transport of pollutants, such regulations are a means of improving air quality in local nonattainment areas. But there is no support for this statement in the record.

As demonstrated by the technical analysis performed by ENVIRON, limiting purchasing in the nonattainment area will not have any effect on attainment status, and will not improve local air quality. Whether purchasing is or is not allowed in the nonattainment areas does not materially affect the attainment demonstration requirements of the region. In fact, as explained in the ENVIRON analysis, NO_X acts as an ozone scavenger. Thus, limiting purchasing could result in higher ozone locally.

These conclusions by ENVIRON are consistent with findings by the VDEQ supporting a Consent Decree among Virginia, Maryland and USEPA. That Consent Decree has been in place since 2004 and was entered by the United States District court for the Eastern District of Virginia in April 2007. In that Consent Decree, Virginia agreed that over-control of NO_X emissions from the Mirant facilities in Maryland was the best way to address Mirant's air quality impact in the region. In effect, the Consent Decree mandates over-regulation of Mirant's Maryland facilities as an offset for the emissions at the Virginia facility. The prohibition of trading within the nonattainment area included in the Virginia CAIR directly conflicts with the Consent Decree. That Consent Decree is based on findings that over-controlling NO_X emissions from the Mirant facilities in Maryland to compensate for less control of NO_X emissions at PRGS would reduce ozone formation in Alexandria, reduce ozone in the Greater Washington D.C. nonattainment area and benefit water quality in the Chesapeake Bay and its tributaries. See Declaration of Thomas R. Ballou, Director of the Office of Air Quality Analysis, VDEQ dated December 11, 2006. That Consent Decree, which Virginia explicitly supported, reflects an arrangement that is effectively the same as allowing transfer of emission allowances among Mirant's facilities in the Greater Washington, D.C. nonattainment area, which is what Mirant is asking for in these comments.

Moreover, as noted above, there are statements in the agency record that a NO_X control strategy is appropriate for addressing regional scale ozone transport. In dense urbanized areas, air quality improvements are most effectively achieved through VOC reductions. See e.g., Agency Statement TH-03 (January 2006) posted on the Regulatory Town Hall; 62 Fed. Reg. 60320 (Nov. 7, 1997). Thus, the trading restriction is inconsistent with the stated goal of the regulations and will not improve local air quality. There is no technical basis for imposing this restriction.

RESPONSE: Mirant suggests that an air quality study conducted by ENVRON is consistent with a Consent Decree made among the Commonwealth of Virginia, Maryland, and USEPA to address NO_X

emissions from the Mirant facilities in Maryland and Virginia, and because of this federal Consent Decree, Mirant is, therefore, not subject to the nonattainment provisions of the 9 VAC 5-140. Mirant states: "That Consent Decree, which Virginia explicitly supported, reflects an arrangement that is effectively the same as allowing transfer of emission allowances among Mirant's facilities in the Greater Washington, D.C. nonattainment area…".

First, and foremost, nothing in the federal Consent Decree prevails over other applicable regulations and statutes, nor prevents Virginia or Maryland or the EPA from enacting or promulgating other applicable requirements or regulations. Since December 2005 the Mirant plant has been operating under a special order from the Department of Energy (DOE) (order No. 202-05-3; extended under Order No. 202-07-2). The Order provides for the limited operation of the Potomac River Generating Station (the Plant) owned by Mirant Potomac River, LLC. The DOE Order and the Virginia CAIR regulations are separate and discrete; one has no bearing upon the other.

It should be noted that much of the content in the Consent Decree has been subsumed by Maryland's Healthy Air Act, which requires state-of-the-art SO_2 and NO_X controls to be installed on the coal fired power plants in the southern Maryland portion of Metropolitan Washington D.C. by 2009 and will not permit the purchase of allowances for compliance. Currently, total NOx emissions from these facilities are estimated to be approximately 154.6 tons per day. By 2009, NOx emissions from these facilities are estimated to be approximately 50 tons per day; a reduction of over 104 tons of NOx emissions. The reduction of NOx associated with the installation of NO_X controls on the power plants in the southern Maryland area were included in the attainment strategy modeling for the Metropolitan Washington D.C. State Implementation Plan (SIP). These emissions reductions were not enough to show through predictive modeling that the Metropolitan Washington D.C. area would monitor less than 85 ppb during the ozone season of 2009 (i.e., show attainment with the ozone standard). The Consent Decree for Mirant was not used in the attainment strategy SIP for the Northern Virginia nonattainment area, (part of the metropolitan Washington D.C. nonattainment area), because that document was not finalized until April 20, 2007. To meet the June, 2007 deadline for submitting the attainment strategy (SIP) for the Metropolitan Washington D.C., the consent decree was not timely, therefore, all other possible controls needed to be considered.

Mirant also states that there is no technical support in the record for the proposition that restricting trading in the nonattainment areas will improve local air quality. There are, in fact, a number of studies that show NO_X emission reductions closer to the areas with poor air quality produce greater reductions in ozone and smog and, therefore, better air quality than do reductions located at greater distances from the nonattainment area. In the early 1990s, the Ozone Transport Assessment Group (OTAG) in conjunction with EPA and 37 states was formed and charged with assessing the significance of pollutant transport and recommending control strategies for reducing that transport. According to EPA, as published in the OTAG Technical Support Document, the OTAG "improved the level of air pollution science and information by an order of magnitude…" The summary of conclusions from the extensive body of knowledge gathered under the work of OTAG included, among others, the following two key findings:

- Regional NOx reductions are effective in producing ozone benefits; the more NOx reduced, the greater the benefit.

- Ozone benefits are greatest in the subregions where emissions reductions are made; the benefits decrease with distance.

Virginia, as well as OTAG and EPA, is fully cognizant that reductions of both NOx and VOC emissions, inside and outside the nonattainment area, are necessary to achieve the air quality standards in the Washington D.C. Metropolitan area. Again, quoting from the OTAG Technical Support Document, EPA stated:

> Ozone and precursor concentration reductions at the boundaries of the nonattainment areas will be necessary, <u>together with VOC and/or NOx reductions within the nonattainment areas, in order</u>

> for the states to demonstrate modeled attainment. As a result, EPA developed its post-1994 attainment strategy guidance for the 1-hour ozone standard, calling for continued emissions reductions within the ozone nonattainment areas together with a national assessment of the ozone transport phenomenon, including a recommendation for control measures aimed at reducing boundary pollutant concentrations. (emphasis added).

For the Washington D.C. SIP, Virginia DEQ used modeling that showed a reduction of 0.4 to 0.8 ppb ozone at the most critical Virginia monitors (Aurora Hills and Mount Vernon respectively) by controlling Mirant at the level of the CAIR caps. Since this area's modeling demonstration is not showing predicted levels of less than 85 ppb (attainment) in the summer of 2009, Virginia DEQ considers the benefit of a 0.4 to 0.8 ppb ozone reduction to be highly significant, especially in light of the penalties for this area should compliance with the NAAQS for ozone not be demonstrated in 2009. The penalties are steep and may necessitate even more draconian measures to be implemented on the citizens, small businesses, industry, and transportation sectors of the metropolitan Washington D.C. area.

The Washington D.C. Metropolitan area is very heavily controlled, and in fact, it is one of the most heavily regulated areas of the country. Citizens are subjected to enhanced I/M vehicle testing, which is some of the most stringent vehicle testing in the nation. They are also subject to a variety of area controls such as limitations on VOC contents of architectural paint and coatings and consumer products such as insecticide and hair spray. Small businesses are heavily impacted by rules on automobile finishing, the sale of certain VOC containing products, by rules on gasoline distribution causing gas stations to spend large sums of money on each gasoline pump, and on stringent permitting requirements. Local, state, and federal government agencies spend large amounts of money promoting and facilitating carpooling, telecommuting, and the use of public transportation. Some localities are purchasing wind power and installing more efficient traffic lights to reduce electricity demands. These controls are required due to the poor air quality in the Metropolitan Washington D.C. area. The following air quality programs have been implemented in the area as of 2002:

Point
- Non-CTG VOC RACT to 50 tpy
- NOx OTC Phase II Budget Rules (DC only)
- Expanded Non-CTG VOC RACT and State Point Source Regulations to 25 tons/yr
- NOx SIP Call (MD)

Area
- Stage II Vapor Recovery
- Phase II Volatility Controls of Refueling Emissions
- Reformulated Surface Coatings
- Reformulated Consumer Products – National Rule
- Reformulated Industrial Cleaning Solvents – National Rule
- National Standards for Locomotive Engines
- Surface Cleaning/Degreasing for Machinery/Automotive Repair
- Landfill Regulations
- Seasonal Open Burning Restrictions
- Stage I Expansion (Tank Truck Unloading)
- Graphic Arts Controls
- Auto body Refinishing

Nonroad
- 1994 EPA Non-Road Diesel Engines Rule
- 1995 EPA Non-Road Small Gasoline Engines Rule, Phase 1 and Phase 2 (handheld and non handheld)
- 1996 EPA Emissions standards for spark ignition marine engines
- 2002 EPA Emissions standards for large spark ignition engines
- Reformulated Gasoline (off-road)

Onroad
- High-Tech Inspection/Maintenance (I&M)
- Reformulated Gasoline (on-road)

Federal "Tier I" Vehicle Standards and New Car Evaporative Standards
National Low Emission Vehicle Program

Programs to be implemented by 2009 include:

Point
Clean Air Interstate Rule (CAIR) (VA and DC)
Maryland Healthy Air Act (MD)
Area
Additional phase-in of reductions from National Locomotives Rule
OTC Mobile Equipment Repair and Refinishing (VA and DC) Rule
OTC AIM Coatings Rule
OTC Solvent Cleaning Rule for VA and DC
OTC Consumer Products Rule - Phase I & II
OTC Portable Fuel Container Rule - Phase I & II
OTC Industrial Adhesives Rule
On-Board Refueling/Vapor Recovery Rule for LD Trucks (2004)
Nonroad
2004 Nonroad Heavy Duty Diesel Rule (negligible benefits by 2009)
Additional phase-in of technology rules implemented by 2002.
Onroad
Heavy-Duty Diesel Engine Rule (2004)
Heavy-Duty Diesel Engine Rule (2007)
Tier 2 Motor Vehicle Emission Standards
I&M Program with Final Cutpoints
Transportation Control Measures (TCMs)
Vehicle Technology, Maintenance, or Fuel-Based Measures

Additional voluntary programs are being implemented by the following localities:

Arlington County, Virginia
Calvert County, Maryland
City of Alexandria, Virginia
City of Falls Church, Virginia
City of Greenbelt, Maryland
Fairfax City, Virginia
Fairfax County, Virginia
Loudoun County, Virginia
Maryland Department of Transportation
Maryland National Capital Parks and Planning Commission
Montgomery County, Maryland
Prince George's County, Maryland
Prince William County, Virginia
Virginia Department of Environmental Quality
Washington Suburban Sanitary Commission, Maryland

These voluntary programs include:

Renewable Energy Programs
Regional Wind Power Purchase Program
Clean Energy Rewards Program
Renewable Portfolio Standards
Energy Efficiency Programs
LED Traffic Signal Retrofit Program
Building Energy Efficiency Programs
Green Building Programs

All of these control strategies result in reductions of both NOx and VOC emissions. Estimated reductions for VOC emissions range from 0.05 - 10.82 tons/day; reductions for NOx emissions range from 0.28 - 128.76 tons/day.

Overall, the 2009 attainment plan for the Metropolitan Washington region includes total reductions by 2009 of 87.10 tons/ day of VOC and 184.64 tons/day of nitrogen oxides (NOx). The plan may be summarized as follows:

- 128.76 tons per day of NOx reductions through the regulation of point sources of pollution, such as factories and power plants;
- 36.97 tons per day of VOC reductions from regulating area sources of pollution such as architectural coatings, portable fuel containers, automobile repair, and consumer products;
- 42.50 tons per day of VOC reductions and 17.50 tons per day of NOx reductions from non-road sources such as nonroad gasoline and nonroad diesel rules, emissions standards for large spark ignition engines, reformulated gasoline, and marine engines;
- 7.35 tons per day of VOC reductions and 38.08 tons per day of NOx reductions from initiatives relating to cars and trucks, the “on-road” or “mobile” sources of pollution; and
- 0.19 tons per day of VOC reductions and 0.30 tons per day of NOx reductions from voluntary measures spanning multiple source sectors.

Mirant states that:

> …technical analysis performed by ENVIRON, limiting purchasing in the nonattainment area will not have any effect on attainment status, and will not improve local air quality. Whether purchasing is or is not allowed in the nonattainment areas does not materially affect the attainment demonstration requirements of the region. In fact, as explained in the ENVIRON analysis, NO_X acts as an ozone scavenger. Thus, limiting purchasing could result in higher ozone locally.

In fact, the CAIR phase 1 emissions cap for Mirant is included in the estimate of reductions from point sources in the Metropolitan Washington SIP and is critical to the attainment demonstration of the region. The reduction is significant particularly when compared to reductions from other control options. If the cap were removed, the entire Metropolitan Washington SIP could be placed in jeopardy. It is estimated that the area will still have 384.74 tons/day of VOC emissions and 362.05 tons/day of NOx emissions after achieving the above mentioned reductions. These numbers indicate that the concern Mirant raises over the issue of insufficient NOx emissions to act as a scavenger for ozone, thus providing a perverse justification not to reduce NOx from the Mirant facility, is unfounded.

Predictive modeling shows the area will not meet attainment for ozone by 2009. Extensive controls for VOC and NOx for both mobile and area source categories are already in place in the region. Establishing caps and restricting trading for the one coal fired power plant in the area that will operate with only low NOx burners, not state-of-the-art NO_X controls, is reasonable and prudent action to ensure all measures are being taken so that the citizens of Virginia breathe healthy air, particularly when that cap will result in a reduction of 10.4 tons of NOx per day and is a critical aspect of the Metropolitan Washington SIP.

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

10. **SUBJECT:** Impact of Nonattainment Area Provision on Mirant

COMMENTER: Mirant Potomac River, LLC (“Mirant”) (written comments by letter)

TEXT: Additionally, removing the ability to trade from Mirant could impact its ability to provide reliable, stable power supply in the Washington, D.C. area. PRGS has been called on to provide power when line outages occur and it is currently operating under the terms of a Department of Energy Order to

do so. PRGS is also the source of generation closest to the high and growing load of Washington D.C. As such, it can be critical to providing capacity and voltage support, especially during the ozone season when load is highest and high temperatures have an adverse effect on transmission line efficiency.

It should also be noted that reducing PRGS operation will result in increasing electricity prices in the region. Elevated electricity prices have an adverse affect on public health, which is disproportionately burdensome for those on a fixed or lower income. See Kline and Keeny, "Mortality Reductions from Use of Low-Cost Coal-Fueled Power: An Analytical Framework."

Moreover, PRGS has limited alternatives available to it to install NO_X controls because of (a) the very limited space available and (b) the inability to obtain construction permits from the City of Alexandria without unreasonable restrictions as evidenced by the City's well publicized goal of having the Plant closed (e.g., zoning litigation, nuisance litigation, resolution to close). The average NO_X emission rate of units subject to the CAIR Rule is approximately 0.12 lbs/mmBtu ("Target Rate"). For a coal-fired power plant like PRGS, this can only be attained using Selective Catalytic Reduction. For the reasons listed above SCR is not feasible at PRGS. This infeasibility was the basis for the Consent Decree between Virginia, Maryland, EPA and Mirant. In the absence of control technologies that would allow PRGS to meet the ever lowering target NO_X emission rate in Virginia (i.e., total NO_X allowances divided by the total heat input), the proposed prohibition on purchasing allowances to comply with the CAIR requirement has the effect of forcing the plant to eventually shut down (no matter how small the difference between the Target Rate and PRGS rate).

More specifically, the budget for allowances in Virginia is fixed and scheduled to be reduced by about 17% for 2015. That budget is allocated on the basis of the relative heat inputs, which are also projected to increase because of demand growth, of each EGU in Virginia. If a unit cannot meet that target rate it will need to obtain allowances or reduce operations to comply with its allowance requirements. If the unit is not able to obtain allowances, it must reduce operations. Since future allocations of allowances are based on past emissions (i.e., operations), the budget for the unit will decrease over time resulting in the need for further operational reductions over time. This "death spiral" is exacerbated for a unit with an inability to procure allowances if other units in the state have the opportunity to purchase credits in response to load growth. As long as PRGS emissions are above the Target Rate and its allowances are capped, it can never make up the lost ground.

RESPONSE: Mirant states: "PRGS is important to the reliable and efficient generation of electricity in the Washington D.C. area. For example, PRGS is operating under a Department of Energy emergency order to supply power while transmission lines are being upgraded."

Since December 2005 the Mirant plant has been operating under a special order from the Department of Energy (DOE) (order No. 202-05-3; extended under Order No. 202-07-2). The Order provided for the limited operation of the Potomac River Generating Station (the Plant) owned by Mirant Potomac River, LLC. DOE and determined that "an emergency existed in the Central District of Columbia area due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, a shortage of facilities for the transmission of electric energy and other causes, and that issuance of an order would serve to alleviate the emergency and serve the public interest."

The order noted that PEPCO (owner of the transmissions lines serving the Central District of Columbia) would be installing additional transmissions lines to "provide a high level of electric reliability in the Central D.C. area, even in the absence of production from the Plant."

In a Letter dated May 31, 2007, from Mr. Kevin Kolevar, Director, Office of Electricity Delivery and Energy Reliability, DOE, to Mr. Robert Driscoll, COE, Mirant Mid-Atlantic, LLC., in referencing the above mentioned wording in the DOE Order, stated, in part: "Therefore, the Department's current expectation is that there will be no need for an extension of Order NO. 202-07-2 beyond its expiration date of July 1, 2007, assuming the two lines are completed by that date."

Letter dated June 27, 2007, from Kirk J. Emge, Vice President, Pepco Holdings, Inc., to David K. Paylor, Director, Department of Environmental Quality, states in part:

> …you requested me to notify you when the installation of the new 230 kV circuits from Potomac Electric Power Company's (Pepco") Palmers Corner Substation to its Potomac River Substation was complete. Pursuant to that request, this is to notify you that at approximately 3:00 p.m. on Tuesday, June 27, 2007 these circuits were energized and the project is now considered complete…

In light of the upgrades to electrical service by PEPCO completed in late June of this year and the DOE decision not to extend the special order, Mirant's argument that the operation of the plant is necessary for supplying reliable electricity in the central D.C. area is no longer applicable.

Mirant indicates that it has done all it can with regard to installing control equipment by installing separated overfire air and low NO_X Burners in compliance with the Consent Decree.

Low NOx burners were installed as part of a federal Consent Decree to resolve a violation in 2003 of Mirant's NOx SIP Call permit limit for NOx emissions. Miriant's SIP Call permit, which was effective in 2003, had a NOx limit of 1,019 tons per day. Mirant violated the permit limits by approximately 1,000 tons. The negotiated Consent Decree for the 2003 violation NOx emissions was approved by the federal court on April 20, 2007. In addition, Mirant has implemented a Trona injection system to control SO_2 in response to an EPA Administrative Compliance Order dated June of 2006. This EPA Order was issued in conjunction with the DOE Order to allow the facility to operate while upgrades were completed to the transmission lines.

DEQ activities pertaining to control technology at the Mirant facility thus far have been in conjunction with the NOx SIP Call Consent Decree, DOE Order and EPA Order; not a review of a permit request pertaining to the installation of new control technology. It is not possible for DEQ to substantiate Mirant's position that "PRGS has limited alternatives available to it to install NO_X controls" as Mirant has not submitted any request to the DEQ for a BACT determination for new control technology. It is unclear to DEQ as to exactly what additional controls, retrofit options or possibilities for fuel switching are feasible because the plant has not undergone a formal control technology review and evaluation that a facility would be subject to under the major or minor new source review process.

Mirant also argues that because the budget is fixed and will be reduced in the second phase of CAIR in 2015, Mirant will not be able to respond to projected demand growth like other units in the state by purchasing credits because their emissions will be capped.

By law, the initial allocation to a source subject to CAIR is for five years; by regulation it is based upon the three highest heat inputs for the years 2001 through 2005. . The cap for sources in nonattainment areas is equal to the allowance under CAIR, therefore, Mirant will not experience any reduction of their emissions cap from 2009 through 2013. Subsequent allocations (and therefore, Mirant's subsequent cap) will be determined annually, based on the three highest years of heat input from the previous five consecutive operating years. Therefore, the allocation for 2014 will be based upon the three highest years of heat input from the years 2009 through 2013. Assuming that Mirant operates at a heat input level that meets its emissions cap during the first five years of the program it is conceivable that Mirant will not have a reduction in allocations until the second phase of the CAIR program becomes effective. At this time the allocations for <u>all</u> sources subject to CAIR will be reduced due to a reduction in the state budget. This formula for the distribution of allowances hardly represents a "death spiral", but instead, is a method to reduce NOx emissions from electrical generating units subject to CAIR and is the intent of the program. Many sources are choosing to install pollution control equipment to offset the reduction in allowances allocations that will result in the second phase of the program.

The increased demand for electricity will be met through new sources coming on line or from increased production of electricity from existing sources; many of which will install state of the art pollution control technology. As a result, the allocations to Mirant may be reduced. However, it is desirable from an air

quality perspective, to have any demand growth met through the operation of either new or cleaner, more efficient generation, than from an uncontrolled facility in a nonattainment area.

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

11. **SUBJECT:** Conclusions and Recommendations

COMMENTER: Mirant Potomac River, LLC ("Mirant") (written comments by letter)

TEXT: At its December 2006 meeting, the Board changed the nonattainment area provisions to prohibit trading between sources under common ownership within nonattainment areas. Additionally, the Board removed provisions that would allow owners the ability to obtain a waiver to the trading restrictions imposed on facilities within nonattainment areas. These changes are not based on sound science and will not further the air quality goals in those areas of the state. Accordingly, Mirant asks the Board to remove or modify the restriction on trading allowances to demonstrate compliance with the CAIR requirements within nonattainment areas as discussed herein.

There is no evidence in the record to support the conclusion that prohibiting transfer of allowances among facilities located in the Greater Washington, D.C. nonattainment area will improve air quality. State law requires that such a finding must be made before restrictions on trading may be imposed. There is evidence in the record that the intention of the regulation is to address regional transport of pollutants and not to address local air quality. Mirant has provided technical support for the conclusion that prohibiting trading in the nonattainment areas does not improve local air quality and may, in fact, have negative local impacts. The prohibition on transfer in nonattainment areas should be removed from the regulation.

The available technical information demonstrates that there is no adverse effect caused by procurement of allowances by facilities located within the Greater Washington, D.C. nonattainment area. This restriction should be removed from the regulation. Additionally, Virginia should encourage trading among facilities under common ownership located within nonattainment areas as defined at the federal level and that cross state boundaries. More significant reductions can be achieved through such trades, and there will be a greater improvement to air quality on a regional basis. Such a provision would be more consistent with the goal of both the federal and Virginia CAIR of addressing regional transport of pollutants as well as the spirit and intent of the NO_X Consent Decree to which Virginia agreed.

RESPONSE: This is a summary of the arguments presented by Mirant and have been previously addressed in the responses to comments 5 through 11.

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

12. **SUBJECT:** Supplementary Information

COMMENTER: Mirant Potomac River, LLC ("Mirant") (written comments by letter)

TEXT: We are submitting the enclosed compact disks (previous submissions to the Department of Environmental Quality) as additional comments on the Regulation for Emissions Trading Nonattainment Area Requirements in Virginia's CAIR Rule (9 VAC 5 Chapter 140): (1) May 4, 2007 Comments on Draft Consent Order Between the Virginia Department of Environmental Quality and the Mirant Potomac River Generation Station and Draft Order Proposed by the City of Alexandria; and (2) May 22, 2007 Comments on Draft State Operating Permits for the Control of SO_2 from the Mirant Potomac River Generating Station.

RESPONSE: Mirant submitted a petition to suspend the nonattainment provisions of Virginia's CAIR regulation and DEQ suspended those provisions pending receipt of additional comment on those provisions. The final sentence (with added CAPS) of Mirant's petition reads as follows.

"We look forward to working with the Board and DEQ in amending these regulations SO THAT THEY ARE CONSISTENT WITH the record, the Board's statutory authority, environmental protection, sound science, reliable electricity AND RECENT SETTLEMENTS OF LITIGATION AMONG THE COMMONWEALTH OF VIRGINIA, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, STATE OF MARYLAND AND MIRANT."

As explained in the response to comment 9, nothing in the amended consent decree or any permit prevails over other applicable regulations and statutes, nor prevents the governments from enacting or promulgating other applicable requirements.

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

13. **SUBJECT:** Allow Averaging Among Facilities under Common Ownership as a Compliance Option to Meet the Emission Caps Imposed for Sources Located in Nonattainment Areas

COMMENTER: Dominion

TEXT: While the final rule allows trading or averaging among units at the same facility for compliance with the emission limits (caps) in nonattainment areas, the addition of Sections 9 VAC 5-140-1062.B and 9 VAC 5-140-2062.B, which establish the NO_X emissions compliance demonstration for units and sources in nonattainment areas for the annual NO_X and ozone season NO_X program, respectively, now explicitly prohibit the use of averaging among sources under the same ownership in a nonattainment area. Facilities within the same nonattainment area and under common ownership should have the ability to comply in the aggregate. This would allow DEQ to meet air quality objectives by maintaining an overall emission cap on electric generating units within the specific nonattainment area while allowing sources some flexibility to meet the requirements. To the extent there are concerns with respect to air quality impacts from any particular source or unit in a nonattainment area, there are provisions in the nonattainment area requirements that would allow the permitting authority to address such issues on a source-specific basis.

This requested change is in full conformance with the law, which states, “that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NO_X and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.” (10.1-1328.A.5 of Virginia Code) This clearly affirms the Board discretion to allow trades among facilities under common ownership, particularly those that do not involve “purchase” of allowances.

RESPONSE: As explained in the response to comment 1, the term “purchase,” as used in §10.1-1328 A 5 of the Code, is not intended to take on the meaning stated by the commenter.

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

14. **SUBJECT:** The Revised Nonattainment Restrictions Imposed Will Significantly Disadvantage New, Cleaner Sources and Could Inadvertently Prevent New Sources Not Eligible for NO_X Allowances from the New Source Set Aside from Operating

COMMENTER: Dominion

TEXT: Due to changes made in the final rule regarding how NO_X allowances from the new source set aside will be allocated to new sources during the initial allocation period (2009-2013), the nonattainment provisions as modified in the final rule could inadvertently impose restrictions that would not allow certain new units located in nonattainment areas to operate. Under the proposal issued in July 2006, new sources could request allowances from the new source set aside each year, based on the unit’s emissions during the previous control period. DEQ would subsequently allocate, on a pro-rata basis, the allowances from the new source set aside each year under the annual and ozone season NO_X programs during the 2009-2013 timeframe. In the final rule, DEQ now requires new sources to submit a

request for allowances from the new source set aside by May 1, 2009 and will base the allocations for the entire 2009-2013 period on a new unit's emissions during the 2008 control period. This change is significant in that it eliminates the ability of a new source that commences operation after the 2008 control period from receiving any allocations from the new source set aside throughout the 2009-2013 timeframe. Since these units would have no allocation of NO_X allowances, their "nonattainment emission cap" would be zero under the provisions pertaining to CAIR NO_X sources in nonattainment areas. While a new unit constructed at an existing facility would at least have the ability to average with other existing units at the same facility, a unit constructed at a "stand-alone," greenfield facility would have no compliance option under these provisions and effectively would not be able to operate. We believe this is an unintended consequence as it essentially could curtail the construction of new, clean, state-of-the-art generation in nonattainment areas and/or restrict the siting of new generation to existing sites.

For those sources that would still be eligible for allowances from the new source set aside during the initial allocation period, which would be limited to sources that commence operations on or after January 1, 2006 but before January 1, 2009, the allocations would be based on how the units operated during the 2008 control period. Consequently, in a case where a new unit comes online during the latter part of either the 2008 ozone season control period or the 2008 annual control period, its allocation from the new source set aside for each respective control period in each of the years 2009 through 2013 is not likely to be representative of the unit's actual operations in these subsequent years. While units in attainment areas will have the option to purchase allowances from the market or to average with other co-owned units or sources in the CAIR program to compensate for allowance shortfalls, new units in nonattainment areas and subject to the nonattainment trading and averaging restrictions will be subject to a very restrictive emission cap with no or very limited flexibility to comply through trading or averaging. New units that would need allowances from the new source set aside during subsequent allocation periods (beginning in 2014 and thereafter) would likewise be constrained during their initial years of operation since the "nonattainment area emission caps" would be based on how a unit operated during its initial year or control period of operation.

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

15. **SUBJECT:** The Expansion of Nonattainment Trading Restrictions to SO_2 Could Curtail the Operations of Sources That Have No Direct SO_2 Allocations under the EPA Title IV Program

COMMENTER: Dominion

TEXT: The proposed rule published in July 2006 did not contain any provisions restricting trading of SO_2 allowances for compliance purposes in nonattainment areas. In the final rule, provisions establishing similar emission caps for SO_2 that are imposed for NO_X have been established for sources located in nonattainment areas. These added provisions will be very problematic for existing sources and for new sources that do not receive direct allowances under EPA's Acid Rain program since the states do not allocate any SO_2 allowances for CAIR and compliance with CAIR is achieved through the surrender of existing Title IV SO_2 allowances. Thus, both existing and new sources subject to the nonattainment provisions of the SO_2 Annual Trading Program that do not have or receive direct Title IV SO_2 allowances will under the provisions so established have a "nonattainment area SO_2 emissions cap" of zero with no or very limited ability to average with other units for compliance.

We believe this is an unintended consequence of these rules that could result in potential reliability issues in ozone nonattainment areas, particularly if the geographic applicability of these nonattainment restrictions expands beyond current boundaries and encompasses additional regions or jurisdictions within the Commonwealth. For these reasons, we request the Board to either exempt or waive these requirements for these units or establish a more reasonable and equitable means of complying with these requirements.

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

16. **SUBJECT:** The Implementation Timeline for Nonattainment Area Requirements for SO_2 Do Not Comport With the Timeline Established in the Virginia Code

COMMENTER: Dominion

TEXT: The provisions of the nonattainment area requirements for SO_2 in 9 VAC 5-140-3061.A.2 require CAIR SO_2 units to meet the nonattainment emission caps beginning in 2009. The 2009 date for implementation of the SO_2 CAIR program does not comport with the requirements of the Virginia Code, which clearly aligns Virginia's implementation of CAIR with the EPA program as follows:

> "Beginning on January 1, 2010, and each year continuing through January 1, 2014, all electric generating units within the Commonwealth shall collectively be allocated allowances of 63,478 tons of sulfur dioxide (SO_2) annually, unless a different allocation is established by the Administrator of the EPA."

We believe the reference to 2009 in the final Virginia SO_2 Annual Trading program rule cited above is unintended. There are several other provisions of the SO_2 Annual Trading Program rule that point to a 2010 start date for the SO_2 CAIR program requirements including the 0.50 "discount" for an SO_2 allowance allocated for a control period in 2010 through 2014 (9 VAC 5-140-3020.B - Definition of a "CAIR SO_2 allowance") and the CAIR Opt-in process (9 VAC 5-140-3840). In addition, a 2010 start date for the SO_2 budget is clearly articulated in DEQ's Final Regulation Background Documents in both the Brief Summary section (p.3) where it states:

> "Virginia's SO_2 annual budgets are 63,478 tons in 2010 through 2104 and 44,435 tons in 2015 and thereafter. Beginning January 1, 2010, electric generating units with a nameplate capacity greater than 25 MWe will be subject to the provisions of this part."

and in the Substance section (p. 8) where it states:

> "3. The SO_2 annual trading budgets for EGUs are (i) 63,478 tons for each control period in 2010 through 2014, and (ii) 44,435 tons for each control period in 2015 and thereafter."

Accordingly, we request DEQ correct the technical discrepancy noted above and modify the regulatory language in 9 VAC 5-140-3061.A.2 to reflect the 2010 date codified in Virginia law.

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

17. **SUBJECT:** Reinstatement of the Nonattainment Waiver Provisions for CAIR Sources That Do Not Receive Title IV SO_2 Allowances and/or New Sources Not Eligible to Receive NO_X Allowances from the New Source Set Aside

COMMENTER: Dominion

TEXT: In the final rule, provisions that would have allowed the Board to grant to a CAIR unit or CAIR source a waiver from the prohibition on trading allowances to demonstrate compliance in a nonattainment area were removed with no explanation. Since the original language as proposed would have provided the Board the authority to include in any permit allowing for such a waiver such terms and conditions that the Board determined were necessary to ensure that a NO_X CAIR unit or NO_X CAIR source would not cause or contribute to a violation of an air quality standard or a "nonattainment condition," we question the removal of this option in the rule.

Such a waiver could, for example, be applied to new sources that are meeting existing Clean Air Act requirements for new sources in nonattainment areas, including NSR emission offsets and lowest achievable emission rates (LAER), that do not receive direct NO_X allowances from the "core emission

pool" and are subject to the limiting constraints associated with allocations from the new source set aside as described above. A waiver from the SO_2 nonattainment provisions could also apply to CAIR sources that do not receive direct SO_2 allowances under the Clean Air Act Acid Rain provisions.

RESPONSE: The reasoning for removal of the waiver provision is found in the response to comment 1.

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

18. **SUBJECT:** Invalid Issues

COMMENTER: Dominion

TEXT: The commenter included comments relative to the allocation of allowances and the trading budget under the CAIR program.

RESPONSE: Those provisions are beyond the scope of this regulatory action and are not included in this summary and response document.

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

19. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Mary C. Harris and James Eady, Alexandra, VA

TEXT: As residents of Northern Virginia, a nonattainment area for ozone and particulates, we wish to register our strong support for the above referenced regulations as adopted by the Board. These rules were developed and recommended by DEQ following a consultative process on CAIR and authorized by the Virginia General Assembly in the Clean Smokestacks Law. These rules were adopted by the Board after extensive review, stakeholder input and public comment. We urge the Board to move forward with the implementation of these regulations and set the soonest possible effective date.

These rules should not allow any waivers from the prohibition of emissions trading in a non attainment area for nitrogen dioxide and sulfur dioxide, as stipulated by the Virginia CAIR rule in its present form.

Specifically, we strongly support the Board's decision to eliminate provisions of 9 VAC 5-140-1061/-2061 that would have allowed for a waiver from the prohibition on trading allowances (with respect to annual NO_X and ozone-season NO_X emission caps) to demonstrate compliance in nonattainment areas. MWAQC and the states have approved a SIP to meet the NAAQS for ozone. According to information from MWAQC, photochemical modeling in the SIP shows that the NO_X emission reductions associated with the prohibition of emissions trading are required to bring the Washington DC-VA-MD region into attainment of the ozone standard.

Additionally, it has been well documented from EPA benefit-cost analyses and other similar studies that $PM_{2.5}$ emissions contribute the majority of health impacts from air pollution. In a case study of five power plants located near the Washington D.C. area, Levy et al. found that, on an annual basis, $PM_{2.5}$ emissions from these plants were responsible for 270 deaths, 78 cardiovascular hospital admissions (CHA), and 190 pediatric asthma emergency room visits (ERV). More importantly, the health benefits from reduced $PM_{2.5}$ emissions resulting from the implementation of Best Available Control Technology were estimated to be 210 fewer deaths, 59 fewer CHA and 140 fewer pediatric asthma ERV annually. Since NO_X and SO_2 are precursors of secondary $PM_{2.5}$, it is essential that these emissions be significantly reduced in this area. The no-trading provision in the Virginia CAIR regulation for nonattainment areas will allow this to happen in a timely manner. Therefore, we also support the Board's decision to add provisions in 9 VAC 5-140-3061 that prohibit SO_2 trading as a means to demonstrate compliance in nonattainment areas.

There are additional benefits to Virginia and the region from a prohibition on trading in nonattainment areas. These are the reduction of mercury emissions in the Chesapeake Bay and its tributaries. EPA has documented that the major initial reductions of mercury under the Clean Air Mercury Rule will be achieved mainly as a "co-benefit" of the implementation of CAIR emission reductions. The regulations as adopted by the SAPCB enable these co-benefits to be realized locally and much sooner. The economic benefit of reduced acid and mercury deposition in the Bay and Virginia waterways alone is substantial and exceed the estimated cost of CAIR compliance for EGUs in non attainment areas.

We believe that NO_X and SO_2 reductions resulting from the Virginia CAIR regulation with its no-trading provision are critical to achieving attainment of ozone and $PM_{2.5}$ in Northern Virginia and strongly urge the Board to uphold the no-trading provisions in the Virginia CAIR regulation.

RESPONSE: Support for the proposal is appreciated.

20. **SUBJECT:** Support clean air standards in nonattainment areas.

COMMENTER: W. Bruce Overbay, Alexandria, VA

TEXT: At the risk of greatly over-simplifying what I appreciate is a very emotional and economically, for some at least, charged issue, it seems to me that the people that standards, plans and regulations were intended to protect are being overlooked. Robbing Peter to pay Paul might work with some standards, like gasoline mileage, but it has no place when it comes to clean air standards.

- Presumably there are good reasons why the federal government has set national air quality standards.
- Presumably there are also good reasons why MWAQC and the states have approved an air quality plan to meet those standards.
- Presumably, there are also good reasons why the Board has adopted regulations concerning the emissions of NO_X and SO_X and emission trading.
- Presumably, when the standards, plans and regulations were adopted everyone involved knew they would cause economic hardship on those that would be required to comply, but it was decided that the benefits of the standards, plans and regulations outweighed the hardships.
- Therefore, why shouldn't all people be allowed to benefit from the standards, plans and regulations, not just those in attainment areas? Why should people in nonattainment areas be forced to breathe bad air because companies don't want to comply with the standards in those areas?
- Trading is a means of denying people in nonattainment areas to enjoy the air that meets the same clean air standards that those in the attainment areas benefit from.
- Companies in nonattainment areas must be required to either play by the rules or not be allowed to operate until they do.

As I said, I appreciate this greatly over-simplifies the issue, but why should any citizen in this country be denied the benefits of federal, state and local government clean air standards just because companies don't want to incur what they knew would be costs to comply? It is incumbent upon the state of Virginia to vigorously enforce the standards regardless of the area. Virginia should not waiver in its resolve to afford all of its citizens the benefit of clean air that at least meets the minimum federal standards.

RESPONSE: Support for the proposal is appreciated.

21. **SUBJECT:** Support clean air standards in nonattainment areas.

COMMENTER: Peter Pennington, Alexandra, VA.

TEXT: If one looks at old maps of Alexandria one can find sites that held gas works, tanning factories, etching works and all manner of industries that in this day and age would not be permitted in a

residential area. Burning coal for power must surely fall into that category in 2007. I understand the reasons for precise regulations, grand-fathering etc. etc., but the equation comes down to profit versus health. And the detriment to health from just this one plant is significant. This was apparent at hearings before the Board. I strongly recommend that no leeway be given to Mirant that would allow them to attack the health of the citizens of Alexandria or Arlington and that on a wider front the EPA really examines the effects of coal burning generating stations. Take a leaf out of Ontario's policy decisions.

RESPONSE: Support for the proposal is appreciated.

22. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Roger Waud and Katie Barta, Alexandra, VA.

TEXT: As residents of North Old Town Alexandria we and our neighbors are very directly affected by the toxic emissions from the Mirant Potomac River Generating Station. As residents in this nonattainment area we are alarmed at any possibility that Mirant could be allowed to trade for emission credits to increase its emissions above NAAQS.

We strongly support the regulations as adopted and support the prohibition of emissions trading in nonattainment areas (such as ours) as stipulated by the Virginia CAIR in its present form. We therefore strongly support the Board's decision to eliminate provisions of 9 VAC 5-140-1061/-2061 that would allow for a waiver from the prohibition on trading allowances (with respect to annual NO_X and ozone-season NO_X emission caps) to demonstrate compliance in nonattainment areas. We also strongly support the Board's decision to add provisions in 9 VAC 5-140-3061 that prohibit SO_2 trading as a means to demonstrate compliance in nonattainment areas. The adverse health effects from NO_X and SO_X emissions, and especially the $PM_{2.5}$ emissions that accompany them, are well known in the medical community.

In sum, it is our fervent hope that the Board will uphold the no-trading provisions in the Virginia CAIR regulation.

RESPONSE: Support for the proposal is appreciated.

23. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Andrea Grimaldi, Alexandria, VA

TEXT: I support of the State Air Pollution Control Board's decision to add provisions in 9 VAC 5-140-3061 that prohibit SO_2 trading as a means to demonstrate compliance in nonattainment areas and I urge the Board to uphold the no-trading provisions in the Virginia CAIR regulation and to eliminate provisions of 9 VAC 5-140-1061/-2061 that would have allowed for a waiver from the prohibition on trading allowances (with respect to annual NO_X and ozone-season NO_X emission caps) to demonstrate compliance in nonattainment areas.

It's a disgrace and a travesty that the Mirant plant or any electric generator entity operating in a ozone nonattainment area, such as Northern Virginia, could essentially receive a "get out of jail card free" by purchasing pollution credits from an outside area and receive a waiver from meeting CAIR requirements. If Mirant or any other electric generator entity is not able to meet CAIR then they are not fit to be in operation and should certainly not be allowed to pollute the environment and endanger the health and well being of the residents of Northern Virginia and the greater Washington DC metropolitan area.

RESPONSE: Support for the proposal is appreciated.

24. **SUBJECT:** Support Prohibition of Emissions Trading in Nonattainment Areas

COMMENTER: Senator Patricia S. Ticer, 30th District, Senate of Virginia

TEXT: I fully endorse the board's CAIR regulation that no trading be allowed in nonattainment areas.

RESPONSE: Support for the proposal is appreciated.

25. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Delegate David L. Englin, 45th District, Virginia House of Delegates

TEXT: I strongly support the regulations as adopted and support the prohibition of emissions trading in nonattainment areas, as stipulated by the Virginia CAIR rule in its present form. Moreover, I strongly support the City of Alexandria's position on this issue.

RESPONSE: Support for the proposal is appreciated.

26. **SUBJECT:** Support Prohibition of Emissions Trading in Nonattainment Areas

COMMENTER: Delegate Adam P. Ebbin, 49th District, Virginia House of Delegates

TEXT: I fully endorse the board's CAIR regulation that no trading be allowed in nonattainment areas.

RESPONSE: Support for the proposal is appreciated.

27. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Dennis Carroll, Alexandria, VA.

TEXT: I strongly support the Regulation for Emissions Trading: Nonattainment Areas Requirements (9 VAC 5 Chapter 140) provision, as supported by the Virginia State Air Pollution Control Board. I believe that Mirant is responsible for many sicknesses and deaths in the Northern Virginia area, especially in Alexandria. My close friend, Norma Bell, died after moving to a condominium that is near the Mirant plant. She lived near the plant for only a few months before dying abruptly at the young age of 36(!) in 1993. An autopsy found no cause for her abrupt death. Her friends feel strongly that she died because of harmful particulate matter that came from the Mirant plant. How many more of our friends and family must die?

RESPONSE: Support for the proposal is appreciated.

28. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas

COMMENTER: Debra Jacobson

TEXT: As an alternate member of the ad hoc regulatory advisory group on the CAIR rule and a resident of Fairfax County, this letter expresses my strong support for the comments filed by the Southern Environmental Law Center, the American Lung Association of Virginia, and the Virginia League of Conservation Voters. These comments oppose the reopening of the Virginia CAIR rule for further change.

DEQ and the Board should be commended for adopting an excellent rule, and proposed changes to the rule should be rejected. In its preamble to CAIR, EPA notes that several counties in Virginia (specifically Fairfax and Arlington) are expected to fail to reach attainment of the ozone air quality standard by 2010 even if the EPA's model CAIR is adopted. However, the EPA provided states substantial flexibility in its model rule to provide an alternative allowance allocation approach to meet state objectives in improving air quality.

In order to promote attainment of the NAAQS for ozone, the Board is to be applauded for utilizing an alternative allowance allocation approach – restricting the trading of nitrogen oxide allowances in nonattainment areas. As a resident of Fairfax County diagnosed with asthma, this additional public health protection is important to me and other residents of Northern Virginia who suffer from the ill effects of air quality nonattainment.

RESPONSE: Support for the proposal is appreciated.

29. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Ana I. Prados

TEXT: I live in Fairfax County, Virginia and wish to comment on the trading provision in the Virginia CAIR regulations. I applaud DEQ's continued commitment to not allow trading of pollution credits in non-attainment areas. In fact, DEQ's own recent model runs shows that the CAIR NO_X cap in northern Virginia would help decrease ozone by about 0.4 ppb in the DC metro area, a considerable reduction given that the area exceeds the ozone NAAQS by less than 1 ppb. Given the existing air quality problems in northern Virginia, I urge you to adopt the Virginia CAIR final regulations without additional changes, as they are needed to protect public health and bring our region into attainment.

I also wanted to add that one of the largest point sources in the DC metro area, the Mirant power plant in Alexandria, continues to lead to SO_2 NAAQS exceedances in Alexandria, in addition to continuing to expose citizens to $PM_{2.5}$, and toxic air pollutants. This provision would also help protect their continued exposure to elevated SO_2 concentrations.

RESPONSE: Support for the proposal is appreciated.

30. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Elizabeth Chimento

TEXT: I fully support the regulation that prohibits trading emission credits of SO_2 and $PM_{2.5}$ in nonattainment areas. Since the Alexandria Mirant power plant is located in a nonattainment area for ozone and $PM_{2.5}$, this regulation will benefit the health, not only of Alexandrians, but also of those residing in the entire metropolitan region.

Also, because downwash at the facility already threatens public health, Mirant should not be allowed to trade emission credits which will worsen the downwash factor and escalate local public health risks.

Dr. Jonathan Levy's landmark study of the health effects of $PM_{2.5}$ from power plants in the Washington, DC area, including the Alexandria Mirant plant, documents the extensive health effects relating to both primary and secondary $PM_{2.5}$ (Environmental Health Perspectives, 2002, "The Importance of Population Susceptibility for Air Pollution Risk Assessment: A Case Study of Power Plants Near Washington, D.C.").

Mirant must not be allowed to trade NO_X and SO_2 credits which result in secondary $PM_{2.5}$ increases as well as increases in health effects in a region already categorized as a $PM_{2.5}$ nonattainment area.

Due to these reasons, it is imperative that the Board's CAIR stipulation forbidding trading emission credits in a nonattainment area remain intact.

RESPONSE: Support for the proposal is appreciated.

31. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Laura Dely

TEXT: The Washington DC metro area, including Northern Virginia, fails to meet federal clean air standards for ozone and fine particles, both damaging to respiratory health and human well-being. Electric utilities such as the Mirant power plant in Alexandria are one of the largest single contributors of ozone-creating nitrogen oxide and noxious sulfur dioxide in the DC metro area. And this plant is entirely unnecessary for the region's power supply needs.

As you know, these pollutants contribute to the formation of ground level ozone and air-borne fine particles in the DC metro area and contribute to the enormous nitrogen load that burdens the Chesapeake Bay. I urge you to restrict the trading of nitrogen oxides and sulfur dioxide allowances in areas such as the Washington metropolitan area, which do not meet federal clean air standards.

I request that DEQ implement the final regulations in Virginia's Clean Air Interstate Rule as written, with no further changes.

RESPONSE: Support for the proposal is appreciated.

32. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Sierra Club, Virginia Chapter

TEXT: First, we wish to thank the Virginia Department of Environment Quality for its continued efforts to reduce NO_X and SO_X in nonattainment areas through the no-trading provision for nonattainment areas in the Virginia CAIR rule. We wish to request that DEQ implement the final regulations in Virginia's CAIR with no further changes.

The Washington DC area, including northern Virginia does not meet the NAAQS for either ozone or $PM_{2.5}$, with electrical utilities such as the Mirant-owned PRGS in Alexandria being one of the single largest contributors to NO_X and SO_X in the DC metro area. In addition, the PRGS is still causing SO_2 NAAQS exceedances in Alexandria, where residents continue to be exposed to very high levels of pollutants from the PRGS. For all these reasons, we urge you to restrict the trading of NO_X and SO_X allowances in nonattainment areas such as the Washington DC metropolitan area.

It is our understanding that DEQ has performed CMAQ model runs with updated emissions for the PRGS and the Possum Point Power Plant to reflect the Virginia CAIR rule and that the result of these modeling runs was a 0.4 ppb reduction in the 8-hour ozone design value for the Washington metropolitan area. Since recent CMAQ model runs indicate that the DC metro area will not meet the ozone NAAQS by less than 1 ppb, it is evident that the no-trading provision in the Virginia CAIR rule has important consequences for ozone attainment in the DC metro area and thus from a public health perspective.

Moreover, if Virginia were to allow power plants in the Washington Metropolitan nonattainment area to buy NO_X emission credits, EPA would likely render the just-submitted 8-hour ozone SIP unapprovable, requiring the Commonwealth to find new control measures that can be implemented in time to meet the NAAQS in 2009.

Finally, because secondary $PM_{2.5}$ can be formed up to hundreds of kilometers from a source emitting SO_2, the main precursor to $PM_{2.5}$ formation in the eastern U.S. this provision is likely to have important repercussions not just for attainment in the immediate DC metro area, but for regions downwind along the northeastern U.S.

In summary, we believe that the no-trading provision in DEQ's CAIR is very important for bringing the DC Metropolitan area into attainment and for the protection of public health, and urge DEQ to implement the Virginia CAIR Final Regulations.

RESPONSE: Support for the proposal is appreciated.

33. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Poul Hertel

TEXT: I wish to express my strong support for the prohibition of emission trading in nonattainment areas, as stipulated by the Virginia CAIR rule. Specifically, I strongly endorse the Board's decision to eliminate provisions of 9 VAC 5-140-1061/-2061 that would have allowed for a waiver from the prohibition on trading allowances to demonstrate compliance in nonattainment areas.

According to the Economist (June 2-8th leader on page 13 titled "Cleaning up") "In 2003, the most recent year for which figures are available, America's power-generating business, arguably the world's biggest single polluter spent a rather smaller proportion of its revenues on R&D than did America's pet food industry."

So far from the non-trading being a detriment to the power industry, the Board's actions will benefit the industry in the long run. As the Economist points out, "Cleaner energy means new technologies and money to be made." However, in the short and long term the exclusion of trading is vital for keeping nonattainment area designation from becoming a hollow shell that cannot work toward ensuring compliance with the NAAQS.

RESPONSE: Support for the proposal is appreciated.

34. **SUBJECT:** Support prohibition of emissions trading in nonattainment areas.

COMMENTER: Southern Environmental Law Center, American Lung Association of Virginia, Piedmont Environmental Council, Virginia League of Conservation Voters

TEXT: As we stated in our comments filed September 8, 2006:

> We strongly encourage DEQ to take advantage of every tool . . . to improve air quality in the Commonwealth. Foremost among these tools is the authority to restrict the trading of nitrogen oxide (NO_X and sulfur dioxide (SO_2) allowances in nonattainment areas. . . . [I]t is vital that DEQ prohibit sources in ozone and $PM_{2.5}$ nonattainment areas from meeting their compliance obligations through the purchase or acquisition of any allowances - either from in-state or out-of-state facilities - as specifically authorized under Va. Code 8 10.1 -1328(A)(5).

Accordingly, we applaud the Department for its decision to insist upon real reductions in criteria pollutants from sources located in nonattainment areas. We respectfully request DEQ to implement these final regulations as written, with no further changes.

Last year, Virginia air quality monitors recorded 66 exceedances of the 8-hour ozone standard. Of these, 51 were in Northern Virginia. According to EPA modeling, Northern Virginia will fail to come into attainment for ozone by the requisite June 2010 deadline - even with reductions from the base CAIR program. Thus, if Northern Virginia is to join Richmond and Hampton Roads in attaining the 8-hour standard, innovative measures must be implemented. The Virginia General Assembly appreciated this reality when it directed DEQ and the State Air Pollution Control Board to develop CAIR regulations that:

> provide for participation in the EPA-administered cap and trade system for NO_X and SO_2 to the fullest extent permitted by federal law except that the Board may prohibit electric generating facilities located within a nonattainment area in the Commonwealth from meeting their NOX and SO_2 compliance obligations through the purchase of allowances from in-state or out-of-state facilities.

Va. Code Ann. §10.1-1328(A)(5). Consistent with this directive, DEQ has adopted a commonsense approach to addressing the Commonwealth's (and the region's) most significant air quality dilemmas. Chief among these is the failure of the Washington, D.C. Metropolitan Statistical Area (MSA) to meet the

NAAQS, due in part to emissions from aging coal-fired power plants nearby, such as the Mirant Potomac River Generating Station.

MWAQC - the entity certified by the Governor of Virginia and neighboring jurisdictions to prepare an air quality plan for the Washington, D.C. MSA - has also sought additional controls on power plants in the Northern Virginia nonattainment area. In developing its 8-hour ozone SIP, MWAQC expected that Virginia's final regulations would be implemented as currently drafted. (See State Implementation Plan: Plan to Improve Air Quality in the Washington, DC-MD-VA Region, May 23, 2007). MWAQC relied on reductions from Virginia's nonattainment cap as part of its plan to "meet federal requirements for reducing ground-level ozone, a principal component of smog, by 2009."

MWAQC's reliance on Virginia's nonattainment restrictions is based on sound, scientific modeling conducted by DEQ. According to current EPA emissions inventories, coal-fired power plants and other stationary sources will remain the second-largest source of nitrogen oxide emissions (behind on-road vehicles) in the metro region in 2009, after Phase I of CAIR has gone into effect. Utilities and related sources are predicted to emit 113 tons of NO_X per day - 24.4 tons more than the eight remaining top-ten sources combined. If Virginia's CAIR regulations are weakened to remove the nonattainment cap, utility emissions would certainly exceed the 113 tons per day currently modeled for 2003.

To bring the Northern Virginia and the Washington, DC region into attainment, additional reductions in emissions from nearby coal-fired power plants must be part of the strategy. Changing Virginia's regulations to delete the nonattainment cap would jeopardize MWAQC's SIP and the area's hopes for achieving compliance with the NAAQS.

Section 116 of the Clean Air Act provides that states retain their discretion to adopt and enforce "any emission standard or limitation" that is more stringent than those required under federal law. Thus, EPA recognizes - as it must - that states have flexibility in choosing which sources to control to achieve the required emissions reductions under CAIR. CAIR focuses on interstate impacts on air quality as a means to seeking compliance with the $PM_{2.5}$ and ozone NAAQS. As mentioned above, Northern Virginia will not meet the 2010 deadline for ozone attainment if the Commonwealth simply adopts the base CAIR program. Thus, taking steps within Virginia's CAIR submittal to further reduce emissions in nonattainment areas is entirely consistent with the overarching goal of EPA to assist states in attaining and maintaining the NAAQS.

State environmental agencies, of course, have routinely adopted additional requirements beyond those included in EPA's model regulations. Virginia is no exception. Effective September 1, 2006, Virginia implemented New Source Review regulations that were more stringent than EPA's program. These NSR restrictions will significantly limit the potential quantity of pollution increases, thereby improving the ability of DEQ to achieve and maintain the NAAQS throughout the Commonwealth. Consistent with its NSR program, DEQ is well-justified in demanding real reductions from sources in nonattainment areas as part of its CAIR submittal.

Additionally, the nonattainment provisions of DEQ's final regulations are consistent with EPA's guidance to states for developing their CAIR programs. A primary purpose of CAIR is to reduce air pollution from upwind sources that are contributing to nonattainment in downwind states. Sources in the Northern Virginia nonattainment region - particularly the Mirant Potomac River Generating Station - are contributing to nonattainment in the neighboring jurisdictions of Washington, DC and Maryland. As explained above, MWAQC has relied on predicted reductions from Virginia's trading restrictions to bring the entire Washington, DC MSA into compliance with the NAAQS. In other words, Virginia's restrictions on trading are appropriate not only for what they will do to guarantee healthy air for the Commonwealth, but also for what they will achieve in terms of improving interstate air quality.

RESPONSE: Support for the proposal is appreciated.

35. **SUBJECT:** Support Prohibition of Emissions Trading in Nonattainment Areas

COMMENTER: Julie Crenshaw Van Fleet

TEXT: The Virginia DEQ has worked very hard on CAIR as well as other Air Quality concerns. As you are aware DEQ completed photochemical modeling for the Virginia part of the States Implementation Plan required by the Metropolitan Washington Region. This modeling demonstrated that Nitrous Oxide and Sulphur Dioxide emissions reductions for the Metropolitan Washington Region are needed for compliance with the ozone standard. Compliance with the ozone standard may be achieved because of the included CAIR provision banning trading of emissions.

The CAIR process was transparent and involved both those to benefit and those to comply, including the utilities from throughout the Commonwealth. A Mirant representative was often present. Why at the eleventh hour with all the work completed and State Implementation Plans filed does Mirant complain?

It is documented by USDOE calculations that "Mirant's PRGS can be expected to cause about 23 premature deaths, 31 heart attacks, 2,488 lost work days due to illness among adults, and 440 asthma attacks among children each year." If Mirant were allowed to purchase emissions credits would these statistics increase? Mirant does not need a waiver from meeting at their PRGS site the Clean Air Interstate Rules or rules regulating any toxic harmful to human health.

State rules for specific non-attainment are for that state's localities. It would be tragic for Virginia to have to look for additional control measures while the greatest point source polluter, Mirant, purchases credits from outside Virginia.

Also, the CAIR components have a bearing on the CAMR as it was stated, and stated by the utilities too, that CAIR will help to clean up Mercury.

Certainly Mirant PRGS has the funds to implement necessary Best Available Control Technologies. Just look at their daily profit and at how much they spend on legal fees. Do Mirant's stockholders know how much Mirant spends vs. the cost to comply?

RESPONSE: Support for the proposal is appreciated.

36. **SUBJECT:** Support Prohibition of Emissions Trading in Nonattainment Areas

COMMENTER: Lowell Smith

TEXT: I believe it is extremely important for DEQ to maintain the prohibition against trading to achieve compliance with a CAIR NOx allocation in a non-attainment area, or in an area that is borderline attainment. The rationale for EPA instituting the CAIR rule was to assist in achieving compliance with ozone and $PM_{2.5}$ ambient standards throughout the eastern part of the country. The air quality modeling conducted by EPA in support of its CAIR action did not take into account the effect of power plants on local air quality problems, so it is up to the states to craft their own CAIR regulations to further the purpose which CAIR is to serve.

The General Assembly did take this concern into account, and it is proper for DEQ to do so as well. There is no scientific justification for allowing sources within non-attainment areas, or areas marginally in attainment, for ozone or $PM_{2.5}$ to meet their legal emission limits through trading emission allocations. The CAIR regulation is addressing pollutants, ozone and $PM_{2.5}$ which are formed from both regional and local sources. In non-attainment or marginally attaining areas, both regional and local emission reductions are required. To allow trading to show compliance on paper would defeat the purpose of the establishing such emission limits.

Thus, DEQ and the Air Pollution Control Board should make no exceptions for sources within such non-attainment areas to avoid their responsibility to achieve real emission reductions within and upwind of areas in non-attainment. To do so would only shift the burden of emission reductions to achieve attainment to other sources, or, alternatively, would postpone indefinitely achieving ambient air quality

standards, thus endangering public health and welfare. DEQ and the Air Pollution Control Board should follow the mandate of the General Assembly to not allow such trading.

RESPONSE: Support for the proposal is appreciated.

37. **SUBJECT:** General support for allowing emissions trading in nonattainment areas.

COMMENTER: Lynn A. Bowers

TEXT: I do not support the SAPCB's CAIR regulation that no trading be allowed in non-attainment areas. I live next to the Mirant plant and believe that it does not present an air quality problem.

RESPONSE: See response to comment 1.

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

38. **SUBJECT:** General support for prohibition of emissions trading in nonattainment areas.

COMMENTER: 61 citizens

TEXT: These citizens expressed support for the regulations as adopted by the board, and urge the board not to allow trading in nonattainment areas. When given, the reason for this position is protection of the NAAQS and public health.

RESPONSE: Support for the proposal is appreciated.

39. **SUBJECT:** General support for prohibition of emissions trading in nonattainment areas.

COMMENTER: Marina Towers Condominium Association, Alexandria, Virginia (letter signed by 37 residents)

TEXT: As residents of North Old Town Alexandria we and our neighbors are very directly affected by the toxic emissions from the Mirant Potomac River Generating Station. As residents in this nonattainment area we are alarmed at any possibility that Mirant could be allowed to trade for emission credits to increase its emissions above National Ambient Air Quality Standards.

The State Air Pollution Control Board adopted regulations concerning emission trading (NO_X and SO_X) on April 18, 2007. We strongly support the regulations as adopted and support the prohibition of emissions trading in nonattainment areas (such as ours) as stipulated by the Virginia Clean Air interstate Rule (CAIR) in it[s] present form. We therefore strongly support the Board's decision to eliminate provisions of 9 VAC 5-140-1061/-206l that would allow for a waiver from the prohibition on trading allowances (with respect to annual NO_X and ozone-season NO_X emission caps) to demonstrate compliance in nonattainment areas. We also strongly support the Board's decision to add provisions in 9 VAC 5-140-3061 that prohibit SO_2 trading as a means to demonstrate compliance in nonattainment areas. The adverse health effects from NO_X and SO_X emissions, and especially the $PM_{2.5}$ emissions that accompany them, are well known in the medical community.

In sum, it is our fervent hope that the State Air Pollution Control Board will uphold the no-trading provisions in the Virginia CAIR regulation.

RESPONSE: Support for the proposal is appreciated.

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