Virginia Regulatory Town Hall

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# Final Regulation
# Agency Background Document

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| **Approving authority name** | State Air Pollution Control Board |
| **Primary action** | 9 VAC 5-140 |
| **Secondary action(s)** | None |
| **Regulation title** | Regulation for Emissions Trading |
| **Action title** | Clean Air Interstate Rule (Revision E05) |
| **Document preparation date** | December 19, 2006 |

This information is required for executive review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act, Executive Orders 21 (2002) 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of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed.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 establishment of three new parts to 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. Use of allowances other than those allocated to the source by the board may not be used to comply in nonattainment areas. 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.

A compliance supplement pool (5,134 tons) is provided for sources that generate early reduction credits. The allowances from the pool are valid for only one year (2009) and cannot be banked after that one-year period.

The following substantive changes have been made 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 establish a set-aside budget for efficient energy/renewable energy (EERE) sources.

- The provisions related to the compliance supplement pool (CSP) have been revised to comply with § 10.1-1328 B of the Code of Virginia.

**$NO_X$ 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. Virginia's $NO_X$ ozone season budget for non-electric generating units is 3,840 tons in 2009 and thereafter.

Beginning May 1, 2009, electric generating units with a nameplate capacity greater than 25 MWe and non-electric generating units above 250 mmBtu 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. Use of allowances other than those allocated to the source by the board may not be used to comply in nonattainment areas. 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.

The following substantive changes have been made 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 related to the efficient energy/renewable energy (EERE) sources have been reconfigured to increase the set-aside to a value equal to 1% of the EGU trading budget.

- The non-EGU provisions have been revised to follow recent guidance from EPA regarding the transition from the $NO_X$ SIP Call program to the CAIR program.

**$SO_2$ 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.

The following substantive change has been made since publication of the proposal:

- Provisions have been added to address compliance in nonattainment areas similar to those for the $NO_X$ trading programs.

## 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 are to be effective as specified by 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 10.1-1322.3 indicates that the Board may promulgate regulations to provide an emissions trading and banking program that results in net air emission reductions, creates an economic incentive for reducing air emissions, and allows for economic growth. However, no regulation shall prohibit the direct trading of credits or allowances between private industries provided such trades do not have an adverse impact on air quality in Virginia. 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. However, the state rule (i) must differ from the federal model rule with regard to the size of the new source set-aside and (ii) must include provisions to prohibit the use of allowances other than those allocated to the source by the board for compliance in nonattainment areas. Section 10.1-1328 B mandates that the owners of early reduction credit (ERC) units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) reduce their emissions in amount that is at least equal to the CSP (i.e., 5,134 tons). 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 is to establish general provisions addressing applicability, permitting, allowance allocation, excess emissions, monitoring, and opt-in provisions to reduce $SO_2$ and $NO_X$ emissions (which are important precursors of $PM_{10}$ and ozone) in order to eliminate their significant contribution to nonattainment or interference with maintenance of the National Ambient Air Quality Standards (NAAQS) in downwind states, and to protect Virginia's air quality, its natural resources and public health and welfare. The regulation is being proposed to create an enforceable mechanism to assure that collectively, all affected sources will not exceed the total $SO_2$ and $NO_X$ emissions budgets established by regulation for the years 2009 and thereafter and to provide the regulatory basis for a

program under which the creation, trading (buying and selling) and registering of emission credits can occur.

## 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 establishment of three new parts to 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.

4. A new unit set-aside budget is included consisting of 4.0% of the EGU budget for each control period in 2009 through 2013 or 1.0% for each control period in 2014 and thereafter.

5. A set-aside for efficient energy/renewable energy sources is included consisting of 1.0% of the EGU budget for each control period in 2009 and thereafter. The unallocated allowances expire after three years. The allocated allowances must be retired.

6. Provision for a voluntary public health set-aside to retire allowances is included.

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

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

9. Initial allocations (2009 – 2013) for existing EGUs are issued on October 31, 2006 and based on heat input (2001 – 2005) normalized over the state budget.

10. Subsequent allocations (2014 and thereafter) for existing EGUs are issued annually beginning October 31, 2009, five years in advance; and based on the preceding five years of heat input.

11. Allocations for existing EGUs are calculated using the baseline heat input, determined by averaging the three highest years of the preceding five years.

12. Initial allocations (2009 – 2013) for new EGUs are issued on October 31, 2009 and based on electrical output (2004 – 2008) normalized over the new unit set-aside budget.

13. Subsequent allocations (2014 and thereafter) for new EGUs are issued annually beginning October 31, 2014 and based on the preceding five years of electrical output.

14. Allocations for new EGUs are calculated using the converted heat input (electrical output), determined by averaging the three highest years of the preceding five years.

15. A compliance supplement pool (5,134 tons) is established which allows for allocations from the pool to early reduction credit (ERC) units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) which are required to make an equivalent amount of early reductions. Allocations from the pool will be distributed to the sources prior to November 30, 2009. Allocations from the pool are valid for the 2009 control period only.

16. Compliance is determined by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units.

17. 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.

18. Sources may bank any allowances not used during a specific control period.

19. Major sources subject to the regulation must obtain a budget permit reflecting the requirements of the budget trading program.

20. 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.

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

22. The program is administered almost in its entirety by EPA, except for the allocations of allowances, issuance of the budget permits and the administration of the opt-in provisions.

23. 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 regulation also applies to non-electric generating units (non-EGUs) above 250 mmBtu. A non-EGU is a fossil fuel-fired stationary boiler or combustion turbine that (i) at no time serves a generator producing electricity for sale under firm contract to the grid or (ii) at any time serves a generator producing electricity for sale under firm contract to the grid, if any such generator has a nameplate capacity of 25 MWe or less and has the potential to use no more than 50% of the potential electrical output capacity of the unit.

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

4. 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.

5. The $NO_X$ ozone season trading budget for non-EGUs is 3,840 tons for each control period in 2009 and thereafter (reduced from the $NO_X$ SIP Call budget of 4104 tons).

6. A new unit set-aside budget is included consisting of (i) 4.0% of the EGU budget for each control period in 2009 through 2013 or 1.0% for each control period in 2014 and thereafter and (ii) 736 tons from the non-EGU budget for each control period in 2009 and thereafter.

7. A set-aside for efficient energy/renewable energy sources is included consisting of 1.0% of the EGU budget for each control period in 2009 and thereafter. The unallocated allowances expire after three years. The allocated allowances must be retired.

8. Provision for a voluntary public health set-aside to retire allowances is included.

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

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

11. Initial allocations (2009 – 2013) for existing EGUs are issued on October 31, 2006 and based on heat input (2001 – 2005) normalized over the state budget.

12. Subsequent allocations (2014 and thereafter) for existing EGUs are issued annually beginning October 31, 2009, five years in advance; and based on the preceding five years of heat input.

13. Allocations for existing EGUs are calculated using the baseline heat input, determined by averaging the three highest years of the preceding five years.

14. The allocations (2009 and thereafter) for existing non-EGUs are carried over from the $NO_X$ SIP call program, are set forth in the regulation, and are permanent.

15. Initial allocations (2009 – 2013) for new EGUs are issued on July 31, 2009 and based on electrical output (2004 – 2008) normalized over the new unit set-aside budget.

16. Subsequent allocations (2014 and thereafter) for new EGUs are issued annually beginning July 31, 2014 and based on the preceding five years of electrical output.

17. Allocations for new EGUs are calculated using the converted heat input (electrical output), determined by averaging the three highest years of the preceding five years.

18. Initial allocations (2009 – 2013) for new non-EGUs are issued on July 31, 2009 and based on heat input (2004 – 2008) normalized over the state budget.

19. Subsequent allocations (2014 and thereafter) for new non-EGUs are issued annually beginning July 31, 2014 and based on the preceding five years of heat input.

20. Allocations for new non-EGUs are calculated using the baseline heat input, determined by averaging the three highest years of the preceding five years.

21. Compliance is determined by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units.

22. 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.

23. Sources may bank any allowances not used during a specific control period.

24. Major sources subject to the regulation must obtain a budget permit reflecting the requirements of the budget trading program.

24. 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.

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

26. The program is administered almost in its entirety by EPA, except for the allocations of allowances, issuance of the budget permits and the administration of the opt-in provisions.

27. 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.

4. Major sources subject to the regulation must obtain a budget permit reflecting the requirements of the budget trading program.

5. The program is administered almost in its entirety by EPA, including the allocations of allowances.

6. EPA has already allocated the allowances which are valid indefinitely, except the value of the allowances is reduced over time.

7. The only role for the state is to issue the budget permits.

8. Compliance is determined by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units.

9. 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.

10. Sources may bank any allowances not used during a specific control period.

11. 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.

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

13. 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.*

1. Public: The primary advantage to the general public is that air quality will improve through a program designed to maximize market forces to reduce pollution in the most cost-effective manner. The cost of compliance is a key issue for the citizens of the Commonwealth since the utility industry is affected by this regulation. If the cost of control is excessive, the additional costs may be passed on to the consumer in the form of rate hikes.

This regulation provides for the trading of $SO_2$ and $NO_X$ allowances to offset the cost of compliance. This approach provides more flexibility for compliance options for the sources affected while still protecting air quality. A compliance demonstration is required at the end of the ozone season and under the annual programs for both $SO_2$ and $NO_X$. Sources must demonstrate that they have operated equipment such that the emissions are either equal to or below the specified limit. Tons of $NO_X$ and $SO_2$ may be purchased or sold according to the need of the source owner; credits can also be generated as early reduction credits. Source may choose to bank credits to be used for compliance demonstrations in future years. Sources not subject to the regulation may participate in the program as opt-in sources provided specific conditions are met. Inclusion of the non-electric generating units covered by the $NO_X$ SIP Call program in the CAIR ozone season trading program will provide benefits by improving the flexibility of owners and operators to meet the budget requirements through trading.

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 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.

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-in to 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. EPA will administer the trading and banking aspects of the regulation thereby avoiding any additional costs that would be associated with that activity.

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 the may only used 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 establishment of three new parts to 9 VAC 5-140, each of which is addressed below. The numbers in the brackets are the last four digits of the corresponding section numbers from the applicable provision of 9 VAC 5 Chapter 140 [9 VAC 5-140-XXXX].

**$NO_X$ 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 allowances other than those allocated to the unit may not be used to comply with the limit. 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. | Provisions have been added to ensure that the implementation of the nonattainment area requirements will not interfere with operation of the EPA CAIR trading program. 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 preceding 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.<br>Provisions have been added to allow compliance to be demonstrated in the aggregate for all units under common ownership. | Necessary to comply with the Code of Virginia. |
| **1420 G* | None. | Provisions have been added to establish a set-aside budget for efficient energy/renewable energy (EERE) sources, along with procedures for its allocation, similar to the provisions in the $NO_X$ Ozone Season Trading Rule. | Included to encourage use of EERE projects, thus reducing consumption of electricity and associated emissions. |
| *1430 | A compliance supplement pool (CSP) is established which allows for allocations from the pool for voluntary early reductions and to avoid an "undue risk to the reliability of electricity." Allocations (5,134 tons) from the pool are to be distributed to the sources prior to November 30, 2009. Allocations from the pool are valid for the 2009 control period only | § 10.1-1328 B of the Code of Virginia mandates that the owners of early reduction credit (ERC) units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) reduce their emissions in amount that is at least equal to the CSP (i.e., 5,134 tons). Since the ERC units must reduce their emissions by at least the full amount of the CSP and the state must award them allowances to cover this reduction, there will be nothing left over in case a portion of the CSP is needed by units in order to avoid an | Necessary to comply with the Code of Virginia. |

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| | | "undue risk to the reliability of electricity." | |

**$NO_X$ Ozone Season Trading Program (Part III)**

| Section number | Requirement at proposed stage | What has changed | Rationale for change |
|---|---|---|---|
| *2020, 2040 B, 2400 B, 2405, 2410, 2420 B, D & E, and 2430/ *2020, 2040 C, 2400 B, 2405, 2410, 2420 B, D & E, and 2430* | Provisions are included to allow the transition of non-electric generating units (non-EGUs) from the $NO_X$ SIP Call Program to the CAIR program. | The non-EGU provisions have been revised to follow recent guidance from EPA regarding the transition. Changes include the addition of several new definitions, the revision of the applicability criteria and other clarifying revisions. | Necessary to comply with federal regulations. |
| *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 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. | Provisions have been added to ensure that the implementation of the nonattainment area requirements will not interfere with operation of the EPA CAIR trading program. 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 preceding 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.<br>Provisions have been added to allow compliance to be demonstrated in the aggregate for all units under common ownership. | Necessary to comply with the Code of Virginia. |
| *2020, 2420 G/ | A set-aside for efficient energy/renewable energy | The EERE provisions have been reconfigured to increase the set- | Included to encourage use of EERE projects, |

| | | | |
|---|---|---|---|
| *2020, 2420 G* | (EERE) sources, along with procedures for its allocation, is included consisting of 36 tons (from the non-EGU trading budget) for each control period in 2009 and thereafter, which expire after three years | aside to a value equal to 1% of the EGU trading budget. Provisions are included to allow for the aggregation of projects. The 36 tons (from the non-EGU trading budget) have been returned to the new unit set-aside. | thus reducing consumption of electricity and associated emissions. |

**$SO_2$ 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. | Necessary to comply with the Code of Virginia. |
| *3020, definition of "CAIR $SO_2$ allowance" */Article 35 (9 VAC 5-140-3400 et seq.)* | Since EPA has already allocated the allowances which are good indefinitely, except the value of the allowances is reduced over time, provisions specifying the timing and methodology for the allowance allocations are not included in the rule. | § 10.1-1328 A 2 and 3 of the Code of Virginia requires the Board to promulgate regulations that provide for the allocation to all units allowances. Provisions have been added to incorporate by reference the federal provisions for the allocation of the allowances. | Necessary to comply with the Code of Virginia. |

**ALL**

- The state rules have been revised to comply with final amendments to the federal CAIR published in the Federal Register on April 28, 2006. The only substantive change is to exempt solid waste incineration units from the rule.
- The state rules have been revised to correct a number of errors identified by EPA during the comment period.

## 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 of the comments received and the agency response begins on page 26.

## 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 establishment of three new parts to 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 |
|---|---|---|
| | **Article 11** | |
| 1010 | Establishes the purpose. | Necessary to allow Virginia sources to participate in the EPA administered regional trading program. It identifies general provisions and the designated representative, permitting, allowance, monitoring and opt-in provisions for the regulation. It also authorizes the administrator of EPA to assist the Board in the implementation of the regulation by carrying out specific functions identified in the rule. |
| 1020 | Establishes the definitions. | Necessary to meet federal requirements and to allow Virginia sources to participate in the EPA administered regional trading program. It identifies specific terms and definitions of words used in the regulation. It also indicates that any words not identified shall have the definitions given them in 9 VAC 5-10-10 et seq. unless otherwise required by context. |
| 1030 | Establishes the measurements, abbreviations, and acronyms. | Necessary to meet federal requirements. Identifies specific measurements, abbreviations, and acronyms used in the regulation and their meanings. |
| 1040 | Establishes requirements covering the applicability. | Necessary to meet federal requirements. Identifies which units and sources are subject to the regulation. |
| 1050 | Establishes requirements covering the retired unit exemptions. | Necessary to meet federal requirements. Identifies which units and sources are exempt from the regulation due to being permanently retired and the requirements to ensure that classification. Also identifies circumstances under which units and sources would lose the exemptions. |
| 1060 | Establishes requirements covering the standard requirements. | Necessary to meet federal requirements. Identifies permit, monitoring, reporting and recordkeeping requirements. Identifies specific emissions requirements, the use of allowances, and consequences of violating those requirements including liability. |
| 1061 | Establishes compliance requirements in nonattainment areas. | Necessary to comply with the Code of Virginia. |
| 1062 | Provides procedures for compliance demonstrations in nonattainment areas. | Necessary to comply with the Code of Virginia. |

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| 1070 | Establishes requirements covering the computation of time. | Necessary to meet federal requirements. Identifies how timeframes will be determined for implementation of deadlines for the regulations including how holidays will be handled. |
| 1080 | Establishes requirements covering the appeal procedures. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the appeal procedures to be used to settle any disagreements as those in 40 CFR Part 78. |
| | **Article 12** | |
| 1100 through 1140 | Establishes requirements covering CAIR designated representatives for CAIR $NO_X$ annual trading program sources, specifically: authorization and responsibilities of the designated representatives; alternate designated representatives; changing the designated representative and the alternate designated representative; changes in the owners and operators; certificate of representation; and objections concerning the designated representative. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the responsibilities of the sources' authorized representatives with regard to all matters under this regulation including provisions necessary for an alternate representative. Also includes specific language that must be included with each submission of information from the representative that includes statements about the accuracy and truthfulness of material and the certification of such accuracy under penalty of law. |
| | **Article 13** | |
| 1200 through 1240 | Establishes requirements covering $NO_X$ annual trading program permits, specifically: general permit requirements; submission of permit applications; information requirements for the permit applications; permit contents and term; and permit revisions. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides specific information on the following: permit requirements including those for a Title V or state operating permit; date for submission of permit applications; information requirements for permit applications including identification of source or unit; permit contents including allowance information; and permit revisions. |
| | **Article 14** | |
| Reserved | | |
| | **Article 15** | |
| 1400 | Establishes the state annual trading program budgets. | Necessary to meet federal requirements. Identifies the EGU state ozone season budget for 2009 to 2014 as 15,994 tons of $NO_X$; for 2015 and thereafter, 13,328 tons of $NO_X$. |
| 1410 | Establishes requirements covering the timing requirements for allowance allocations. | Necessary to meet federal requirements. Identifies the timeframes by which the permitting authority will submit allowance allocations to the administrator of EPA and how allowance allocations will be handled if the permitting authority fails to submit necessary information. |
| 1420 | Establishes requirements covering the allowance allocations. | Necessary to meet federal requirements. Defines allowance allocation methodology for existing units, new units and energy efficiency and renewable energy units. |
| 1430 | Establishes the compliance supplement pool budget and requirements covering the compliance supplement pool. | Necessary to comply with the Code of Virginia. |

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| | **Article 16** | |
| 1500 through 1570 | Establishes requirements covering the $NO_X$ annual trading program allowance tracking system, specifically: establishment of accounts; responsibilities of authorized account representatives; recordation of allowance allocations; compliance; banking; account error; and closing of general accounts. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides information on establishing either compliance or general allowance accounts with the administrator. Provides information on the actions of the authorized account representative, the permitting authority and the administrator of EPA with regard to the compliance account and the recordation of the allowance allocations to and the deductions of allocations from each account. Also addresses the banking of allowances and the corrections of any errors to the account as well as information on closing an existing general account. |
| | **Article 17** | |
| 1600 through 1620 | Establishes requirements covering $NO_X$ annual trading program allowance transfers, specifically: submission of allowance transfers; EPA recordation; and notification. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides information on allowance transfers and how they shall be submitted to the administrator. Provides timeframes for EPA to record an allowance transfer (5 business days) and timeframe for EPA to notify the account representative of the execution of the transfer (5 business days). |
| | **Article 18** | |
| 1700 through 1760 | Establishes requirements covering monitoring and reporting, specifically: general requirements; initial certification and recertification procedures; out of control periods; notifications; recordkeeping and reporting; petitions; and additional requirements to provide heat input data for allocations purposes. | Necessary to meet federal requirements. Provides detailed information and timeframes for how a source shall monitor and report all necessary data and submit recordkeeping information in compliance with subpart H of 40 CFR Part 75. Also provides information pertaining to certification and recertification of monitoring equipment. |
| | **Article 19** | |
| 1800 through 1880 | Establishes requirements covering individual $NO_X$ annual trading program unit opt-ins, specifically: applicability; general; designated representative; applying for opt-in permit; opt-in process; opt-in permit contents; withdrawal from $NO_X$ annual trading program; change in regulatory status; and allowance allocations to opt-in units. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides detailed information for sources that want to opt into the program. These sources are not retired units, are required to have either a Title V or state operating permit, vent all emissions into a stack, and can meet the monitoring requirements of 40 CFR Part 75. The opt-in units shall have a designated representative, submit a complete permit application, and comply with all monitoring, data collection, reporting and recordkeeping requirements of these provisions. |

**$NO_X$ Ozone Season Trading Program (Part III)**

| New section number | New requirement | Rationale for new requirement |
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| | **Article 21** | |
| 2010 | Establishes the purpose. | Necessary to allow Virginia sources to participate in |

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| | | the EPA administered regional trading program. It identifies general provisions and the designated representative, permitting, allowance, monitoring and opt-in provisions for the regulation. It also authorizes the administrator of EPA to assist the Board in the implementation of the regulation by carrying out specific functions identified in the rule. |
| 2020 | Establishes the definitions. | Necessary to meet federal requirements and to allow Virginia sources to participate in the EPA administered regional trading program. It identifies specific terms and definitions of words used in the regulation. It also indicates that any words not identified shall have the definitions given them in 9 VAC 5-10-10 et seq. unless otherwise required by context. |
| 2030 | Establishes the measurements, abbreviations, and acronyms. | Necessary to meet federal requirements. Identifies specific measurements, abbreviations, and acronyms used in the regulation and their meanings. |
| 2040 | Establishes requirements covering the applicability. | Necessary to meet federal requirements. Identifies which units and sources are subject to the regulation. |
| 2050 | Establishes requirements covering the retired unit exemptions. | Necessary to meet federal requirements. Identifies which units and sources are exempt from the regulation due to being permanently retired and the requirements to ensure that classification. Also identifies circumstances under which units and sources would lose the exemptions. |
| 2060 | Establishes requirements covering the standard requirements. | Necessary to meet federal requirements. Identifies permit, monitoring, reporting and recordkeeping requirements. Identifies specific emissions requirements, the use of allowances, and consequences of violating those requirements including liability. |
| 2061 | Establishes compliance requirements in nonattainment areas. | Necessary to comply with the Code of Virginia. |
| 2062 | Provides procedures for compliance demonstrations in nonattainment areas. | Necessary to comply with the Code of Virginia. |
| 2070 | Establishes requirements covering the computation of time. | Necessary to meet federal requirements. Identifies how timeframes will be determined for implementation of deadlines for the regulations including how holidays will be handled. |
| 2080 | Establishes requirements covering the appeal procedures. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the appeal procedures to be used to settle any disagreements as those in 40 CFR Part 78. |
| | **Article 22** | |
| 2100 through 2140 | Establishes requirements covering CAIR designated representatives for CAIR $NO_X$ ozone season sources, specifically: authorization and responsibilities of the designated representatives; alternate designated representatives; changing the | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the responsibilities of the sources' authorized representatives with regard to all matters under this regulation including provisions necessary for an alternate representative. Also includes specific language that must be included with |

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| | designated representative and the alternate designated representative; changes in the owners and operators; certificate of representation; and objections concerning the designated representative. | each submission of information from the representative that includes statements about the accuracy and truthfulness of material and the certification of such accuracy under penalty of law. |
| | **Article 23** | |
| 2200 through 2240 | Establishes requirements covering $NO_X$ ozone season permits, specifically: general permit requirements; submission of permit applications; information requirements for the permit applications; permit contents and term; and permit revisions. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides specific information on the following: permit requirements including those for a Title V or state operating permit; date for submission of permit applications; information requirements for permit applications including identification of source or unit; permit contents including allowance information; and permit revisions. |
| | **Article 24** | |
| Reserved | | |
| | **Article 25** | |
| 2400 | Establishes the state trading program budgets. | Necessary to meet federal requirements. Identifies the EGU state ozone season budget for 2009 to 2014 as 15,994 tons of $NO_X$; for 2015 and thereafter, 13,328 tons of $NO_X$. |
| 2405 | Establishes the total non-electric generating unit budget and allocations. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Creates a non-EGU budget of 3,840 tons of $NO_X$ for 2009 and thereafter. |
| 2410 | Establishes requirements covering the timing requirements for allowance allocations. | Necessary to meet federal requirements. Identifies the timeframes by which the permitting authority will submit allowance allocations to the administrator of EPA and how allowance allocations will be handled if the permitting authority fails to submit necessary information. |
| 2420 | Establishes requirements covering the allowance allocations. | Necessary to meet federal requirements. Defines allowance allocation methodology for existing units, new units and energy efficiency and renewable energy units. |
| 2430 | Establishes the individual non-electric generating unit allocations. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the $NO_X$ allocation for each non-EGU unit subject to the program. |
| | **Article 26** | |
| 2500 through 2570 | Establishes requirements covering the $NO_X$ ozone season allowance tracking system, specifically: establishment of accounts; responsibilities of authorized account representatives; recordation of allowance allocations; compliance; banking; account error; and closing of general accounts. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides information on establishing either compliance or general allowance accounts with the administrator. Provides information on the actions of the authorized account representative, the permitting authority and the administrator of EPA with regard to the compliance account and the recordation of the allowance allocations to and the deductions of allocations from each account. Also addresses the banking of allowances and the corrections of any errors to the account as well as information on |

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| | | closing an existing general account. |
| | **Article 27** | |
| 2600 through 2620 | Establishes requirements covering $NO_X$ ozone season allowance transfers, specifically: submission of allowance transfers; EPA recordation; and notification. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides information on allowance transfers and how they shall be submitted to the administrator. Provides timeframes for EPA to record an allowance transfer (5 business days) and timeframe for EPA to notify the account representative of the execution of the transfer (5 business days). |
| | **Article 28** | |
| 2700 through 2760 | Establishes requirements covering monitoring and reporting, specifically: general requirements; initial certification and recertification procedures; out of control periods; notifications; recordkeeping and reporting; petitions; and additional requirements to provide heat input data for allocations purposes. | Necessary to meet federal requirements. Provides detailed information and timeframes for how a source shall monitor and report all necessary data and submit recordkeeping information in compliance with subpart H of 40 CFR Part 75. Also provides information pertaining to certification and recertification of monitoring equipment. |
| | **Article 29** | |
| 2800 through 2880 | Establishes requirements covering individual $NO_X$ ozone season unit opt-ins, specifically: applicability; general; designated representative; applying for opt-in permit; opt-in process; opt-in permit contents; withdrawal from $NO_X$ ozone season trading program; change in regulatory status; and allowance allocations to opt-in units. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides detailed information for sources that want to opt into the program. These sources are not retired units, are required to have either a Title V or state operating permit, vent all emissions into a stack, and can meet the monitoring requirements of 40 CFR Part 75. The opt-in units shall have a designated representative, submit a complete permit application, and comply with all monitoring, data collection, reporting and recordkeeping requirements of these provisions. |

**$SO_2$ Annual Trading Program (Part IV)**

| New section number | New requirement | Rationale for new requirement |
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| | **Article 31** | |
| 3010 | Establishes the purpose. | Necessary to allow Virginia sources to participate in the EPA administered regional trading program. It identifies general provisions and the designated representative, permitting, allowance, monitoring and opt-in provisions for the regulation. It also authorizes the administrator of EPA to assist the Board in the implementation of the regulation by carrying out specific functions identified in the rule. |
| 3020 | Establishes the definitions. | Necessary to meet federal requirements and to allow Virginia sources to participate in the EPA administered regional trading program. It identifies specific terms and definitions of words used in the regulation. It also indicates that any words not identified shall have the definitions given them in 9 |

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| | | VAC 5-10-10 et seq. unless otherwise required by context. |
| 3030 | Establishes the measurements, abbreviations, and acronyms. | Necessary to meet federal requirements. Identifies specific measurements, abbreviations, and acronyms used in the regulation and their meanings. |
| 3040 | Establishes requirements covering the applicability. | Necessary to meet federal requirements. Identifies which units and sources are subject to the regulation. |
| 3050 | Establishes requirements covering the retired unit exemptions. | Necessary to meet federal requirements. Identifies which units and sources are exempt from the regulation due to being permanently retired and the requirements to ensure that classification. Also identifies circumstances under which units and sources would lose the exemptions. |
| 3060 | Establishes requirements covering the standard requirements. | Necessary to meet federal requirements. Identifies permit, monitoring, reporting and recordkeeping requirements. Identifies specific emissions requirements, the use of allowances, and consequences of violating those requirements including liability. |
| 3061 | Establishes compliance requirements in nonattainment areas. | Necessary to comply with the Code of Virginia. |
| 3062 | Provides procedures for compliance demonstrations in nonattainment areas. | Necessary to comply with the Code of Virginia. |
| 3070 | Establishes requirements covering the computation of time. | Necessary to meet federal requirements. Identifies how timeframes will be determined for implementation of deadlines for the regulations including how holidays will be handled. |
| 3080 | Establishes requirements covering the appeal procedures. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the appeal procedures to be used to settle any disagreements as those in 40 CFR Part 78. |
| | **Article 32** | |
| 3100 through 3140 | Establishes requirements covering CAIR designated representatives for CAIR $SO^2$ sources, specifically: authorization and responsibilities of the designated representatives; alternate designated representatives; changing the designated representative and the alternate designated representative; changes in the owners and operators; certificate of representation; and objections concerning the designated representative. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Identifies the responsibilities of the sources' authorized representatives with regard to all matters under this regulation including provisions necessary for an alternate representative. Also includes specific language that must be included with each submission of information from the representative that includes statements about the accuracy and truthfulness of material and the certification of such accuracy under penalty of law. |
| | **Article 33** | |
| 3200 through 3240 | Establishes requirements covering $SO^2$ permits, specifically: general permit requirements; submission of permit applications; information requirements for the permit applications; permit contents and | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides specific information on the following: permit requirements including those for a Title V or state operating permit; date for submission of permit applications; information requirements for |

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| | term; and permit revisions. | permit applications including identification of source or unit; permit contents including allowance information; and permit revisions. |
| | **Article 34** | |
| Reserved | | |
| | **Article 35** | |
| 3400 | Establishes the state annual trading program budgets. | Necessary to comply with Code of Virginia. Identifies the EGU state ozone season budget for 2009 to 2014 as 63,478 tons of $SO_2$; for 2015 and thereafter, 44,435 tons of $SO_2$. |
| 3410 | Establishes requirements covering the timing requirements for allowance allocations. | Necessary to comply with Code of Virginia. The timing requirements for allocation of $SO_2$ allowances are to be in accordance with 40 CFR Part 73. |
| 3420 | Establishes requirements covering the allowance allocations. | Necessary to comply with Code of Virginia. The $SO_2$ allowances are to be allocated in accordance with 40 CFR Part 73. |
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| | **Article 36** | |
| 3500 through 3570 | Establishes requirements covering the $SO^2$ allowance tracking system, specifically: establishment of accounts; responsibilities of authorized account representatives; recordation of allowance allocations; compliance; banking; account error; and closing of general accounts. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides information on establishing either compliance or general allowance accounts with the administrator. Provides information on the actions of the authorized account representative, the permitting authority and the administrator of EPA with regard to the compliance account and the recordation of the allowance allocations to and the deductions of allocations from each account. Also addresses the banking of allowances and the corrections of any errors to the account as well as information on closing an existing general account. |
| | **Article 37** | |
| 3600 through 3620 | Establishes requirements covering $SO^2$ allowance transfers, specifically: submission of allowance transfers; EPA recordation; and notification. | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides information on allowance transfers and how they shall be submitted to the administrator. Provides timeframes for EPA to record an allowance transfer (5 business days) and timeframe for EPA to notify the account representative of the execution of the transfer (5 business days). |
| | **Article 38** | |
| 3700 through 3760 | Establishes requirements covering monitoring and reporting, specifically: general requirements; initial certification and recertification procedures; out of control periods; notifications; recordkeeping and reporting; petitions; and additional requirements to provide heat input data for allocations purposes. | Necessary to meet federal requirements. Provides detailed information and timeframes for how a source shall monitor and report all necessary data and submit recordkeeping information in compliance with subpart H of 40 CFR Part 75. Also provides information pertaining to certification and recertification of monitoring equipment. |
| | **Article 39** | |
| 3800 through 3880 | Establishes requirements covering individual $SO^2$ opt-ins, specifically: applicability; general; designated | Necessary to allow Virginia sources to participate in the EPA administered regional emissions trading program. Provides detailed information for sources |

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| | representative; applying for opt-in permit; opt-in process; opt-in permit contents; withdrawal from $SO^2$ trading program; change in regulatory status; and allowance allocations to opt-in units. | that want to opt into the program. These sources are not retired units, are required to have either a Title V or state operating permit, vent all emissions into a stack, and can meet the monitoring requirements of 40 CFR Part 75. The opt-in units shall have a designated representative, submit a complete permit application, and comply with all monitoring, data collection, reporting and recordkeeping requirements of these provisions. |

## 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.

This regulation will reduce the regulatory burden associated with meeting the federal requirement to not exceed the total $SO_2$ and $NO_X$ emissions budgets established for the year 2009 and thereafter for all sources, including all small businesses, by improving the flexibility of owners and operators to meet the budget requirements.

## 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

On March 10, 2005 the Environmental Protection Agency (EPA) officially notified states that they had failed to submit plans, known as State Implementation Plans (SIPs), addressing the contribution to interstate transport of pollutants that form ozone and particle pollution in downwind states. The Clean Air Act (§§ 110(a)(1) and (2)), requires states to submit SIPs that implement, maintain, and enforce a new or revised National Ambient Air Quality Standard (NAAQS) within 3 years of promulgation of the standard. Among other things, these SIP revisions must address a state's significant contribution of pollution in other states. In July 1997, EPA issued the 8-hour ozone and $PM_{2.5}$ NAAQS. States were required to submit SIPs that satisfied certain initial Clean Air Act requirements for implementing these standards by July 2000. This submittal initiates requirements to address interstate transport of air pollutants under § 110(a)(2)(D). Section 110(a)(2)(D) of the Clean Air Act provides an important tool for addressing the problem of interstate transport of air pollutants. This provision applies to each pollutant covered by a NAAQS and to all areas of the country regardless of their attainment designation. This section of the Act specifically provides that a SIP must prohibit statewide air pollutant emissions that significantly contribute to a nonattainment or maintenance problem in another state. EPA has made a finding that Virginia has failed to make the required submission addressing interstate transport. The finding starts a 2 year clock for EPA to issue a final Federal Implementation Plan (FIP) that will address the requirements of § 110(a)(2)(D) if Virginia fail to make the required submission. This action is also the first action required under a consent decree between EPA and Earth-Justice. In March 2004, Earth-Justice filed a notice of intent to sue EPA over EPA's failure to find that states had not submitted § 110(a)(1) SIPs for $PM_{2.5}$ and ozone. The March 10 promulgation satisfies EPA's obligation under the consent decree concerning the § 110(a)(2)(D) requirements related interstate transport.

On July 17, 1997, following a lengthy scientific review process, EPA revised the NAAQS for ground-level ozone and particle pollution or particulate matter. Specifically, EPA replaced the 1-hour ozone standard by promulgating a new 8-hour ozone standard to protect against longer exposure periods. EPA also promulgated new particulate matter standards and established both an annual and a 24-hour standard for fine particles - those 2.5 micrometers in diameter or smaller. Ozone is rarely emitted directly into the air. Ozone is generally formed when nitrogen oxides ($NO_X$) and volatile organic compounds (VOCs) react in the presence of intense sunlight. $NO_X$ and VOCs are emitted by sources of combustion including motor vehicles, and industrial facilities, also, gasoline vapors, chemical solvents and natural sources. Fine particle pollution, or $PM_{2.5}$, is a mixture of microscopic solids and liquid droplets suspended in the air. Fine particles may be emitted directly or formed when other air pollutants – including sulfur dioxide ($SO_2$) and $NO_X$ emitted by cars, power plants and other industrial sources react in the atmosphere. In a separate, but related regulatory action, on March 10, 2005 EPA promulgated the Clean Air Interstate Rule (CAIR). Based on the Clean Air Act requirements for states to address the interstate transport of air pollutants, this rule finds that 28 states, including the District of Columbia, contribute significantly to nonattainment, or interfere with maintenance, of the NAAQS for 8-hour ozone and $PM_{2.5}$ pollution in downwind states. The 28 states identified in the CAIR must submit SIPs that will achieve the emission reduction requirements in the CAIR by September 11, 2006. States that submit an approvable SIP to satisfy the requirements of the CAIR will satisfy the requirements in the EPA's findings notice (70 FR 25162, May 12, 2005) related to § 110(a)(2)(D).

State Requirements

Section 10.1-1322.3 of the Code of Virginia indicates that the board may promulgate regulations to provide for an emissions trading program to achieve and maintain the NAAQS. The banking and trading program shall result in net air emission reductions, create economic incentive for reducing air emissions and allow for economic growth. In developing the regulations, the board shall consider (i) the definition

and use of emissions reduction credits form mobile and stationary sources, (ii) offsets, (iii) interstate or regional trading, (iv) mechanisms needed to facilitate trading and banking, and (v) emissions allocations. However, no regulation shall prohibit the direct trading of credits or allowances between private industries provided such trades do not have an adverse impact on air quality in Virginia. 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.

Section 10.1-1328 A requires that the Board adopt a regulation that establishes emissions budgets for annual $NO_X$ emissions, ozone season $NO_X$ emissions, and annual $SO_2$ emissions, and allows the state to implement the EPA Clean Air Interstate Rule (CAIR) and facilitate the trading of allowances within the United States. However, the state rule (i) must differ from the federal model rule with regard to the size of the new source set-aside and (ii) must include provisions to prohibit the use of allowances other than those allocated to the source by the board for compliance in nonattainment areas.

Section 10.1-1328 B mandates that the owners of early reduction credit (ERC) units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) reduce their emissions in amount that is at least equal to the CSP (i.e., 5,134 tons). The state must award the CSP allowances to the ERC units which are required to make an equivalent amount of early reductions during the 2007 and 2008 control periods. Allocations from the pool will be distributed to the units prior to November 30, 2009. Allocations from the pool are valid for the 2009 control period only.

## 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.*

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The ozone present at ground level as a principal component of photochemical smog is formed in sunlit conditions through atmospheric reactions of two main classes of precursor compound: VOCs and $NO_X$. The term ‘‘VOC’’ includes many classes of compounds that possess a wide range of chemical properties and atmospheric lifetimes, which helps determine their relative importance in forming ozone. Sources of VOCs include motor vehicles, chemical plants, refineries, and many consumer products, but also natural emissions from vegetation. Nitrogen oxides are emitted by motor vehicles, power plants, and other combustion sources, with lesser amounts from natural processes including lightning and soils.

In addition to ensuring that areas of the state that meet the NAAQS continue to do so, the Commonwealth is also obligated to actively improve air quality. Currently, approximately one half of the Commonwealth’s citizens live in areas that do not attain the NAAQS. Virginia’s nonattainment problems extend beyond its borders as well: a neighboring state has submitted a § 126 petition to EPA claiming that Virginia’s air pollution is having a negative impact on its air quality. Visibility problems have been identified in Virginia’s national park areas. Additionally, nitrogen deposition from airborne emissions is contributing to serious water quality problems in Chesapeake Bay. In this larger context, it is clear that the state needs to take additional steps beyond the immediate legal requirements for nonattainment and other areas if larger, statewide issues of air quality are to be addressed.

The relative importance of $NO_X$ and VOC in ozone formation and control varies with local- and time-specific factors, including the relative amounts of VOC and $NO_X$ present. In rural areas with high concentrations of VOC from biogenic sources, ozone formation and control is governed by $NO_X$. In some urban core situations, $NO_X$ concentrations can be high enough relative to VOC to suppress ozone formation locally, but still contribute to increased ozone downwind from the city. In such situations, VOC reductions are most effective at reducing ozone within the urban environment and immediately downwind.

The formation of ozone increases with temperature and sunlight, which is one reason ozone levels are higher during the summer. Increased temperature increases emissions of volatile manmade and biogenic organics and can indirectly increase $NO_X$ as well (e.g., increased electricity generation for air conditioning). Summertime conditions also bring increased episodes of large scale stagnation, which promote the build-up of direct emissions and pollutants formed through atmospheric reactions over large regions.

The most recent authoritative assessments 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.

Studies conducted in the 1970s established that ozone occurs on a regional scale (i.e., 1000s of kilometers) over much of the eastern U.S., with elevated concentrations occurring in rural as well as metropolitan areas. While progress has been made in reducing ozone in many urban areas, the Eastern U.S. continues to experience elevated regional scale ozone episodes in the extended summer ozone season. Regional 8-hour ozone levels are highest in the northeast and mid-Atlantic areas with peak 2002 (3-year average of the 4th highest value for all sites in the region) ranging from 0.097 to 0.099 parts per million (ppm).

The OTAG Regional and Urban Scale Modeling and Air Quality Analysis Work Groups concluded that regional $NO_X$ emissions reductions are effective in producing ozone benefits; the more $NO_X$ reduced, the greater the benefit; and that controls for VOC are effective in reducing ozone locally and are most advantageous to urban nonattainment areas (62 FR 60320, November 7, 1997).

The EPA continues to believe based on the OTAG and NARSTO reports cited earlier, and the modeling completed as part of the analysis for the CAIR rule, that $NO_X$ emissions are chiefly responsible for regional ozone transport, and that $NO_X$ reductions will be most effective in reducing regional ozone transport. This understanding was considered an adequate basis for controlling $NO_X$ emissions for ozone transport in the $NO_X$ SIP call, and was upheld by the courts. As a result, EPA is requiring $NO_X$ reductions and not VOC reductions in the CAIR rule. However, EPA agrees, that VOCs from some upwind States do indeed have an impact in nearby downwind States, particularly over short transport distances.

The EPA expects that states will need to examine the extent to which VOC emissions affect ozone pollution levels across state lines, and identify areas where multi-state VOC strategies might assist in meeting the 8- hour standard, in planning for attainment. This does not alter the basis for the CAIR ozone requirements in this rule; EPA's modeling supports the conclusion that $NO_X$ emissions from upwind states will significantly contribute to downwind nonattainment and interfere with maintenance of the 8- hour ozone standard. The $NO_X$ SIP Call was promulgated 1998 to address interstate ozone transport problems in the Eastern U.S. EPA noted that it made sense to reevaluate whether the $NO_X$ SIP call was adequate at the same time that EPA was assessing the need for emissions reductions to address interstate $PM_{2.5}$ problems because of overlap in the pollutants and relevant sources, and the timetables for states to submit local attainment plans. EPA presented a new analysis of the extent of residual 8-hour ozone attainment projected to remain in 2010, and the extent and severity of interstate pollution transport contributing to downwind nonattainment in that year. The proposal notice said that based on a multi-part assessment, EPA had concluded that: ''Without adoption of additional emissions controls, a substantial number of urban areas in the central and eastern regions of the U.S. will continue to have levels of 8-hour ozone that do not meet the national air quality standards."

EPA has concluded that small contributions of pollution transport to downwind nonattainment areas should be considered significant from an air quality standpoint, because these contributions could prevent or delay downwind areas from achieving the standards. EPA has concluded that interstate transport is a major contributor to the projected (8-hour ozone) nonattainment problem in the eastern U.S. in 2010. The nonattainment areas analyzed receive a transport contribution of more than 20 percent of the ambient ozone concentrations, and had a transport contribution of more than 50 percent. Typically, two or more states contribute transported pollution to a single downwind area, so that the ''collective contribution'' is

much larger than the contribution of any single state. Also, EPA concluded that highly cost effective reductions in $NO_X$ emissions were available within the eastern region where it determined interstate transport was occurring, and that requiring those highly cost effective reductions would reduce ozone in downwind nonattainment areas. In addition, the proposal examined the effect of hypothetical across-the board emissions reductions in nonattainment areas. The notice stated that EPA had conducted a preliminary scoping analysis in which hypothetical total $NO_X$ and VOC emissions reductions of 25 percent were applied in all projected nonattainment areas east of the continental divide in 2010, yet approximately 8 areas were projected to have ozone levels exceeding the 8-hour standard. Based on experience with state plans for meeting the one-hour ozone standard, EPA said this scenario was an indication that attaining the 8- hour standard will entail substantial cost in a number of nonattainment areas, and that further regional reductions are warranted.

Virginia must submit a SIP that will achieve the $SO_2$ and $NO_X$ emission reductions required in the CAIR by September 11, 2006. States that submit an approvable SIP to satisfy the requirements of the CAIR within the required time period will satisfy the requirements in § 110(a)(2)(D).

## 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.*

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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.

# COMMONWEALTH OF VIRGINIA
# STATE AIR POLLUTION CONTROL BOARD
# SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR REGULATION REVISION E05
# CONCERNING

# REGULATION FOR EMISSIONS TRADING (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.

## SUMMARY OF PROPOSED AMENDMENTS

The proposed regulation amendments concerned provisions covering Regulation for Emission Trading, Clean Air Interstate Rule, Revision E05. This regulatory action encompasses the establishment of three new parts to 9 VAC 5-140, each of which is addressed below:

**Nitrogen Oxides ($NO_X$) Annual Trading Program (Part II)**

1. The regulation applies to electric generating units (EGUs) with a nameplate capacity greater than 25 megawatts electrical (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.

4. A new unit set-aside budget is included consisting of 5.0% of the EGU budget for each control period in 2009 through 2013 or 2.0% for each control period in 2014 and thereafter.

5. Provision for a voluntary public health set-aside to retire allowances is included.

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

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

8. Initial allocations (2009 – 2013) for existing EGUs are issued on October 31, 2006 and based on heat input (2001 – 2005) normalized over the state budget.

9. Subsequent allocations (2014 and thereafter) for existing EGUs are issued annually beginning October 31, 2009, five years in advance; and based on the preceding five years of heat input.

10. Allocations for existing EGUs are calculated using the baseline heat input, determined by averaging the three highest years of the preceding five years.

11. Initial allocations (2009 – 2013) for new EGUs are issued on October 31, 2009 and based on electrical output (2004 – 2008) normalized over the new unit set-aside budget.

12. Subsequent allocations (2014 and thereafter) for new EGUs are issued annually beginning October 31, 2014 and based on the preceding five years of electrical output.

13. Allocations for new EGUs are calculated using the converted heat input (electrical output), determined by averaging the three highest years of the preceding five years.

14. A compliance pool (5,134 tons) is established which allows for allocations from the pool for early reductions and to avoid an “undue risk to the reliability of electricity." Allocations from the pool will be distributed to the sources prior to November 30, 2009. Allocations from the pool are valid for the 2009 control period only.

15. Compliance is determined by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units.

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.

17. Sources may bank any allowances not used during a specific control period.

18. Major sources subject to the regulation must obtain a budget permit reflecting the requirements of the budget trading program.

19. 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 into the program.

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

21. The program is administered almost in its entirety by EPA, except for the allocations of allowances, issuance of the budget permits and the administration of the opt-in provisions.

22. 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 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 regulation also applies to non-EGUs above 250 million British thermal units (mmBtu). A non-EGU is a fossil fuel-fired stationary boiler or combustion turbine that (i) at no time serves a generator producing electricity for sale under firm contract to the grid or (ii) at any time serves a generator producing electricity for sale under firm contract to the grid, if any such generator has a nameplate capacity of 25 MWe or less and has the potential to use no more than 50% of the potential electrical output capacity of the unit.

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

4. 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.

5. The $NO_X$ ozone season trading budget for non-EGUs is 3,840 tons for each control period in 2009 and thereafter (reduced from the $NO_X$ SIP Call budget of 4,104 tons).

6. A new unit set-aside budget is included consisting of 5.0% of the EGU budget for each control period in 2009 through 2013 or 2.0% for each control period in 2014 and thereafter and 700 tons from the non-EGU budget.

7. A set-aside for efficient energy/renewable energy sources is included consisting of 36 tons for each control period in 2009 and thereafter, which expire after three years.

8. Provision for a voluntary public health set-aside to retire allowances is included.

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

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

11. Initial allocations (2009 – 2013) for existing EGUs are issued on October 31, 2006 and based on heat input (2001 – 2005) normalized over the state budget.

12. Subsequent allocations (2014 and thereafter) for existing EGUs are issued annually beginning October 31, 2009, five years in advance; and based on the preceding five years of heat input.

13. Allocations for existing EGUs are calculated using the baseline heat input, determined by averaging the three highest years of the preceding five years.

14. The allocations (2009 and thereafter) for existing non-EGUs are carried over from the $NO_X$ SIP call program, are set forth in the regulation, and are permanent.

15. Initial allocations (2009 – 2013) for new EGUs are issued on July 31, 2009 and based on electrical output (2004 – 2008) normalized over the new unit set-aside budget.

16. Subsequent allocations (2014 and thereafter) for new EGUs are issued annually beginning July 31, 2014 and based on the preceding five years of electrical output.

17. Allocations for new EGUs are calculated using the converted heat input (electrical output), determined by averaging the three highest years of the preceding five years.

18. Initial allocations (2009 – 2013) for new non-EGUs are issued on July 31, 2009 and based on heat input (2004 – 2008) normalized over the state budget.

19. Subsequent allocations (2014 and thereafter) for new non-EGUs are issued annually beginning July 31, 2014 and based on the preceding five years of heat input.

20. Allocations for new non-EGUs are calculated using the baseline heat input, determined by averaging the three highest years of the preceding five years.

21. Compliance is determined by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units.

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.

23. Sources may bank any allowances not used during a specific control period.

24. Major sources subject to the regulation must obtain a budget permit reflecting the requirements of the budget trading program.

24. 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 into the program.

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

26. The program is administered almost in its entirety by EPA, except for the allocations of allowances, issuance of the budget permits and the administration of the opt-in provisions.

27. 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.

**Sulfur Dioxide ($SO_2$) Annual Trading Program (Part IV)**

1. The regulation applies to 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.

4. Major sources subject to the regulation must obtain a budget permit reflecting the requirements of the budget trading program.

5. The program is administered almost in its entirety by EPA, including the allocations of allowances.

6. EPA has already allocated the allowances which are valid indefinitely, except the value of the allowances is reduced over time.

7. The only role for the state is to issue the budget permits.

8. Compliance is determined by comparing the amount of allowances in the owner's account with the total amount of emissions from all of the affected units.

9. Sources may bank any allowances not used during a specific control period.

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 into the program.

11. Sources that opt into 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.

## SUMMARY OF PUBLIC PARTICIPATION PROCESS

A public hearing was held in Richmond, Virginia on August 24, 2006. Thirteen persons attended the hearing, with four of those offering testimony (one individual spoke for two different organizations); and 243 additional written comments were received during the public comment period. As required by law, notice of this hearing was given to the public on or about July 10, 2006 in the Virginia Register and in seven major newspapers (one in each Air Quality Control Region) throughout the Commonwealth. In addition, personal notice of this hearing and the opportunity to comment was given by mail to those persons on the Department's list to receive notices of proposed regulation revisions. A list of hearing attendees and the complete text or an account of each person's testimony is included in the hearing report which is on file at the Department.

## 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.

3. **SUBJECT**: General Comments; SIP Approval – Definitions; 9 VAC 5-140-1020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: In its proposed rules, Virginia has defined all references to “permitting authority” as referring to State Air Pollution Control Board. This change is acceptable in most, but not all instances. In certain definitions of terms, it is important that those terms cover the trading programs in all states that choose to participate in the EPA-administered trading programs. For example, in the definition of

"allocate or allocation" in each CAIR rule, Virginia limits the term to allowances issued by Virginia (i.e., the permitting authority, defined as the State Air Pollution Control Board) or the administrator. The definitions must be corrected so that the term is defined with regard to allowances issued by all permitting authorities in states participating in the EPA-administered trading program or issued by the administrator. This is necessary in order to ensure that all allowances issued in a given EPA-administered trading program (i.e., the $NO_X$ annual, $SO_2$, or $NO_X$ ozone season trading program) are fungible and can be traded and used for compliance with the allowance-holding requirements in any state in the program. For the same reason, the definitions of the terms "CAIR $NO_X$ allowance," "CAIR $SO_2$ allowance," and "CAIR $NO_X$ Ozone Season allowance" must refer to all allowances issued by a permitting authority in a state that is participating in the EPA-administered trading program, and the definition of "CAIR $NO_X$ Annual Trading Program," "CAIR $SO_2$ Trading Program," and "CAIR $NO_X$ Ozone Season Trading Program" must refer to the programs in any state that is participating in the respective EPA-administered trading program. Similarly, the terms "CAIR $NO_X$ unit," CAIR $SO_2$ unit," and "CAIR $NO_X$ ozone season unit", which are used in the definition of "allocate or allocation," need to refer to units subject to the programs in any state in the respective EPA-administered trading program. EPA also notes that the definitions of many of these terms in the $NO_X$ annual, $SO_2$, and $NO_X$ ozone season model trading rules were revised in the April 28, 2006 final rule.

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

4A. **SUBJECT**: $NO_X$ Annual Trading Program: Definitions; 9 VAC 5-140-1020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: In the definition of "CAIR permit," the reference to "federally enforceable written document or portion of such document" is replaced by "title V operating permit or state operating permit." This creates some problems that should be addressed. As discussed in more detail below, this definition, in conjunction with 9 VAC 5-140-1200, results in allowing opt-in units to have a state operating permit rather than a title V operating permit or other federally enforceable permit. That approach is inconsistent with the model rule in that the model rule requires opt-in units to have federally enforceable permits setting forth the opt-in requirements.

**RESPONSE**: Virginia's title V operating permits and state operating permits are federally enforceable, and there is no reason why they cannot be used to meet CAIR permit requirements.

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

4B. **SUBJECT**: $NO_X$ Annual Trading Program: Definitions; 9 VAC 5-140-1020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: The definition of "CAIR permit" creates some confusion because, while the definition equates "CAIR permit" and "title V operating permit or state operating permit," other provisions concerning permitting treat the CAIR permit as a part of, not the entire, title V operating permit or state operating permit. See, e.g., 9 VAC 5-140-1200 A and B and 9 VAC 5-140-1230 C.

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

5. **SUBJECT**: $NO_X$ Annual Trading Program: Definitions; 9 VAC 5-140-1020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Definition of "Most stringent state or federal $NO_X$ emissions limitation" - The last sentence should be removed since it could result in a greater allowance allocation for opt-in units than provided in the model rule.

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

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.

7. **SUBJECT**: $NO_X$ Annual Trading Program: Permit Requirements; 9 VAC 5-140-1200

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: This provision is inconsistent with the model rule in that the model rule requires opt-in units to have federally enforceable permits setting forth the opt-in requirements. 9 VAC 5-140-1200 seems to allow opt-in units to have a state operating permit, rather than a title V operating permit or other federally enforceable permit. 9 VAC 5-140-1800 has the same problem.

**RESPONSE**: See response to comment number 4A.

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

8. **SUBJECT**: $NO_X$ Annual Trading Program: Timing Requirements for $NO_X$ allowance allocations; 9 VAC 5-140-1410

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsections B.2, C.2, and D.2 - The corresponding provisions in the EPA model rule have been removed in the April 28, 2006 rule changes. We recommend removing them for the reasons explained in the April 28, 2006 final rule and because the provision to use 83% of the allocations of 2013 for the control period of 2014 would implement Phase 2 of the program one year early. We believe that this is not Virginia's intent.

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

9. **SUBJECT**: $NO_X$ Annual Trading Program: Timing Requirements for $NO_X$ allowance allocations; 9 VAC 5-140-1410 C 1, 9 VAC 5-140-1420 C 1-4, and 9 VAC 5-140-1530.

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: There is an inconsistency in these provisions. 9 VAC 5-140-1410 C.1 provides that allocations for new units for the years 2009 – 2013 will be submitted to EPA by October 31, 2009. However, 9 VAC 5-140-1420 C.1-4 seems to provide that units may submit requests each year throughout the period 2009-2013 and that Virginia will act on such requests each year. Further, 9 VAC 5 -140-1530 D provides that EPA record such allocations each year, not just one time. If the timing provisions of 9 VAC 5-140-1410 C.1 are not changed, units that commence operation in 2009 – 2013 will not be able to receive allowances in any of the years 2009 – 2013. If it is Virginia's intent to allow units to

request allowances from the new unit set-aside for each year 2009 – 2013, then the provisions in 9 VAC 5-140-1410 C.1 should be changed to reflect that.

**RESPONSE**: Section 10.1-1322.3 of the Code of Virginia mandates:

> 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 applicable to the electric power industry shall … 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.

This provision does indeed require that units that commence operation in 2009 – 2013 will not be able to receive allowances in any of the years 2009 – 2013. Accordingly, the regulation provides for the initial allocations to be issued in a five year block; thus, the allocations for the control periods in 2009 – 2013 will be submitted to EPA by October 31, 2009 as provided in 9 VAC 5-140-1410 C. This means that no further allowances will be submitted to EPA until October 31, 2014 for the control period in 2014 as provided in 9 VAC 5-140-1410 D. After that, the allowances will be made annually for each control period as provided in 9 VAC 5-140-1410 D. 9 VAC 5-140-1420 C 1-4 and 9 VAC 5 -140-1530 D have been redrafted to clarify this process. Regardless of when the permitting authority allocates the allowances, the allocations will be submitted to EPA as provided in 9 VAC 5-140-1410 and EPA may record them as provided in 9 VAC 5-140-1530.

10. **SUBJECT**: $NO_X$ Annual Trading Program: CAIR $NO_X$ allowance allocations; 9 VAC 5-140-1420

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection E. The provision “after completion of the procedures under subdivision C.4” should be corrected to “after completion of the procedures under subsections C.4 and D.4.”

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

11. **SUBJECT**: $NO_X$ Annual Trading Program: General Requirements; 9 VAC 5-140-1700

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivision D.4.c - The reference to D.3.1 in this subdivision is incorrect and should be changed to D.3.a.

**RESPONSE**: The cross-reference has been corrected.

12. **SUBJECT**: $NO_X$ Annual Trading Program: Initial certification and recertification procedures; 9 VAC 55-140-1710

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivision D.3.e(1)(e) - The reference for the definition of “maximum potential $NO_X$ emission rate” is incorrectly cited as 40 CFR 75.2, and must be corrected to 40 CFR 72.2.

**RESPONSE**: The cross-reference has been corrected.

13. **SUBJECT**: $NO_X$ Annual Trading Program: CAIR $NO_X$ Opt-in Units – Applicability; 9 VAC 5-140-1800

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection D - Like 9 VAC 5-140-1200, this provision seems to allow opt-in units to have a state operating permit, rather than a title V operating permit or other federally enforceable permit. This is inconsistent with the model rule. This provision is reflected in other provisions of the opt-in sections, e.g., 9 VAC 5-140-1830 B.1.

**RESPONSE**: See response to comment number 4A.

14. **SUBJECT**: $NO_X$ Annual Trading Program: Opt-in process; 9 VAC 5-140-1840

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivision C.2 - It is recommended that the reference to "subdivisions B.1.b and 2" be changed to B.1.b and B.2.

**RESPONSE**: The cross-reference meets the formatting requirements of the Virginia Registrar of Regulations.

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

15. **SUBJECT**: $NO_X$ Annual Trading Program: $NO_X$ allowance allocations to CAIR $NO_X$ opt-in units; 9 VAC 5-140-1880

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivisions C.1.c. and C.2.c. EPA is uncertain whether the references to "subdivision a of this subdivision" and "subdivision b of this subdivision" are correctly worded.

**RESPONSE**: The cross-reference meets the formatting requirements of the Virginia Registrar of Regulations.

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

16. **SUBJECT**: $NO_X$ Ozone Season Trading Program: General Comment

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Virginia has chosen to meet its $NO_X$ SIP Call obligations by expanding the applicability provisions in the CAIR $NO_X$ ozone season trading program to include all non-EGUs subject to the state's $NO_X$ Budget Trading Program. However, to successfully incorporate these non-EGUs and to transition from the state $NO_X$ Budget trading program to the CAIR $NO_X$ ozone season program, the state will need to make additional modifications to its proposed CAIR ozone season rule. For example, there are several definitions that either differ between the state's $NO_X$ Budget trading program and CAIR or otherwise need to be modified to reflect the transition to CAIR. The state should refer to a document entitled "CAIR Questions and Answers – SIP Call Transition," for a discussion of the steps involved in the transition from the state's $NO_X$ Budget program to the CAIR $NO_X$ ozone season program. This document can be found at the following web site: http://www.epa.gov/airmarkets/cair/sipcalltrans.html.

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

17A. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Definitions; 9 VAC 5-140-2020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: In the definition of "CAIR permit," the reference to "federally enforceable written document or portion of such document" is replaced by "title V operating permit or state operating permit." This creates some problems that should be addressed. As discussed in more detail below, this definition, in conjunction with 9 VAC 5-140-2200, results in allowing opt-in units to have a state operating permit rather than a title V operating permit or other federally enforceable permit. That approach is inconsistent with the model rule in that the model rule requires opt-in units to have federally enforceable permits setting forth the opt-in requirements.

**RESPONSE**: Virginia's title V operating permits and state operating permits are federally enforceable, and there is no reason why they cannot be used to meet CAIR permit requirements.

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

17B. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Definitions; 9 VAC 5-140-2020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: The definition of "CAIR permit" creates some confusion because, while the definition equates "CAIR permit" and "title V operating permit or state operating permit," other provisions concerning permitting treat the CAIR permit as a part of, not the entire, title V operating permit or state operating permit. See, e.g., 9 VAC 5-140-2200 A and B and 9 VAC 5-140-2230 C.

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

18. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Definitions; 9 VAC 5-140-2020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Definition of "most stringent state or federal $NO_X$ emissions limitation - The last sentence should be removed since it could result in a greater allowance allocation for opt-in units than provided in the model rule.

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

19. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Definitions; 9 VAC 5-140-2020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Definitions of "fossil-fuel-fired," "commence commercial operation," and "commence operation" - Because Virginia is bringing in non-EGUs from its $NO_X$ SIP Call trading program, certain definitions from that program must be preserved and applied to these units only. Please refer to the Questions and Answers referenced above in the general comment.

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

20. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Definitions; 9 VAC 5-140-2020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Definition of "core trading program budget." Please clarify that the "state trading budget" used for the calculation of the core trading program budget is the EGU portion of the total state budget. If it included the non-EGU portion of the total state budget, it seems that Virginia would be

allocating in 9 VAC 5-140-2420 and 2430 a total number of allowances (to EGUs and non-EGUs) that exceeded the total state budget.

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

21. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Applicability; 9 VAC 5-140-2040

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivisions B.1 and B.2 - There are a number of the differences between the CAIR applicability provisions and the Virginia $NO_X$ Budget Trading Program applicability provisions; for example, CAIR exempts certain cogeneration units, while the $NO_X$ Budget trading program does not exempt them but rather treats them as either EGUs or non-EGUs. In particular, the EGU portion of the applicability provisions in Virginia's $NO_X$ Budget trading program (such as 9 VAC 5-140-40 A.1.c) does not exclude cogeneration units and so there potentially can be cogeneration units that are excluded from the CAIR model trading program but covered by the EGU portion of Virginia's $NO_X$ Budget trading program applicability. Therefore, in order to ensure that all units covered by the Virginia $NO_X$ Budget trading program and not by the CAIR model rule applicability provisions are brought into the Virginia's CAIR $NO_X$ ozone season trading program, Virginia's CAIR $NO_X$ ozone season applicability provision should include, in their entirety, the applicability provisions from the Virginia $NO_X$ Budget trading program, not just the non-EGU portion. Under this approach, 9 VAC 5-140-2040 would set forth two categories of units that are CAIR $NO_X$ Ozone Season units: the first category (to be set forth in 9 VAC 5-140-2040 A) would be described using the provisions of § 96.304 (as revised by the April 28, 2006 final rule); and the second category (to be set forth in 9 VAC 5-140-2040 B) would be described as units that are not covered by 9 VAC 5-140-2040 A and that are covered by the language taken from 9 VAC 5-140-40 A.1 and 2. Further, 9 VAC 5-140-2040 B.1 currently does not use the language from Virginia's $NO_X$ Budget trading program applicability in 9 VAC 5-140-40 A.2, but rather assumes that the table in 9 VAC 5-140-2430 already lists every unit commencing operation before January 1, 2006 and covered by 9 VAC 5-140-40 A.2. Using the table rather than the actual applicability language means that, if it is later determined that a unit that was not listed should have been listed, then that unit is incorrectly excluded from the CAIR $NO_X$ ozone season trading program. For that reason, Virginia should use the actual applicability language from 9 VAC 5-140-40 A.2 (as well as the language from 9 VAC 5-140-40 A.1). EPA is willing to work with Virginia concerning how to include the Virginia $NO_X$ Budget trading program applicability provisions in Virginia's CAIR rule.

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

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.

24. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Permit Requirements; 9 VAC 5-140-2200

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: This provision is inconsistent with the model rule in that the model rule requires CAIR ozone season units to have federally enforceable permits setting forth the CAIR requirements. 9 VAC 5-140-2200 seems to allow opt-in units to have a state operating permit, rather than a title V operating permit or other federally enforceable permit. 9 VAC 5-140-2800 has the same problem.

**RESPONSE**: See response to comment number 4A.

25. **SUBJECT**: $NO_X$ Ozone Season Trading Program: State Trading Budgets; 9 VAC 5-140-2400

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: For clarity, it is recommended that subsection A specify that the "state trading budget" as used in the subsection applies to $NO_X$ ozone season units under 9 VAC 5-140-2040 A (EGUs) and that the "state trading budget" as used in subsection B is the overall or total budget, which also covers $NO_X$ ozone season units under 9 VAC 5-140-2040 B 4 (the non-EGUs from the $NO_X$ SIP Call).

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

26. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Submission of CAIR permit application; 9 VAC 5-140-2410 B.2, C.2, and D.2.

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: The corresponding provisions in the EPA model rule have been removed in the April 28, 2006 rule changes. We recommend removing them here for the reasons explained in the April 28, 2006 final rule and because the provision to use 83% of the allocations of 2013 for the control period of 2014 would implement Phase 2 of the program one year early. We believe that this is not Virginia's intent.

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

27. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Submission of CAIR permit application; 9 VAC 5-140-2410 C.1, 9 VAC 5-140-2420 D.1-4, and 9 VAC 5-140-2530 D

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: There is an inconsistency in these provisions. 9 VAC 5-140-2410 C.1 provides that allocations for new units for the years 2009 – 2013 will be submitted to EPA by July 31, 2009. However, 9 VAC 5-140-2420 D.1-4 seems to provide that units may submit requests each year throughout the period 2009-2013 and that Virginia will act on such requests each year. Further, 9 VAC 5 -140-2530 D provides that EPA record such allocations each year, not just one time. If the timing provisions of 9 VAC 5-140-2410 C.1 are not changed, units that commence operation in 2009 – 2013 will

not be able to receive allowances in any of the years 2009 – 2013. If it is Virginia's intent to allow units to request allowances from the new unit set-aside for each year 2009 – 2013, then the provisions in 9 VAC 5-140-2410 C.1 should be changed to reflect that.

**RESPONSE**: See response to comment number 9.

28. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Timing requirements for $NO_X$ allowance allocations; 9 VAC 5-140-2410

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection A should also require the permitting authority to submit the allocations in accordance with 9 VAC 5-14-2430 for 2009-2013 by October 31, 2006.

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

29. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Timing requirements for $NO_X$ allowance allocations; 9 VAC 5-140-2410

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection B should also apply to allocations under 9 VAC 5-140-2430. This would put all allocations on the same schedule and give Virginia flexibility if, at some time in the future, the state wants to revisit the non-EGU allocations.

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

30. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Seasonal allowance allocations 9 VAC 5-140-2420

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsections C.1. and C.2. The effect of these provisions (combined with the permanent allocations to existing non-EGUs under 9 VAC 5-140-2430) is that once new non-EGUs establish a baseline, their allocations will be drawn from the EGU portion of Virginia's budget. This is acceptable; EPA is mentioning this only to ensure that this is Virginia's intention.

**RESPONSE**: Subdivisions C 1 and C 2 provide the procedures for making allocations for existing EGUs that do have a baseline heat input, not non-EGUs. Existing non-EGUs have been given permanent allocations under 9 VAC 5-140-2430. 9 VAC 5-140-2420 D and E cover the allocation of allowances to both EGUs and non-EGUs that do not have a baseline heat input. These allowances would come from the new source set-aside budget which includes both allowances from the total state budget for EGUs and non-EGUs as provided in the definition of new unit set-aside budget.

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

31. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Seasonal allowance allocations 9 VAC 5-140-2420

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection F. The language is unclear but it seems that non-EGUs allocated allowances under Subsection C (i.e., those not covered by 9 VAC 5-140-2430 but having a baseline under Subsection B) will get prorated allowances from unallocated new source set-aside allowances. It

also seems that the EGU and non-EGU new unit set-asides would be combined for purposes of making the allocations to EGUs and non-EGUs under Subsection F. The language should be clarified.

**RESPONSE**: As of this date, there are no non-EGUs beyond those listed in 9 VAC 5-140-2430; thus subsection C covers only EGUs. Should any non-EGUs surface at a later date, the rule has been restructured to classify them as new non-EGUs and treated as such for purposes of allocation of allowances. The set-asides for both EGUs and non-EGUs are combined; see the definition of "new unit set-aside budget." See response to comment number 30.

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

32. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Seasonal allowance allocations 9 VAC 5-140-2420

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsections D and E. While it seems that Virginia intends in these provisions to have two separate set-asides for each control period, one for EGUs (in 9 VAC 5-140-2040 A) and one for non-EGUs (in 9 VAC 5-140-2040 B), the language is not clear on this point.

**RESPONSE**: As discussed in the response to comments 30 and 31, there is a single set-aside for both EGUs and non-EGUs taken from a portion of their budgets. Subsection D provides for the allocation of the combined set-aside to both EGUs and non-EGUs for the initial years of 2009 – 2013, while subsection E accomplishes the same thing for the years 2014 and thereafter. This differs from EPA procedures because of a requirement in state law (see response to comment number 9) that allowances for the first five years must be allocated as a single unit.

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

33. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Initial Certification and recertification procedures 9 VAC 50-140-2710

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivision D.3.e.(2). The reference to "subdivision (1) a and b" should be to subdivisions 3.a and 3.b of this subdivision.

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

34. **SUBJECT**: $NO_X$ Ozone Season Trading Program: Applicability; 9 VAC 5-140-2800

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection D. Like 9 VAC 5-140-2200, this provision seems to allow opt-in units to have a state operating permit, rather than a title V operating permit or other federally enforceable permit. This is inconsistent with the model rule. This provision is reflected in other provisions of the opt-in sections, e.g., 9 VAC 5-140-2830 B.1.

**RESPONSE**: See response to comment number 4A.

35. **SUBJECT**: $NO_X$ Ozone Season Trading Program: $NO_X$ Allowance allocations to CAIR $NO_X$ Ozone Season opt-in units; 9 VAC 5-140-2880

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subdivisions C.1.c. and C.2.c. EPA is uncertain whether the references to "subdivision a of this subdivision" and "subdivision b of this subdivision" are correctly worded.

**RESPONSE**: The cross-references meet the formatting requirements of the Virginia Registrar of Regulations.

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

36A. **SUBJECT**: $SO_2$ Trading Program: Definitions; 9 VAC 5-140-3020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: In the definition of "CAIR permit," the reference to "federally enforceable written document or portion of such document" is replaced by "title V operating permit or state operating permit." This creates some problems that should be addressed. As discussed in more detail below, this definition, in conjunction with 9 VAC 5-140-3200, results in allowing opt-in units to have a state operating permit rather than a title V operating permit or other federally enforceable permit. That approach is inconsistent with the model rule in that the model rule requires opt-in units to have federally enforceable permits setting forth the opt-in requirements.

**RESPONSE**: Virginia's title V operating permits and state operating permits are federally enforceable, and there is no reason why they cannot be used to meet CAIR permit requirements.

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

36B. **SUBJECT**: $SO_2$ Trading Program: Definitions; 9 VAC 5-140-3020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: The definition of "CAIR permit" creates some confusion because, the definition equates "CAIR permit" and "title V operating permit or state operating permit," other provisions concerning permitting treat the CAIR permit as a part of, not the entire, title V operating permit or state operating permit. See, e.g., 9 VAC 5-140-3200 A and B and 9 VAC 5-140-3230 C.

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

37. **SUBJECT**: $SO_2$ Trading Program: Definitions; 9 VAC 5-140-3020

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Definition of "Monitoring system." The reference to Article 37 should instead be to Article 38.

**RESPONSE**: This correction has been made.

38. **SUBJECT**: $SO_2$ Trading Program: Standard Requirements; 9 VAC 5-140-3060

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection B.2 - The reference to "subsection c" should be to "subsection C."

**RESPONSE**: This correction has been made.

39. **SUBJECT**: $SO_2$ Trading Program: Standard Requirements; 9 VAC 5-140-3060

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection C.4 - This reference should include Article 39 as well.

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

40. **SUBJECT**: $SO_2$ Trading Program: General $SO_2$ trading program permit requirements 9 VAC 5-140-3200

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: This provision is inconsistent with the model rule in that the model rule requires opt-in units to have federally enforceable permits setting forth the opt-in requirements. 9 VAC 5-140-3200 seems to allow opt-in units to have a state operating permit, rather than a title V operating permit or other federally enforceable permit. 9 VAC 5-140-3800 has the same problem.

**RESPONSE**: See response to comment number 4A.

41. **SUBJECT**: $SO_2$ Trading Program: Initial certification and recertification requirements 9 VAC 5-140-3710

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection D.3. EPA is uncertain whether the references to subdivisions of subdivisions are correctly worded. For example, on lines 1 and 5, the second occurrence of the word "subdivision" seems to be more appropriately referred to as "subsection" to be consistent with the nomenclature of the rule. Such references also are used in other sections, e.g., 9 VAC 5-140-3880 C.1.c. and C.2.c.

**RESPONSE**: The cross-references meet the formatting requirements of the Virginia Registrar of Regulations.

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

42. **SUBJECT**: $SO_2$ Trading Program: Recording and Reporting 9 VAC 5-140-3740

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection E.2. The reference to 40 CFR 75.34 A.1 should be corrected to 40 CFR 75.34(a)(1)

**RESPONSE**: This correction has been made.

43. **SUBJECT**: $SO_2$ Trading Program: Applicability 9 VAC 5-140-3800

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection D. Like 9 VAC 5-140-3200, this provision seems to allow opt-in units to have a state operating permit, rather than a title V operating permit or other federally enforceable permit. This is inconsistent with the model rule. This provision is reflected in other provisions of the opt-in sections, e.g., 9 VAC 5-140-3830 B.1.

**RESPONSE**: See response to comment number 4A.

44. **SUBJECT**: $SO_2$ Trading Program: Allowance allocations to CAIR $SO_2$ opt-in permits; 9 VAC 5-140-3880

**COMMENTER**: US EPA Region III, Philadelphia, PA

**TEXT**: Subsection D.1. The reference to "subdivision 1 of this subsection" should be corrected to "subdivision A.1 of this section."

**RESPONSE**: This correction has been made.

## General

45. **SUBJECT**: General Support for the Proposal

**COMMENTER**: Appalachian Power Company and American Electric Power (AEP); Dominion; FPL Energy and Doswell Limited Partnership (DLP); United States Combined Heat and Power Association (USCHPA)

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

Appalachian Power Company and American Electric Power (AEP) are fully supportive of Virginia's approach of using the federal cap and trade program to meet the regional goals of CAIR, structured along the lines of the federal model rule. We believe that the goals of the federal program are managed more cost effectively by such a trading program. The trading program allows the individual members of industry to make economic and risked based decisions to cost effectively manage their operation while meeting the goals of the pollutant reductions of the program.

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

46. **SUBJECT**: Timely Adoption of the Program

**COMMENTER**: FPL Energy and Doswell Limited Partnership (DLP)

**TEXT**: It is important to DLP to be able to fully participate in the multi-state cap and trade programs that will be administered by the EPA to facilitate compliance with CAIR and as such, we urge to the Board to approve, and DEQ to submit, an approvable plan within the time frame mandated by the EPA to avoid the imposition of a FIP.

**RESPONSE**: Every effort is being made to ensure that a program acceptable to EPA is submitted in a timely manner.

47. **SUBJECT**: Timely Adoption of the Program

**COMMENTER**: Dominion

**TEXT**: Dominion actively participated in the CAIR ad hoc advisory group process to advocate the drafting of a DEQ rule that tracks the EPA model rule as closely as possible to assure timely approval by EPA, and meets the requirements of EPA's rule and air quality objectives in a way that minimizes the burden of compliance for affected sources in Virginia by providing as much flexibility and forward certainty as possible.

**RESPONSE**: Support for the process and proposal is appreciated. Every effort is being made to ensure that a program acceptable to EPA is submitted in a timely manner.

## Air Quality Issues

48. **SUBJECT**: NAAQS Compliance, $PM_{2.5}$

**COMMENTER**: National Parks Conservation Association

**TEXT**: CAIR will leave five Virginia areas with $PM_{2.5}$ levels above 12 micrograms per cubic meter ($\mu g/m^3$) by 2010 (Arlington County, Bristol, Richmond, Roanoke and Salem). Bristol will remain above 12 $\mu g/m^3$ in 2015. In 2020, as a result of CAIR, all five of these Virginia communities are projected to have $PM_{2.5}$ levels that are within just ½ to ¼ point below 12 $\mu g/m^3$. Therefore, in order to protect the health of Virginians in these counties, DEQ should prohibit EGUs located therein, or affecting the air quality therein, from using the purchase of ERCs (early reduction credits) to comply with the CAIR limits on $PM_{2.5}$.

**RESPONSE**: EPA issued the final rule for standards for particulate matter on October 17, 2006 (71 FR 61144). The 24-hour $PM_{2.5}$ standard is revised to 35 $\mu g/m^3$. EPA retained the current annual standard at 15 $\mu g/m^3$ (not 12 $ug/m^3$ as suggested by the commenter). Based upon the EPA standard the areas identified by the commenter currently meet the standard and are projected to meet the standard. The Northern Virginia region was included in the nonattainment area for planning purposes—the Virginia localities actually meet the federal standard. The other areas currently are and are projected to remain attainment areas; therefore, restricting trading of any allowances, including ERCs, in attainment areas would be contrary to § 10.1-1328 A of the Code of Virginia which provides specific language pertaining to trading and nonattainment areas.

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

49. **SUBJECT**: NAAQS Compliance, Ozone

**COMMENTER**: National Parks Conservation Association, S. Ziegler

**TEXT** Even under the current ozone standard, relying on CAIR to just barely bring ozone levels under the health threshold, without an adequate margin of safety, is risky. Attainment is by no means guaranteed, even with full implementation of CAIR, and there is a good chance that Virginia areas could fall back into nonattainment. Even after nonattainment areas achieve the ozone and fine particle standards, they will be under a maintenance plan for 20 years, meaning that they will have to diligently keep emissions below the nonattainment level until 2027 for ozone, and until 2035 for fine particles; any slippage and these areas will be put back into nonattainment status. Slippage could be caused by economic growth in the region that creates new emissions, and also, in the case of ozone, simply by several warm summers.

**RESPONSE**: EPA has promulgated the CAIR regulations under Clean Air Act (CAA) § 110(a)(2)(D)(i) which specifically addresses the issue of regional transport. Other sections of the Act address the requirements for addressing specific local nonattainment issues.

The final CAIR rule published on May 12, 2005 (70 FR 25162) is based on extensive air quality analysis and cost analyses:

> EPA projects that $SO_2$ and $NO_X$ emissions reductions from CAIR will bring into attainment 52 of the 79 counties that are otherwise projected to be in nonattainment for $PM_{2.5}$ in 2010, and 57 of the 74 counties that are otherwise projected to be in nonattainment for $PM_{2.5}$ in 2015. The EPA further estimates that the required $NO_X$ emissions reductions would, by themselves, bring into attainment 3 of the 40 counties that are otherwise projected to be in nonattainment for 8-hour ozone in 2010, and 6 of the 22 counties that are projected to be in nonattainment for 8-hour ozone in 2015. (70 FR 25333).

Local attainment SIP planning, local and regional air quality plans, etc., will continue to be revised to ensure that appropriate air quality strategies are being implemented to address local air quality concerns in both nonattainment and maintenance areas.

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

50. **SUBJECT**: NAAQS Compliance, Ozone

**COMMENTER**: Dominion

**TEXT**: Air quality in Virginia is improving, and EPA modeling demonstrates that the implementation of CAIR will assist in achieving attainment of the fine particle and ozone standards in Virginia. In the unanticipated event there remain local areas in Virginia that fail to meet the standards following the implementation of CAIR, the legislature has provided DEQ (through 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, and the proposal contains such measures.

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

51. **SUBJECT**: Voluntary Public Health Set-aside

**COMMENTER**: County of Fairfax, VA, Board of Supervisors

**TEXT**: We commend the establishment of an annual voluntary public health set-aside in this rule with allowances being permanently retired and we strongly support this inclusion.

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

52A. **SUBJECT**: Mandatory Public Health Set-aside

**COMMENTER**: American Lung Association of Virginia; Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council; 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 comment reflecting those concerns has been selected for use in this document.)

In Virginia, power plant pollution causes approximately 1,000 deaths, 23,700 asthma attacks, and 140,600 lost workdays every year. Today, more than 3.0 million Virginians live in communities that fail to meet EPA's minimum air quality standards for protecting human health. Forty-three of Virginia's cities and counties have been designated as having unhealthy levels of fine particulate pollution, ozone, or both. These nonattainment areas stretch from Shenandoah National Park to the Chesapeake Bay, and from Washington, D.C. to the North Carolina line. As stated earlier, EPA noted in its preamble to CAIR that Fairfax and Arlington Counties are expected to fail to reach attainment of the ozone air quality standard by 2010 even if EPA's model CAIR language is adopted.

The Association of Local Air Pollution Control Administrators (ALAPCO) and the State and Territorial Air Pollution Program Administrators (STAPPA) have raised the option of an “Attainment/Public Health Set-aside” that reduces the $NO_X$ emission caps to facilitate attainment of these health-based air quality standards. We believe that Virginia should adopt this approach and retire allowances to reduce the overall $NO_X$ emissions cap under the following two circumstances.

First, entities should be authorized to voluntarily contribute $NO_X$ allowances to the public health set-aside to lower the overall state emissions cap. Many corporations and non-profit organizations may be willing

to purchase $NO_X$ allowances and demonstrate their environmental commitment in this manner. We support the provisions in the proposed $NO_X$ Ozone Season and Annual Trading Program Rules providing for such a voluntary public health set-aside.

Second, if a unit in Virginia ceases operation permanently, then $NO_X$ allowances allocated to that unit should be retired for all time and should be placed in a public health set-aside. In fact, in its modeling related to CAIR, EPA identified several specific units in Virginia that the agency believes will retire early to comply with CAIR and CAMR by 2020. In view of the adverse health effects of continued nonattainment in Virginia, the owners of units that have ceased operation should not be able to reap a windfall by continuing to sell these allowances or use them at other units under their control.

We suggest that the Board consider the merits of setting aside additional allowances in an attainment/public health set-aside. This approach would provide a hedge against the possibility that current and proposed measures will be insufficient to provide health air quality for all Virginians.

**RESPONSE**: Currently, the only area in the state that does not meet the federal standard for ozone is Northern Virginia, which consists of 5 cities and 4 counties. Many localities that were originally designated as nonattainment for the ozone standard have been or are in the process of being redesignated to attainment. With respect to $PM_{2.5}$, the Northern Virginia region was included in the nonattainment area for planning purposes—the Virginia localities actually meet the federal standard. We recognize that ozone nonattainment is a significant problem for the over 2 million persons living as well as working in Northern Virginia. We will continue to work diligently to ensure that it will share in the significant improvements in air quality being enjoyed throughout the remainder of the state.

EPA has stipulated a specific budget for Virginia for both $NO_X$ and $SO_2$ that cannot be exceeded (70 FR 25324, 25325). Section 10.1-1328 A of the Code of Virginia identifies exactly how many allowances shall be allocated to electric generating units (EGUs) under the Virginia CAIR rules. During the first phase of the program (2009-2014) all EGUs in Virginia will be allocated 36,074 tons of $NO_X$ annually, and 15,994 tons during the ozone season. During the second phase (2015 and beyond) all EGUs in Virginia will receive 30,062 tons of $NO_X$ annually, and 13,328 tons of $NO_X$ during an ozone season. The law also stipulates a 5% set-aside for new sources and EERE projects; therefore, to create an annual public health set-aside would be contrary to the provisions of § 10.1-1328 of the Code of Virginia.

As to the issue concerning confiscation of allowances from retired units, full implementation of CAIR will result in significant reductions in emissions that come with significant costs to the sources making those reductions. It should be noted that EPA projections for CAIR full implementation (see 70 FR 25197, May 12, 2005) will result in $SO_2$ emission reductions of 3.5 million tons in 2010 within the CAIR region (28 states and the District of Columbia) and 3.7 million tons in 2015. For $NO_X$, the emissions reductions region wide are projected to be 1.5 million tons in 2010 and 1.8 million tons in 2015.

The demonstrated effectiveness of the $NO_X$ SIP Call and eventually the CAIR program would not be possible but for the flexibility sources have to determine the most cost-effective method to achieve reductions including the trading/selling of allowances. Were the state to confiscate the allowances of units that a source determines are no longer cost-effective to operate, it would be removing the key incentive that has made significant reductions possible through cap and trade programs.

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

52B. **SUBJECT**: Mandatory Public Health Set-aside

**COMMENTER**: Several hundred (230) citizens

**TEXT**: The comments requested that the regulation contain requirements to reduce the overall state emission cap by establishing a public health account where 5% of the emissions are "set aside" for the purpose of improving air quality and public health.

**RESPONSE**: See response to comment number 52A.

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.

## New Source/EERE Set-aside

59. **SUBJECT**: EERE Projects eligible for the entire New Source Set-aside

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council; American Lung Association of Virginia

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

The proposed rule takes a first step by including a small set-aside of $NO_X$ allowances to support EERE projects. However, the size of the EERE set-aside contained in the proposed rule is grossly inadequate. In fact, one or two large wind projects or several large efficiency projects could be expected to exhaust the entire allocation.

The enactment of HB1055 by the General Assembly in the 2006 General Session requires the Board to adopt CAIR regulations containing a combined new source/EERE set-aside of $NO_X$ allowances of 5% of the total number of allowances. Thus, HB1055 requires the Board to allocate approximately 800 allowances to new EERE and new fossil fuel sources under the $NO_X$ Ozone Season Rule for the period 2009 to 2014 and approximately 1800 allowances under the $NO_X$ Annual Rule for 2009 to 2014. Allocations also are required in the period 2015 and thereafter.

The Board should issue regulations that allocate allowances in both the $NO_X$ Ozone Season Rule and the $NO_X$ Annual Rule to spur EERE activities for several reasons. Such action will; (i) facilitate attainment of the air quality standards for ozone and particulate matter throughout the Commonwealth, thereby reducing the adverse health effects experienced by Virginia residents, (ii) encourage pollution prevention activities, (iii) stimulate local job creation and economic growth, (iv) reduce emissions of greenhouse gases, particularly carbon dioxide; and (v) moderate projected increases in electricity rates.

Moreover, reducing air emissions through EERE is consistent with the objectives of the Virginia Energy Plan, enacted by the Virginia General Assembly this year. This legislation included the following among its major objectives; (i) increasing Virginia's reliance on sources of energy that, compared to traditional energy resources, are less polluting of the Commonwealth's air and water, (ii) using energy resources more efficiently, (iii) facilitating conservation, and (iv) recognizing the need to foster those economically developable alternative sources of energy that can be provided at market prices as vital components of a diversified energy portfolio.

We urge you to include such a set-aside for not only the $NO_X$ Ozone Season Rule but also the Annual Rule for the following reasons. First, the language of Title 10.1-1328A.4 of the Virginia Code, as amended in 2006, requires this result. This new provision states that the CAIR rules shall include a 5% set-aside of $NO_X$ allowances during the first five years of the program for new sources, including EERE projects. Thus, the $NO_X$ combined new source/EERE set-aside should not be limited to a single rule -- the Ozone Season Rule. Rather, a combined new source/EERE set-aside should be provided for both $NO_X$ rules.

Second, inclusion of the combined new source/EERE set-aside in the $NO_X$ Annual Rule is good public policy because it will facilitate attainment of the $PM_{2.5}$ standard. Under CAIR, EPA has extended restrictions on $NO_X$ emissions to cover the entire year because many areas of the country, including nine counties and cities in Virginia, have failed to attain the NAAQS for fine particulate matter. By providing a component of the new source set-aside in the $NO_X$ Annual Rule to reward EERE projects and by requiring the retirement of such allowances, Virginia will improve its air quality for this especially harmful pollutant.

**RESPONSE**: The proposal had a value of 36 tons reserved for EERE projects (9 VAC 5-140-2420 G 1). At the time the ad hoc advisory group was convened in 2005, § 10.1-1322.3 of the Code of Virginia provided the pertinent provisions relating to set- asides in effect at that time:

> …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 5% for the first five plan years and two percent per year thereafter, and provide an initial allocation period of five years.

There were discussions in the ad hoc group and concern that, if strictly interpreted, legislative language limited allowances from the set-aside; they could only be used for new EGUs and would not be available for EERE projects. Therefore, the set-aside for EERE projects agreed to by the advisory group was created from surplus allowances from the non-EGU budget (non-EGUs were only included in the seasonal program) and consequently the EERE set-aside was only available for the seasonal program.

§ 10.1-1328 A 4 of the Code of Virginia, effective July 1, 2006, requires that EERE projects be included in the new source set-aside:

> The rules shall include a 5% set-aside of $NO_X$ allowances during the first five years of the program and 2% thereafter for new sources, including renewables and energy efficiency projects …

The scenario for crafting the EERE set-aside from non-EGU allowances is no longer an option given the requirements of § 10.1-1328 A 4 of the Code of Virginia.

The proposal has been modified to establish a set-aside for EERE projects from the new source set-aside and to provide 1% of the total EGU budget for such purpose for both the annual and seasonal programs. Unused allowances will be banked for three years as initially proposed. After three years, there will be more than 900 tons of $NO_X$ allowances for EERE projects in the annual program and almost 400 tons in the seasonal program.

EERE Set Aside Budget
Phase I Annual Program: 1% (361 tons) of the total EGU budget.
Phase II Annual Program: 1% (301 tons) of the total EGU budget.

Phase I Seasonal Program: 1% (160 tons) of the total EGU budget.
Phase II Seasonal Program: 1% (133 tons) of the total EGU budget.

60. **SUBJECT**: EERE Set-aside

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

**TEXT**: The Clean Smokestacks legislation requires a set-aside "for new sources, including renewables and energy efficiency projects." Va. Code § 10.1-1328(A)(4). We support earmarking for EERE projects a guaranteed minimum percentage of at least 1% of the total allowances (at least 20% of the set-aside) for both the $NO_X$ Ozone Season Rule and the $NO_X$ Annual Rule.

**RESPONSE**: See response to comment number 59.

61. **SUBJECT**: EERE Set-aside

**COMMENTER**: Dominion

**TEXT**: HB1055 requires the Board to adopt CAIR regulations that include a new source set-aside for new sources including EERE. The combined set-aside is to comprise 5% of the total state $NO_X$ budget in the initial 5 years of the program and 2% thereafter. During the ad hoc advisory group process, the group reached consensus agreement that a set-aside should be established for EERE to be carved out of the new source set-aside, and that the size of the EERE set-aside would be 1% of the total

budget with the combined size of the new source set-aside and the EERE set-aside at 5% of the total budget during the initial allocation period and 2% thereafter. It was also the intent of the group that these set-asides would be established for both the annual and ozone season programs, which is now required by HB1055.

The current DEQ proposal, while providing for an EERE set-aside of 36 tons as part of the ozone season $NO_X$ program, does not fully comport with the requirements of HB1055. Dominion believes that the consensus recommendation of the advisory group, as described above, would meet the requirements of HB1055 and suggests DEQ modify the proposal accordingly. Allocations for EERE projects should be determined on an output-basis @ 1.5 lb $NO_X$/MWh basis in the 2009-2014 period, and then 1.25 lb $NO_X$/MWh thereafter in accordance with the methodology used for new sources.

**RESPONSE**: See response to comment number 59.

62. **SUBJECT**: New Source Set-Aside

**COMMENTER**: Appalachian Power Company and American Electric Power (AEP)

**TEXT**: A few subdivisions appear to have the new source set-aside of 5% to last through 2014. The phrase in 1420.C.2 and 2420.D.2, beginning "… starting with the control period in 2009 and until the later of the control period 2014 or the first …" may be better stated as "… starting with the control period in 2009 and until the later of the [beginning of the] control period 2014 or the first …"

In another instance in section 1420.E, the language of phrase "… divided by 95% for a control period during 2009 through 2014 and 98% for a control period during 2015 and thereafter, …" may be better stated "… divided by 95% for a control period during 2009 through 2013 and 98% for a control period during 2014 and thereafter, …" Incorporating these suggested changes will follow the Virginia legislative recently enacted § 10.1-1328 in Article 3, Chapter 13 of the Code of Virginia to have the new source set-aside at 5% for five years and 2% for each year thereafter.

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

63. **SUBJECT**: Subsequent 2% EERE/New Source Set-aside

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council;

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

The proposed $NO_X$ rules also provide a grossly inadequate allocation of $NO_X$ allowances for the EERE set-aside for years 2015 and thereafter. The Board is required to modify this allocation to conform to the statutory mandate of HB 1055. This mandate requires a set-aside of 2% of $NO_X$ allowances for new sources, including EERE projects, for 2015 and thereafter. This set-aside would equal 267 allowances for the $NO_X$ Ozone Season Rule and 601 allowances for the $NO_X$ Annual Rule for this period.

**RESPONSE**: Changes have been made to the proposal to ensure that the provisions are not in conflict with § 10.1-1328 of the Code of Virginia. See response to comment number 59.

64. **SUBJECT**: Re-evaluation of the Size of the EERE/New Source Set-aside for 2015 and Beyond

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA

**TEXT**: We have serious concerns about the adequacy of even the larger set-aside mandated by HB 1055 because of the likelihood of increasing use of EERE in the future as the price of fossil fuel increases. However, we have noted the Department's statement in its Town Hall Background Document that it will initiate a review and re-evaluation of the CAIR regulation within four years after its effective date.

We support the concept of a re-evaluation of the EERE set-aside. However, we believe that the timetable delays this re-evaluation too far into the future. This re-evaluation should be completed by the fall of 2009 in order to provide ample time for the reconsideration of the size of the EERE set-aside prior to the time that DEQ specifies its $NO_X$ allocations for 2015 (fall of 2010).

**RESPONSE**: All regulations are required to be reviewed every four years as required by the Governor's Executive Order 36 (2006). As with all the Board's regulations, should there be a need to reopen the regulations for amendments or necessary changes the Board has the authority to do that at any time.

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

65. **SUBJECT**: Allocation of $NO_X$ Allowances to New Sources from the New Source Set-aside

**COMMENTER**: Dominion

**TEXT**: Dominion fully supports the establishment of a set-aside for new sources. We raise the following concerns regarding DEQ's proposed methodology for the distribution of allowances from the set-aside to new sources.

DEQ should clarify that the distribution of allowances to new sources from the new source set-aside will be done on an annual basis. While the sections of both the annual and ozone season $NO_X$ rules appear to indicate such, the sections of the rules describing the timing of $NO_X$ allocations imply that DEQ will allocate allowances from the new source set-aside for the initial 5 years of the program (2009-2013) in October 2009. This would mean that only new sources that are in operation on or before October 2009 would be allocated allowances from the new source set-aside for the initial 5 years of the program, and that new sources that come on line after October 2009 would not have access to allowances from the new source set-aside at any time during the initial 5 years of the program. We do not believe this is the intent of DEQ, and that the proposal should be modified to assure that allowances to new sources are allocated on an annual basis from the inception of the program.

**RESPONSE**: Section 10.1-1322 of the Code of Virginia, in part, states:

> 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**. (Emphasis added.)

This provision, indeed, requires that units that commence operation in 2009 – 2013 will not be able to receive allowances from the new sources set-aside in any of the years 2009 – 2013. The regulation provides for the initial new source set aide allocations to be issued in a five year block; thus, the allocations for the control periods in 2009 – 2013 will be submitted to EPA by October 31, 2009 as provided in 9 VAC 5-140-1410 C. This also means that the amount of residual allowances left in the new source set- aside will be redistributed to existing sources; the same amount for five years.

After that, the allowances will be made annually for each control period as provided in 9 VAC 5-140-1410 D, 9 VAC 5-140-1420 C 1-4, and 9 VAC 5-140-1530 D have been redrafted to clarify this process.

66. **SUBJECT**: Allocation of $NO_X$ Allowances to New Sources from the New Source Set-aside

**COMMENTER**: Dominion

**TEXT**: The methodology DEQ proposes for sources requesting allowances from the new source set-aside under both the annual and the ozone season $NO_X$ programs could result in some sources not having the ability to receive such allowances for emissions generated during their initial year or control period of operation. As proposed, a new source commencing operation in any given year can request to be allocated allowances "starting with the later of the control period in 2009 or the first control period after the control period in which the CAIR $NO_X$ (annual or ozone season) unit commences commercial operation." Thus, a source commencing operation in January 2010, for example, would not be eligible for allowances from the new source set-aside for any emissions it generates during the 2010 annual $NO_X$ control period. Likewise, a unit that commences operation in May 2010 would be ineligible for new source set-aside allowances for both the 2010 annual and ozone season control periods. Under the $NO_X$ allocation provisions established for the $NO_X$ SIP Call, sources were able to apply in advance for allowances from the new source set-aside, which were then distributed on a pro-rata basis with unused allowances returned to the new source set-aside pool. We urge DEQ to consider either using a similar approach established in the SIP Call or to develop a methodology that would allow new sources access to allowances from the new source set-aside during their initial year of commercial operation.

**RESPONSE**: It is the intent of the EPA model CAIR not to provide allowances to new sources in the first year of operation. Pages 25356-25357 of the April 28, 2006 Federal Register notice for the final rule states:

> The Agency believes that it is reasonable to provide a set-aside for allocations to new units and further believes that is reasonable not to provide access to allocations for a new unit during its initial year of operation. The Agency's final methodology provides allocations to new units based on the prior year's emissions until the new unit establishes a baseline and is allocated as an existing unit. The methodology does not provide allowances to a unit in its first year of operations; however, it is straightforward, reasonable to implement, and predictable.

In addition, EPA has stated that the procedure for distributing allowances from the new source set-aside developed under the $NO_X$ SIP Call was found to be too complicated for EPA to implement (see preamble to final CAIR, 70 FR 25281). EPA is responsible for administrating the allowance/banking/trading aspects of the program, including allowances from the new source set-aside. It is prudent to follow the provisions EPA has provided in the model rule.

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

67. **SUBJECT**: Allocation of $NO_X$ Allowances to New Sources from the New Source Set-aside

**COMMENTER**: Dominion

**TEXT**: An additional concern with the proposed new source set-aside allocation methodology is the limitation imposed on the number of allowances a new source can request. As proposed, a new source can request for an amount of allowances "not exceeding the CAIR (annual or ozone season) unit's total tons of $NO_X$ emissions during the control period immediately before such control period." This restriction could particularly disadvantage certain units in their initial years of commercial operation as they ramp up operations, as well as units that come on line late in a control period and would then be limited in their request for allowances to cover emissions for the following year (or control period). Since the methodology as proposed will pro-rate the distribution of allowances from

the new source set-aside anyway, the limitations placed on the amount of allowances a unit can request should be eliminated.

**RESPONSE**: Language addressing allocations from the new source set-aside is derived specifically from the EPA model rule. EPA is responsible for administrating the allowance/banking/trading aspects of the program, including the tracking of allowances from the new source set-aside. It is prudent to follow the provisions EPA has provided in the model rule.

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

## Energy Efficiency and Renewable Energy (EERE)

68. **SUBJECT**: Allocations to EERE Projects

**COMMENTER**: FPL Energy and Doswell Limited Partnership (DLP)

**TEXT**: As a major developer of wind energy projects, FPL Energy is pleased that DEQ has proposed to allocate seasonal $NO_X$ allowances from the new source set-aside to EERE projects. We believe that allocating $NO_X$ allowances to EERE projects encourages investment in new wind projects and recommend that similar provisions be added for the allocation of the annual $NO_X$ allowances. Since wind energy projects do not emit $NO_X$, the owner of the project would not need to surrender any allowances for compliance purposes and could use the proceeds from the sale of the allowances to reduce the development costs of additional wind energy projects.

**RESPONSE**: Of primary concern to many that purchase power from EERE projects is the ability to take credit for that use of non-polluting energy in their air quality plans that are submitted to EPA. (See comment number 70.) To receive air quality credit from EPA the retirement of $NO_X$ allowances is necessary; therefore, there is an EERE set-aside from which $NO_X$ allowances can be used or retired. Changes have been made to the proposal that ensure that there are adequate $NO_X$ allowances available for EERE projects and that provide those allowances may be withheld by the state and retired as a creditable control measures in air quality plans. It should be noted that, under normal market conditions, the more $NO_X$ allowances that are retired for EERE projects, the greater the value of the remaining allowances.

69. **SUBJECT**: EERE projects

**COMMENTER**: County of Fairfax, VA, Board of Supervisors

**TEXT**: We are particularly interested in the important opportunity presented by this rulemaking to encourage EERE actions that can reduce emissions of $NO_X$ precursors to both ground-level ozone and fine particulate matter. In this regard, we support and appreciate the Board's recognition of the need to allocate $NO_X$ allowances to spur EERE measures.

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

70. **SUBJECT**: Need $NO_X$ Emission Reduction Credit for EERE Projects

**COMMENTER**: County of Fairfax, VA, Board of Supervisors

**TEXT**: In recent years, Fairfax County along with other local government entities in Virginia have invested millions of dollars on EERE actions for a variety of reasons, including air quality improvement. For example, in April 2005, Fairfax County executed a two-year contract to purchase 5% of the electricity needs of the County from renewable sources (wind energy) through the purchase of Renewable Energy Credits (RECs). This wind power purchase was the first of its kind in the

Commonwealth. The County was motivated to make this purchase in order to set an example for others in local government and the private sector to take proactive measures to improve air quality in the region.

Additionally, the county has instituted a wide ranging energy efficiency program in over 80 of the county's largest buildings. These investments in energy savings programs translate into a capital investment by the county of over $6 million that are expected to result in long-term savings in operating costs for the county but also, very importantly, help reduce the demand for electricity from county facilities, and thus translate into lower emissions levels from the power plants operating within the region.

The county has made these investments in air quality, even though there is not at the present time a mechanism to receive $NO_X$ emission reduction credit in the region's SIP. Under the Commonwealth's current $NO_X$ emissions trading regulations, state and local governments cannot obtain $NO_X$ emission reduction credit for such actions in their SIPs to meet the federal 8-hour ozone standard or the fine particulate standard. Therefore, it is crucial that the Board take action in the current rulemaking to allocate allowances to reward EERE activities. Guidance issued last year by EPA makes clear that retirement of $NO_X$ allowances is a key component of SIP credit for EERE activities. However, unless the Board pursues an approach that uses the flexibility granted by EPA to allocate allowances to EERE, then no pool of allowances will be available for retirement.

**RESPONSE**: The proposal has been modified to establish an EERE set-aside in both the seasonal and annual $NO_X$ programs. The set-aside in the seasonal program is much larger than was originally proposed. See response to comment number 59.

The annual program and seasonal programs have been changed to clarify that allowances used for a credible control measure will be permanently retired (9 VAC 5-140-1420 G 4 e and 9 VAC 5-140-2420 G 4 e).

71. **SUBJECT**: Definition of Renewable Energy

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council;

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

The proposed $NO_X$ Ozone Season Rule defines a “renewable energy unit” as a non-emitting electric generator that began commercial operation after January 1, 2006 and is powered by (i) wind, solar, ocean thermal, wave, geothermal, or biomass energy; or (ii) landfill gas. This definition should be modified in both $NO_X$ rules to encompass energy derived from tides, as currently included in the renewable energy definition under the Virginia Code (56 VAC 576). In addition, the proposed rule should encompass fuel cells powered by hydrogen generated by a renewable energy source. Tidal and fuel cell energy also should be subject to project aggregation.

In addition, ambiguity in the current definition should be removed. The definition encompasses certain “non-emitting electric generator[s]” that are powered by a variety of sources, including biomass. However, most biomass generators are not zero-emission sources. Rather, biomass generators typically emit $NO_X$ and other pollutants. In view of this fact, if biomass energy is included in the proposed definition, then this definition of renewable energy should be limited by the following caveats to assure that emissions of $NO_X$ and other pollutants are strictly controlled. The biomass energy should be limited to projects that: (i) involve renewable energy from clean plant or animal material; (ii) involve a project (or projects aggregated under a single application) that reduce $NO_X$ emissions by at least one ton, (iii) employ maximum achievable control technology and continuous emission stack monitors for all chemical emissions of concern to human health, either regionally or locally; and (iv) are listed in one of the following categories: anaerobic digestion systems operating on animal or plant wastes; methane gas;

combustion of clean wood, bark or other plant material; or combustion of fuels derived entirely from processing of clean wood, bark, or other plant or animal material, including processing by gasification, pyrolysis, fermentation, distillation, or densification.

The following categories should be excluded from the definition of renewable energy even if they are included in the above biomass categories: (i) material that has been treated or painted or derived from demolition or construction material; (ii) energy derived from municipal, industrial or other multiple source solid waste; and (iii) co-firing of biomass with fossil fuels or solid waste. Many of these restrictions are contained in the definition of "biomass energy" in the proposed rule. However, additional restrictions should be considered.

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

72. **SUBJECT**: Retire EERE Allowances

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council

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

A critical component of the unanimous consensus of the Advisory Group in favor of a combined new source/EERE set-aside was the agreement that allowances awarded to provide incentives for EERE projects would be retired from future use. The environmental and public interest members of the Advisory Group argued that the EERE incentive would be justified if air quality improvements were guaranteed. We believe that this important agreement should be reflected in the final $NO_X$ regulations.

The reason for this recommended approach is twofold: (i) the retirement of allowances effectively reduces the $NO_X$ cap, providing the opportunity for EERE activities to improve air quality; and (ii) the owner or operator of an EERE project can receive a financial reward in the marketplace or increase their market share because of the added air quality value that accrues from the retirement of allowances to certain purchasers, such as municipalities.

The proposed approach furthers the efficient operation of the marketplace. Previously, allowances were only awarded to fossil-fuel generators to reward emission reductions through investments in scrubbers and other end-of-the-pipe pollution controls. This new approach puts pollution prevention, which should be favored, on a level playing field by allowing the potential for $NO_X$ emission reduction credit in a SIP for qualifying EERE projects.

**RESPONSE**: EPA published a document providing information to states concerning SIP credits for EERE projects titled, "Guidance on State Implementation Plan (SIP) Credits for Emission Reductions from Electric-Sector Energy Efficiency and Renewable Energy Measures" (August 2004). The document stated:

> …One acceptable way of achieving additional emission reductions from energy efficiency and renewable energy measures in the presence of a cap and trade program is through the retirement of allowances commensurate to the emissions expected to be reduced by the energy efficiency measures…. (pg. 10).

Changes have been made to the proposal that clarifies that allowances for EERE projects to be used for SIP credits shall be retired. For the annual program, see 9 VAC 5-140-1420 G 4 e and G 7. For the seasonal program see 9 VAC 5-140-2420 G 4 e and G 7.

73. **SUBJECT**: Banking EERE Allowances

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council

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

At the September 29 advisory group meeting, the group reached a consensus that the portion of the allowances reserved for EERE could be banked for a period of up to three years if the allocation was undersubscribed. After that time, residual $NO_X$ allowances would revert to the existing source pool for distribution. We urge the Board to incorporate this approach in both the $NO_X$ Ozone Season and Annual Rules.

**RESPONSE**: The proposal has been changed to include baking provisions (9 VAC 5-140-1420 G 6) in the annual program.

74. **SUBJECT**: Aggregate EERE Projects

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council; Southern Environmental Law Center; Virginia Chapter, Sierra Club; Virginia League of Conservation Voters; Piedmont Environmental Council; FPL Energy and Doswell Limited Partnership (DLP)

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

The proposed $NO_X$ rules do not provide authority for project aggregation under the new source/EERE set-aside. Under the proposed $NO_X$ Ozone Season Rule, the definition of "renewable energy unit" requires a nameplate capacity of greater than 25 MW and does not specifically authorize project aggregation. This size requirement would exclude solar energy projects because most solar projects are in the kilowatt capacity range, and only a few generate even 1 MW. The current definition also would effectively exclude small wind and small efficiency projects. A definition of "renewable energy unit" should be included in both $NO_X$ rules and should be modified in the Ozone Season Rule to allow any individual or aggregated projects of 1 MW or above to qualify for $NO_X$ allowances.

The reports cited elsewhere highlight the importance of allowing an applicant for $NO_X$ allowances to aggregate the emission reduction benefits of a number of smaller projects into a single application for one or more tons of allowance awards. Unless such aggregation is allowed, developers of small projects for efficiency or renewable energy (e.g., solar photovoltaics) will not qualify for allowances, and the value of such pollution prevention investments will not be fully reflected in the marketplace.

DOE and other energy experts have emphasized that the absence of project aggregation authority severely diminishes the incentive value of the set-aside. For example, a review of the existing New Jersey $NO_X$ set-aside revealed that less than one-fifth of the allowances had been allocated since its creation, largely because of the failure of the regulations to provide clear authority for project aggregation. In comparison, regulations implemented by Massachusetts offer model language that authorizes project aggregation and addresses this problem.

To minimize the administrative burden on DEQ, the Virginia regulation should follow the approach of the Massachusetts rule and limit the project aggregation authority to projects totaling some appreciable fraction of a MW of renewable energy generation or savings. The success of the Massachusetts

regulation is highlighted by the fact that it is the only state that has fully utilized the $NO_X$ allowances under its EERE set-aside.

The importance of aggregation is highlighted by the following example. If each school district in a county participates in a financing program to improve energy efficiency, the energy service company (ESCO) financing such investments could aggregate all of the energy savings from the projects undertaken and receive set-aside allowances for the reductions. The school district could assure the retirement of the $NO_X$ allowances for SIP credit purposes by requiring such retirement in its contract with the ESCO. The ESCO could charge a premium for such clean air benefits, thereby encouraging future EERE investments. In the absence of authority for project aggregation, these important environmental and market benefits would not occur.

The project aggregation authority should be extended to not only those who own, lease, operate or control small EERE projects but also to state agencies. Extending such authority to state agencies is essential to allow a state that funds grants for small solar or other EERE projects to aggregate allowances from these small projects and retire them to achieve air emission reductions. A recent DOE report has recommended this approach.

**RESPONSE**: Appropriate changes have been made to the proposal to allow the aggregation of EERE projects. For the annual program see 9 VAC 5-140-1420 G 2. For the seasonal program see 9 VAC 5-140-2420 G 2.

75. **SUBJECT**: Shift EERE Projects to Existing Source Allocation Pool

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council; Southern Environmental Law Center; Virginia Chapter, Sierra Club; Virginia League of Conservation Voters; Piedmont Environmental Council; FPL Energy and Doswell Limited Partnership (DLP)

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

One of the most important details in structuring an effective EERE set-aside is providing a predictable and long-term allocation of allowances. This objective can be facilitated by assuring that the units allocated allowances under the combined new source/EERE set-aside ultimately transition into the core allowance pool for existing sources.

Under both the proposed $NO_X$ Ozone Season and Annual Rules, fossil fuel-fired generating units coming into operation after January 1, 2006 will initially receive allowances under the new source set-aside. However, once these fossil fuel units have established a baseline heat input of five or more calendar years, they will receive an allocation of $NO_X$ allowances under the existing source allocation. In comparison, the proposed rule appears to provide only a one-year allocation to EERE projects.

We urge you to treat both new fossil fuel units and new EERE units similarly under the $NO_X$ Ozone Season and Annual Rules. Both types of units should be transitioned from the new source set-aside to the existing source pool after a period of five years. This approach will help assure that the important objectives of the EERE set-aside will be achieved.

**RESPONSE**: CAIR requires states to "revise their SIPS to include control measures to reduce emissions of sulfur dioxide ($SO_2$) and/or nitrogen oxides $NO_X$" (70 FR 25162). EPA conducted a regulatory impact analysis that estimates the "annual private compliance costs (1999$) of $2.4 billion for 2010 and $3.6 billion for 2015 if all states [subject to the rule] make the required emissions reductions through the power industry" (70 FR 25166). The preamble continues: "Section V, 'Determination of State Emissions Budgets,' describes how EPA determined the state-by-state emissions reductions

requirements and, in the event States elect to control EGUs, the State-by-State EGU emissions budgets" (70 FR 25166).

The tons of $NO_X$ identified in the annual and seasonal budgets identified by EPA are clearly established to pertain to EGUs operating within each state. The model cap and trade rule provided in section VIII of the preamble is done so with the expectation that states electing to derive the emissions reductions prescribed by CAIR from the electric generating industry will participate in the EPA-administered cap and trade program "as a way to reduce the cost of compliance, and to provide compliance flexibility" (70 FR 25165).

The Virginia SIP submittal to EPA will rely on emissions primarily from EGUs to achieve the emissions reductions prescribed by CAIR as stipulated in § 10.1-1328 of the Code of Virginia. The budgets were developed to provide allowances to EGU facilities to operate under the cap and trade program. The establishment of an EERE set-aside, though mandated in § 10.1-1328 as part of the new source set-aside, is not intended to eventually reduce the total amount of allowances provided to the EGUs (as would be the case if the EERE projects were eventually folded into the existing source pool). The EERE set-aside is only a percentage of the total budget for EGUs as stipulated in both paragraph A 1 for the first phase of the program and in paragraph A 3 in the second phase of the program.

If the EERE allocations were to be permanently included into the existing source pool, then the allocations to EGUs stipulated in § 10.1-1328 A 3 could not be met.

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

76. **SUBJECT**: Definition of Qualifying Energy Efficiency Units

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA

**TEXT**: We support the definition of "energy efficiency unit" contained in the proposed $NO_X$ Ozone Season Rule and urge that this definition be extended to the $NO_X$ Annual Rule. The proposed rule defines energy efficiency unit as "an end-use energy efficiency project implemented after January 1, 2006 that reduces electricity consumption according to an energy efficiency verification protocol acceptable to the board." This definition provides additional time for the Board to review potentially applicable energy efficiency verification protocols.

**RESPONSE**: The EERE provisions, along with the definition of "energy efficiency unit," have been made to the $NO_X$ Annual Trading Rule.

77. **SUBJECT**: Quantification and Verification Methodology for the Set-aside

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA

**TEXT**: One of the key issues in implementing an EERE set-aside is the specification of the methodology for calculating energy savings from energy efficiency measures. This methodology is essential to simplify the calculation of energy savings for diverse energy efficiency measures.

We recommend that Virginia consider the 2004 New Jersey Measurement Protocol for Commercial, Industrial and Residential Facilities, supplemented by the November 2005 draft report of the DOE's Mid-Atlantic Clean Energy/Air Quality Integration Pilot Project, as an appropriate quantification and verification protocol. The Mid-Atlantic pilot project was one of four pilot projects in the U.S. coordinated by the DOE and EPA in 2005, and its work reflects the cutting-edge of analysis in this field. Of course, the state CAIR rule should specifically authorize DEQ to periodically update the measurement protocol as new advances are developed in this area and as new technologies are implemented.

The methodology set forth in the NJ Protocol and supplemented by the Mid-Atlantic pilot report allows the applicant and DEQ to award allowances without analyzing information on electricity savings for each piece of equipment. Instead, energy savings are calculated based on the characteristics of the installed technology. This approach greatly simplifies the data tracking and measurement procedures for both the applicant and DEQ. This approach is user-friendly and allows the conversion of energy savings to emission reductions with a relatively small investment of resources.

These recommended procedures do not award allowances for reductions in electricity use and the resultant reductions in $NO_X$ emission reductions that would have occurred under a "business as usual" scenario. In other words, these protocols do not compare the new highly efficient system to the previous system or to the average existing system but rather compare the new efficient system to current standard technology.

We urge DEQ to follow a collaborative approach with its state energy office and utility commission to implement the new EERE set-aside. Such a collaborative approach has been implemented by several states with existing EERE set-asides, including Ohio and New Jersey. We believe that the strong involvement of these energy agencies is appropriate since the energy savings goals of these agencies will directly benefit from the implementation of the $NO_X$ set-aside program, and these agencies have far more experience than DEQ in estimating energy savings.

**RESPONSE**: 9 VAC 5-140-1420 G 1 and 9 VAC 5-140-2420 G 1 authorize an EERE proponent of an energy efficiency unit or renewable energy unit to submit a request to the permitting authority, "in a format acceptable to the permitting authority." Analyzing requests for EERE projects, although being a new activity for DEQ will be, nonetheless, conducted in an efficient manner utilizing expert advice to ensure that the emissions reductions attributed to these projects are appropriate and deadlines established within the regulations are met.

78. **SUBJECT**: Calculation of Avoided Emission Rate

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA; County of Fairfax, VA, Board of Supervisors; Virginia Energy Purchasing Governmental Association; James River Green Building Council

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

The quantification methodology used for converting renewable energy generation or energy efficiency savings into $NO_X$ emission reductions is very important. As EPA has stated in its April 2000 guidance document, the amount of energy savings and generation and the emissions factor are the "fundamental components of a $NO_X$ allocation formula."

Based on the lessons learned in the DOE's Clean Energy/Air Quality pilot project for the Mid-Atlantic Region, the best approach to reducing the regulatory burdens of implementing an EERE set-aside is to define in the CAIR regulation a stipulated avoided emissions rate. According to a group of leading experts on clean energy/air integration, the best measure for establishing this rate is the generation-weighted average of $NO_X$ emissions from fossil fuel-fired plants (coal, oil, and natural gas) on the PJM West electric grid. We support the use in the proposed $NO_X$ Ozone Season Rule of a stipulated avoided emissions rate of 1.5 lb/MWh for 2009 to 2014 and 1.25 lb/MWh for 2015 and thereafter. Although recent studies indicate that the stipulated avoided emissions rate set forth in the proposed rule is conservative, we can support the proposed regulation.

In addition, the DOE pilot project recommends that states consider the following additional approaches to facilitate the implementation of CAIR and the effectiveness of the regulation: (i) providing the state agency authority to approve a higher allocation rate than the stipulated amount upon the presentation of adequate evidence, such as an electric grid system dispatch analysis of fossil-fuel plants; and (ii)

updating the stipulated rate to reflect changes in the fuel mix and control technologies. This updating could be completed at the time of the planned CAIR re-evaluation.

**RESPONSE**: Support for the proposal is appreciated. As previously mentioned, the regulations are reviewed according to the schedule set forth through Executive Order providing sufficient opportunity for timely updates as necessary.

## Allocation Methodology

79. **SUBJECT**: Heat Input/Output Basis for Allocation

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA

**TEXT**: Under CAIR, EPA provided states the option of allocating $NO_X$ emission allowances to sources in proportion to their energy input or in proportion to their energy output. Many energy experts favor the allocation of emission allowances on an energy output basis because this approach rewards units that are more efficient in converting fossil fuel energy into electricity. Regulatory approaches that encourage increased energy efficiency are important for several reasons: (i) units that are more energy efficient emit fewer air pollutants for the same percentage of air pollution control, create less waste heat that can have detrimental effects in a receiving water body, and emit less carbon dioxide, the principal greenhouse gas; (ii) most units that are more energy efficient are generally newer and thus incorporate better air pollution control technology, and (iii) natural gas and distillate fired units that are more energy efficient conserve increasingly scarce fossil fuel resources, and consequently reduce upward price pressures in energy markets.

The ad hoc advisory group recognized the inherent advantages of moving to an output-based allocation system, and a unanimous consensus developed to adopt this approach for all new units coming into the CAIR allocation system. However, the group also recognized that an adequate database did not yet exist to implement an output-based approach for existing units. Therefore, the group agreed that the initial CAIR allocation scheme for these existing units should be input-based.

However, many members of the group advocated the phased transition to an output-based allocation system for the future. Certainly, it will be possible over the next few years to assemble the database required to do so. We recommend that DEQ consider the phased transition to a full output-based when it re-evaluates CAIR.

**RESPONSE**: EPA has determined “that allocating to existing units based on baseline historic heat input data, rather than output data is desirable because accurate protocols currently exist for monitoring this data and reporting it to EPA, and several years of certified data are available for most existing units” (71 FR 25356).

Significant monetary and staff resources would be required to develop appropriate protocols and an accurate database to attempt to issue allowances on an output-based approach and are beyond the capabilities of DEQ at this time.

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

80. **SUBJECT**: Heat Input/Output Basis for Allocation

**COMMENTER**: Dominion

**TEXT**: Per the recommendation of the ad hoc advisory group, the proposal allocates $NO_X$ allowances on a heat input basis for all existing sources (those in operation before January 1, 2006) and on a generation output basis with an appropriate heat input conversion for new sources (per the EPA

model rule). Some group members advocated that this distinction in allocation methodology between existing and new sources should be abandoned in subsequent reallocations and that allocations for all sources be based on generation output. Dominion supports DEQ's decision in the proposed rules to retain the heat input approach for existing sources in subsequent reallocations. Many of these sources will be required to install expensive control equipment to comply with CAIR. The operation of these controls will increase the "parasitic load" used at the facility, which is energy not supplied to the regional electric grid (net output). Since output-based approaches are typically based on net generation output (net megawatt hours), these units for which capital expenditures have been incurred to reduce emissions will be disadvantaged since the increased generation to serve parasitic load requirements will not be included in the baseline used to determine $NO_X$ allocations.

We also note that in the development of the CAIR model rule and in its proposed $NO_X$ allocation methodology under the proposed CAIR FIP, EPA uses heat input for allocating $NO_X$ allowances to existing sources because accurate protocols currently exist for monitoring this data and reporting it to EPA. Protocols to determine allocations based on output would need to be developed and implemented by DEQ. We further note that under the methodology recommended by consensus in the ad hoc advisory group, allocations for the initial year for which an output-based approach would be applied (2015) must be determined by 2009 (6 years in advance) and will be based on baseline data collected over the 5-year period 2004-2008, which would require sources to already have acquired the necessary information based on a protocol that has yet to be developed.

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

81. **SUBJECT**: Heat Input/Output Basis for Allocation

**COMMENTER**: FPL Energy and Doswell Limited Partnership (DLP)

**TEXT**: As currently proposed, allocations are made to new units on an output basis when they are made from the new source set-aside, but on a heat input basis when the allocation to the new source is made from the existing source pool. The use of a heat input based allocation methodology provides a disproportionate allocation of allowances to inefficient EGUs, resulting in fewer allowances allocated to cleaner more efficient EGUs. The use of an output based $NO_X$ allowance allocation method would reward generating efficiency. We recognize that the use of an output based $NO_X$ allowance allocation system has been rejected in the past due to the lack of historic data. Since new and existing sources are treated differently in the proposed rule anyway, DEQ has the opportunity in this rulemaking to make the shift to a truly output based allocation method. Instead of calculating a "converted heat input" for each new source, DEQ should calculate an unadjusted allowance allocation based on actual net output for new sources (1.5 lb/MWh) and heat input for existing sources (0.15 lb/mmBtu). Similar to the existing $NO_X$ SIP Call allocation methodology, the number of allowances would then be adjusted by the ratio of the number of allowances in the budget to the total number of unadjusted allowances. This approach would allow DEQ to gradually migrate to a system that rewards efficiency as older existing units are retired and new units begin to dominate the population of affected units. This approach would also allow allocations to be made to EERE projects that have at least one year of operating data.

**RESPONSE**: See response to comment number 79.

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

82. **SUBJECT**: Output-based standards for Allowance Allocation

**COMMENTER**: United States Combined Heat and Power Association (USCHPA)

**TEXT**: The model rule utilizes "modified" output-based standards for $NO_X$ allowance allocation for cogeneration and distributed generation emissions units that commenced construction after January 1, 2001. USCHPA's position is that the agency's adoption of output-based standards for new

and/or existing emissions units will more equitably award $NO_X$ allocations to sources that efficiently generate power.

Indeed, EPA has recently employed output-based standards in proposed and final rulemakings. For example, EPA's recently finalized new source performance standards for stationary combustion turbines issued output based emissions standards for $NO_X$ and $SO_2$ (Standards of Performance for Stationary Combustion Turbines, 71 FR 38482, July 6, 2006). In a proposed rule for revising new source review applicability for EGUs, EPA explained that output based emissions standards are beneficial from an efficiency and environmental perspective.

We also believe that incorporating output-based emissions test has merit for several reasons. The primary benefit of output-based standards is that they recognize energy efficiency as a form of pollution prevention. Using more efficient technologies reduces fossil fuel use and also reduces the environmental impacts associated with the production and use of fossil fuels. Another benefit is that output-based standards allow sources to use energy efficiency as a part of their emissions control strategy. Energy efficiency as an additional compliance option can lead to reduced compliance costs, as well as lower emissions. We want to encourage use of efficient units that displace less efficient, more polluting units. This approach is especially desirable where EGUs are already subject to market-based systems such as the Acid Rain Program, $NO_X$ SIP Call, and state trading programs implementing CAIR, as those programs increase incentives for using efficient units.

**RESPONSE**: Output-based standards are required for new sources as defined in the proposal.

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

83. **SUBJECT**: Fuel Factors/Fuel Weighting

**COMMENTER**: Debra Jacobson, George Washington University Law School; Environmental Resources Trust; Lowell Smith, Retired Scientist; American Lung Association of VA

**TEXT**: Under CAIR, EPA provided the states the option of assigning $NO_X$ emission allowances to fossil fuel generating sources--coal, oil, and natural gas--in a neutral manner. This approach levels the playing field among fuel sources in gaining access to emission allowances. We strongly support the approach adopted by the Board's proposed $NO_X$ rules to utilize this option and to allocate allowances to units on a fuel neutral basis.

Indeed, it is totally unacceptable for generating units using coal as a fuel source--the fuel that creates the greatest environmental harm--to be rewarded with the greatest share of emission allowances while generating units fueled with natural gas--the fuel causing the least environmental harm--receive a lesser share of $NO_X$ allowances. This system of fuel-biased emission allowances runs counter to the important goals of protecting public health, public welfare and the environment.

In a free market, the regulator should not pick winners and losers. Rather, the regulator should create a level playing field for all technologies, and set its environmental standards to be protective of environmental quality irrespective of the technology that industry might choose to use. As long as coal combustion causes greater global warming, pollutes with more toxic mercury, emits more precursors to the formation of photochemical oxidants (smog), does greater harm to visibility, and greatly acidifies ecosystems, it should not be rewarded with more than its fair share of emission allowances.

We agree with the Board's approach on the proposed rule to adopt a fossil fuel neutral allocation system for all affected units. This approach is fully compatible with the authority provided by EPA in CAIR and serves to promote the public interest.

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

84. **SUBJECT**: Fuel Factors/Fuel Weighting

**COMMENTER**: Appalachian Power Company and American Electric Power (AEP)

**TEXT**: AEP supports the incorporation and use of the fuel adjustment factors specified in the federal rule. The federal model rule recognized the disproportionate impact on solid fuels, relating to the setting up of state budgets. The federal model rule justified a 100% factor for solid fuels, because solid fuel units will bear the brunt of the needed reductions under CAIR and will require more allowances without being unfairly disadvantaged, to the detriment of ratepayers. Thus, the $NO_X$ budget remaining (after making the new unit set-asides) should be allocated using the EPA Model Rule CAIR methodology of historic EGU heat input adjusted for the fuel burned. Use of the fuel factors reflects the inherent differences in emission rates of different fossil fuel-fired units and the burdens for controlling emissions. Since the existing units do not have much flexibility to change fuels, the use of a fuel neutral method of allocating allowances would subsidize units burning non-coal fuels while penalizing existing sources burning coal. EPA proposed use of this method for state allocations to provide equity for coal-generation states. As a state that relies on coal-generation as the foundation for its low energy costs, the Commonwealth should apply this adjusted allocation method as set forth in the model rules. EPA has performed an extensive study encompassing 3-years to develop the fuel factors presented in the model rule. We believe the heat input methodology using the fuel factors is not a disincentive for energy efficiency. Power generators in Virginia have consistently demonstrated that they operate to meet energy demand in a least-cost manner.

**RESPONSE**: The fuel weighting methodology presented in the model rule is cumbersome and would create an increased burden on already limited staff resources. No such option was presented under the $NO_X$ SIP Call – the allocation methodology was of that program proved to be straightforward, reasonable to implement, and predictable. No less should be expected under the CAIR program; therefore it has been determined that adding fuel weighting to the allocation methodology would add an unnecessary complication and administrative burden.

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

85. **SUBJECT**: Fuel Factors/Fuel Weighting

**COMMENTER**: Dominion

**TEXT**: There was disagreement among ad hoc advisory group members as to whether DEQ should adopt the fuel weight-adjusted methodology EPA applies in the CAIR model rule to determine $NO_X$ allocations or should adopt a fuel-neutral approach. EPA's logic for the fuel adjustment to heat inputs is based on historic $NO_X$ emission rates for coal, natural gas and oil-fired units for the years 1998-2002. While we do not disagree with EPA that there are inherently different $NO_X$ emission rates for different fuels, the CAIR reduction requirements are based on $NO_X$ emission rates of 0.15 lb/mmBtu for the initial phase and 0.125 lb/mmBtu thereafter. While it may make some sense to account for the fact that most gas-fired units already operate at levels below those requirements, most uncontrolled oil-fired units do not and will be required to reduce emissions to comply with the rule. We therefore have concern with the EPA approach with respect to its adjustment to oil-fired units. Dominion supports the fuel-neutral approach DEQ has proposed, which is the methodology EPA applied in the $NO_X$ SIP Call and the methodology DEQ currently applies in its $NO_X$ emissions trading rule implementing the seasonal $NO_X$ SIP call requirements under 9 VAC Chapter 140 Part I ($NO_X$ Budget Trading Program).

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

86. **SUBJECT**: Phase II Allocation Period

**COMMENTER**: Appalachian Power Company and American Electric Power (AEP); Dominion

**TEXT**: In several instances, within the annual and the ozone season CAIR $NO_X$ allowance allocation timing sections, the phrase that states: "if the applicable control period is in 2014, the administrator will assume that the allocations equal 83% of the allocations for the control period that immediately precedes the applicable control period and …" Our interpretation of the statement is that the agency will reduce the allotments to 83% of the allowances provided in 2013 for compliance period in 2014. Since the phase II allocations begin in 2015 instead of 2014 in the federal model rule and the recently enacted § 10.1-1328 in Article 3, Chapter 13 of the Code of Virginia, we recommend the date be changed. In all cases, the date of 2014 should be changed to 2015. This includes but is not limited to 1410.B.2, 1410.C.2, 1410.D.2, 2410.B.2, 2410.C.2, 2410.D.2. Failure to incorporate the suggested change effectively results in moving phase II of the annual $NO_X$ CAIR program ahead by 1 year.

**RESPONSE**: See response to comment numbers 8 and 26.

## Early Reduction Credits (ERCs) and Compliance Supplement Pool (CSP)

87A. **SUBJECT**: Achieve Further Reductions in Emissions from Power Plants

**COMMENTER**: American Lung Association of Virginia

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

Provide that Virginia Dominion Power achieves early reductions in $NO_X$ emissions during the 2007 or 2008 annual control periods equal to the total number of allowances in the Virginia CSP established by the EPA in CAIR.

**RESPONSE**: Section 10.1-1328 B of the Code of Virginia mandates:

> To further protect Virginia's environment regarding control of $NO_X$ emissions from electric generating units, the owner of one or more electric generating units that are located within the Commonwealth and whose combined emissions of $NO_X$ from such units exceeded 40,000 tons in 2004 shall achieve an amount of early reductions in $NO_X$ emissions during the 2007 or 2008 annual control periods equal to the total number of allowances in the Virginia compliance supplement pool established by the EPA in the CAIR.

This provision mandates that the owners of early reduction credit (ERC) units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) reduce their emissions in amount that is at least equal to the CSP (i.e., 5,134 tons). Since the ERC units must reduce their emissions by at least the full amount of the CSP, the permitting authority must allocate to them allowances to cover this reduction.

87B. **SUBJECT**: Achieve Further Reductions in Emissions from Power Plants

**COMMENTER**: Several hundred (230) citizens

**TEXT**: The comments requested that the regulation require earlier emission reductions from industry.

**RESPONSE**: See response to comment number 87A.

88. **SUBJECT**: Achieve Further Reductions in Emissions from Power Plants

**COMMENTER**: Dominion

**TEXT**: The rules as currently proposed do not address the requirement for Dominion to reduce $NO_X$ emissions by 5,134 tons in 2007 and/or 2008 that was imposed through the enactment of HB1055 by the General Assembly in 2006, and will need to be modified in some way to address these early reduction requirements. Since the language of HB1055 is specific with respect to the applicability of the early reduction requirements to the annual control period, we believe this requirement must be confined to the $NO_X$ Annual Trading Program and, in accordance to the provisions of HB1055, must specify that the reductions achieved under this provision will be fully eligible for ERCs and allowance allocations provided from the CSP under the ERC provisions of the CAIR annual $NO_X$ program.

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

89. **SUBJECT**: Compliance Supplement Pool

**COMMENTER**: Appalachian Power Company and American Electric Power (AEP)

**TEXT**: The staff recommendations are silent on the process for allocating the CSP envisaged in the federal model rule. AEP recommends that the allowances within the CSP be pre-allocated to eligible sources and then earned via reductions relative to the average $NO_X$ emission rate for the period 2003 through 2005. The pre-allocation of allowances to the existing CAIR sources should be based on the ratio of the unit's baseline heat input (adjusted for fuel as described above) to the state budget total heat input (the same ratio as the allowances for periods 2009 through 2013). The unit must then make reductions in an amount at least equal to the pre-allocated amount and make the necessary request for the supplement pool allowances to receive the allowances. If the unit owners choose not to make early reductions, those allowances are then distributed to those units that exceeded the reductions of their preallocation. Should the supplement pool not be met, then those excess allowances are to be retired.

AEP would like to offer a defined allocation methodology that would allow units to earn allowances from this pool, if they are capable of achieving a 10% reduction in the 2007 and 2008 timeframe.

The pre-allocation of allowances will provide the existing sources assurance that the investment made for early reductions will be rewarded with a given amount of supplement pool allowances. This method will provide a method for units to plan and make reductions that the unit is assured to receive. The current method provides no stability in the planning process nor does it provide any certainty to non-SCR units that ERC allowances could be earned for making tuning adjustments to the unit firing controls and low-$NO_X$ burners or other control methods. Such $NO_X$ improvements represent real reductions and should make a source eligible for ERCs.

**RESPONSE**: Section 10.1-1328 B of the Code of Virginia mandates that the owners of ERC units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) reduce their emissions in amount that is at least equal to the compliance supplement pool (i.e., 5,134 tons). Thus, the ERC units must reduce their emissions by at least the full amount of the CSP and the state must award them allowances to cover this reduction. Achieving a 10% reduction in the 2007 and 2008 timeframe may or may not be sufficient to meet the required objective of 5,134 tons by all ERC units.

Nonetheless, any source desiring ERCs should be required to demonstrate quantifiable and enforceable emissions reductions to be eligible for ERCs. Making adjustments to the unit's firing control, etc., as suggested by the commenter, should be done now to ensure that a unit is operating as cleanly and efficiently as possible. It is inappropriate to wait until after the start of the CAIR program to make such straightforward adjustments and then claim ERCs and the associated economic benefit.

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

90. **SUBJECT**: Compliance Supplement Pool

**COMMENTER**: Dominion

**TEXT**: The proposal is vague in terms of how a source would qualify for earning ERCs. As currently proposed, any source could qualify for ERCs by simply operating less than it does in 2006 without actually reducing its emission rate or installing controls to reduce emissions. Dominion believes that ERCs should be reserved for those that have actually implemented measures and controls to actually reduce emissions. Accordingly, we urge DEQ to consider incorporating the provisions for the issuance of allowances from the CSP for ERCs that EPA has established in its final rule to implement CAIR through a FIP that would establish a 0.25 lb/mmBtu annual average as a threshold below which ERCs could be earned.

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

91. **SUBJECT**: Earning ERCs

**COMMENTER**: Dominion

**TEXT**: Dominion fully supports the concept of ERCs and commends DEQ for including ERC provisions in the rule. These early reduction incentives not only provide companies added compliance flexibility that ease the burden once the requirements take effect, but benefit the environment as well by providing real emission reductions sooner – a win-win situation. However, we recommend that DEQ modify the ERC provisions of its rule as follows.

Under the proposal, allowances from the CSP would be awarded to sources that generate early $NO_X$ reductions during the 2007 and 2008 control periods as well as to sources that demonstrate a need based on an inability to meet the $NO_X$ reduction requirements by 2009. The CSP distribution methodology would pro-rate all such requests providing “equal weight” to requests generated from actual early emission reductions and requests based on a “demonstrated need.” While we do not take issue with provisions that would award CSP allowances to those that demonstrate a need, we believe that DEQ should allocate allowances from the CSP first to units that have actually earned credits through early reductions and therefore incurred operational costs, and then, to the extent there are residual allowances in the CSP, allocate to those units that demonstrate need.

**RESPONSE**: Section 10.1-1328 B of the Code of Virginia mandates that the owners of ERC units (units under single ownership with combined emissions of $NO_X$ that exceeded 40,000 tons in 2004) reduce their emissions in amount that is at least equal to the compliance supplement pool (i.e., 5,134 tons). The federal provisions contain no such mandate. Facilities must generate the early reduction credits (ERCs) only if they want some of the compliance supplement pool (CSP). Under the federal provisions the CSP is allowed to be allocated for early reductions and to avoid an “undue risk to the reliability of electricity." Since the ERC units must reduce their emissions by at least the full amount of the CSP and the state must award them allowances to cover this reduction, there will be nothing left over in case a portion of the CSP is needed by units in order to avoid an “undue risk to the reliability of electricity."

## Incentives for CHP Facilities

92. **SUBJECT**: Set-aside for CHP Projects

**COMMENTER**: United States Combined Heat and Power Association (USCHP)

**TEXT**: Incentives for CHP can also be provided through allowance set-asides. We strongly encourage the establishment of allowance set-asides for CHP projects to promote energy efficiency. Small CHP projects (projects serving generators less than 25 MWe) should also be eligible for

allowance set-asides to facilitate their entry into the marketplace. Collectively, smaller CHP projects, which are often customer-owned, can significantly improve energy efficiency and provide economic benefits. Similar to the output-based standards referenced above, allowance set-asides should foster the development of CHP projects of all sizes that will eventually increase the amount of regional energy produced per unit of fuel consumed.

**RESPONSE**: Section 10.1-1328 A of the Code of Virginia clearly stipulates how many allowances will be allocated to EGU sources and what percentage of the budget shall be reserved for a new source set-aside including EERE projects. Removing any additional allowances for the purpose of a set-aside specifically for CHP facilities would be in violation of the legislation. See response to comment number 52.

93. **SUBJECT**: More Incentives for CHP Facilities

**COMMENTER**: United States Combined Heat and Power Association (USCHPA)

**TEXT**: USCHPA encourages the agency to explore alternatives that provide greater incentives to CHP projects than the model rule. STAPPA/ALAPCO published in August 2005 a document entitled "Alternative $NO_X$ Allowance Allocation Language for the Clean Air Interstate Rule." The STAPPA/ALAPCO document contains several alternative language choices that promote CHP. These alternatives are designed to integrate seamlessly into the model rule. The STAPPA/ALAPCO document can be found at the following weblink: http://www.4cleanair.org/SearchResults.asp.

**RESPONSE**: The proposal has been modified according to recommendations from STAPPA/ALAPCO that provide opportunities to promote clean technologies. The STAPPA/ALAPCO document, “Alternative $NO_X$ Allowance Allocation Language for the Clean Air Interstate Rule,” provided suggested language for states to use if they chose to deviate from the EPA model rule via two options: (i) allocate according to a hybrid approach using both heat input and electrical output or (ii) allocate using strictly electrical output.

The allocation methodology was discussed at length within the ad hoc group and consensus was achieved on several issues. The group agreed that the allocation methodology should be a combination of heat input for existing units and electrical output for new units and that existing CHP facilities should be allocated based on heat input.

The proposal contains the STAPPA/ALAPCO recommended language that uses the same consistent CHP allocation methodology for all technologies and all fuels and is consistent with the allocation approach for non-CHP units. Changes have been made to the proposal to clarify the CHP allocation methodology.

94. **SUBJECT**: Promoting CHP Energy

**COMMENTER**: United States Combined Heat and Power Association (USCHPA)

**TEXT**: Promoting clean energy such as CHP will address critical issues facing this nation. The convergence between efficiency and power generation which CHP technologies provide will beget emissions reductions per unit of energy generated but also address homeland security issues such as energy independence and greenhouse gas reduction. Moreover, support for CHP should spur additional CHP development and lead to even greater emissions reductions and efficient generation. USCHPA supports the agency's efforts to facilitate CHP within its CAIR rulemaking and hope that clean energy will play a prominent role.

**RESPONSE**: The proposal has been modified according to recommendations from STAPPA/ALAPCO that provide opportunities to promote clean technologies.