

TENTATIVE AGENDA
STATE AIR POLLUTION CONTROL BOARD MEETING

FRIDAY, APRIL 24, 2009

HOUSE ROOM C
GENERAL ASSEMBLY BUILDING
9TH & BROAD STREETS
RICHMOND, VIRGINIA

Convene – 9:30 a.m.

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ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE AIR POLLUTION CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For **CASE DECISIONS** (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. In some cases a public hearing is held at the conclusion of the public comment period on a draft permit. In other cases there may be an additional comment period during which a public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented during the public comment period (i.e., those who commented at the public hearing or during the public comment period) up to 3 minutes to exercise their rights to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a **FORMAL HEARING** is being held.

POOLING MINUTES: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cmberndt@deq.virginia.gov.

Consumer and Commercial Products (9 VAC 5 Chapter 45, Rev. J07) - Regulation Development Report and Request to Publish Proposal for Public Comment: The Clean Air Act mandates that states include in their State Implementation Plans (SIPs) certain control measures. If it is determined that these

federally mandated measures will not fill the gap between air quality goals and actual air quality, the SIP must then incorporate additional measures as needed to meet the air quality goals. These additional measures are determined in consultation with locally affected officials, who provide input on control strategy development and associated control measures. In the Northern Virginia area, the pertinent body of locally affected officials is the Metropolitan Washington Air Quality Committee (MWAQC). MWAQC has recommended that Maryland, Virginia, and Washington, D.C., adopt new regulations or amend existing regulations for consumer products in order to achieve the necessary reductions of VOC emissions in the Northern Virginia area. In the Fredericksburg area, the pertinent body of locally affected officials is the George Washington Air Quality Committee (GWAQC). GWAQC has recommended that similar regulations be adopted and amended for the Fredericksburg and Spotsylvania County area as part of the redesignation request and maintenance plan for that area. In the Richmond area, the pertinent body of locally affected officials is the Metropolitan Richmond Air Quality Committee (MRAQC). The recommended measures were also approved by the MRAQC for inclusion in the area's redesignation request and maintenance plan.

The Department is requesting approval of a proposal for public comment that meets federal statutory and regulatory requirements. Approval of the proposal will ensure that the Commonwealth will be able to meet its obligations under the federal Clean Air Act.

This regulatory action incorporates all of the changes proposed by revision D06 (Consumer and Commercial Products). In addition, this action (i) expands applicability of five of the seven new articles proposed in revision D06 into the Richmond VOC Emissions Control Area, (ii) amends Chapter 40, Article 48 to expand the applicability of that article into the Richmond VOC Emissions Control Area, and (iii) adds a temporary exemption for one of the product categories in the new article that controls VOC emissions from adhesives, adhesive primers, sealants and sealant primers. This action also modifies many of the compliance dates proposed in revision D06. All of the proposed revision D06 text is included in this regulatory action to preserve those changes in the event that revision D06 is withdrawn.

To solicit comment from the public on the notice of intended regulatory action, the Department issued a notice that provided for receiving comment during a comment period and at a public meeting. The summary and analysis of public input is in the agency background document. The public participation report containing the raw formal testimony is available upon request.

The notice of intended regulatory action included a statement inviting comment on whether the Department should use an ad hoc advisory group to assist the Department in the development of the proposal. The department did not receive written responses from at least five persons during the associated comment period indicating that the department should use an ad hoc advisory group. Therefore, the department did not use an ad hoc advisory group.

The proposed regulatory action adds a new chapter (9 VAC 5-45) specifically for regulations pertaining to consumer and commercial products and is applicable to specific product types and the owners that are involved in the manufacture, distribution, retail sales and in some cases, the marketing and use of those products. In Part I of the new chapter, special provisions specify the general testing, monitoring, compliance, notification, recordkeeping and reporting requirements that are applicable to all articles in the new chapter and specify certain other sections of the regulations that are not generally applicable. Exceptions to the special provisions are addressed in each individual article of the new chapter.

In Part II of the new Chapter 45:

1. The proposed regulatory action establishes standards for portable fuel containers for products manufactured before and after May 1, 2010, as new Articles 1 and 2 in Chapter 45, respectively, and applies to all of the products subject to the current provisions of Chapter 40, Article 42 (Portable Fuel Container Spillage). Article 1 clarifies some Article 42 exemptions and definitions, adds another exemption category,

removes obsolete standards and their associated administrative requirements, and provides criteria for sell-through of products. Because Article 1 applies to all products manufactured before May 1, 2010, and is designed to replace Chapter 40, Article 42, the compliance schedule proposed for Article 1 is the same as that in Chapter 40, Article 42. Article 2 applies to all portable fuel container products manufactured on or after May 1, 2010, and requires board pre-certification of new portable fuel container products as compliant with new labeling requirements and with new, more stringent design and performance standards. Article 2 also includes applicability to a new category of owner and adds (i) new and revised exemptions, (ii) new certification procedures, (iii) new testing standards, and (iv) alternative compliance provisions for innovative products over those provisions now applicable under Chapter 40, Article 42. The new Article 2 specifies a compliance deadline no later than May 1, 2010. The new articles will apply in the Northern Virginia, Fredericksburg and Richmond Volatile Organic Compound (VOC) Emissions Control Areas. Chapter 40, Article 42 will be repealed at an appropriate time after the standards in the new Articles 1 and 2 are effective.

2. The proposed regulatory action establishes standards for consumer products manufactured before and after May 1, 2010, as a new Articles 3 and 4 in Chapter 45, respectively and applies to all of the products subject to the current provisions of Chapter 40, Article 50 (Consumer Products). Article 3 pertains to consumer products manufactured before May 1, 2010, clarifies some definitions and standards, makes the Alternative Control Plan procedures more flexible, revises labeling, reporting and other administrative requirements, and clarifies sell-through criteria. (Article 3 applies to all products manufactured before May 1, 2010, and is designed to replace Chapter 40, Article 50, therefore the compliance schedule proposed for Article 3 is the same as Chapter 40, Article 50.) Article 4 applies to all consumer products manufactured after May 1, 2010, and includes all of the changes made in Article 3, adds more definitions and standards for some new product categories and establishes new labeling and other administrative requirements. Article 4 specifies a compliance deadline no later than May 1, 2010. The new articles will apply in the Northern Virginia, Fredericksburg and Richmond VOC Emissions Control Areas. Chapter 40, Article 50 will be repealed at an appropriate time after the standards in the new Articles 3 and 4 are effective.

3. The proposed regulatory action establishes standards for architectural and industrial maintenance coatings and incorporates all of the provisions of Chapter 40, Article 49 (Emission Standards for Architectural and Industrial Maintenance Coatings) into a new Article 5 in Chapter 45, with the exception that the new Article 5 removes some obsolete reporting requirements and changes the remaining one to a recordkeeping requirement. The standards and other provisions of the new Article 5 are not substantively changed from what is in Chapter 40, Article 49; therefore, no new compliance dates are proposed for the Northern Virginia and Fredericksburg VOC Emissions Control Areas. The standards and other provisions are being extended into the Richmond VOC Emissions Control Area with a proposed compliance deadline of May 1, 2010. Chapter 40, Article 49 will be repealed at an appropriate time after the new Article 5 standards are effective.

4. The proposed regulatory action will add a new regulation, Article 6 in the new chapter 45 that establishes new emission standards for adhesives and sealants. The provisions of this article apply to owners who sell, supply, offer for sale or manufacture for sale commercial adhesives, sealants, adhesive primers or sealant primers that contain volatile organic compounds within the Northern Virginia and Fredericksburg VOC Emissions Control Areas. The provisions will also apply to owners that use, apply for compensation or solicit the use or application of such products in those areas. Exempted from the regulation is any such product manufactured in the Northern Virginia or Fredericksburg VOC Emissions Control Areas for shipment and use outside of these areas. The provisions of this regulation will not apply to a manufacturer or distributor who sells, supplies, or offers for sale such products that do not comply with the VOC standards as long as the manufacturer or distributor can demonstrate both that the product is intended for shipment and use outside of those areas and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the product is not distributed in those areas. A number of product-specific exemptions are also allowed. VOC content limits are specified for different product categories. Control technology guidelines are offered as an alternate means of achieving compliance with the standards. Test methods, registration

requirements and recordkeeping procedures are provided. This article specifies a compliance deadline of May 1, 2010.

5. The proposed regulatory action establishes standards for asphalt paving operations and incorporates all of the provisions of Chapter 40, Article 39 (Emission Standards for Asphalt Paving Operations) as a new Article 7 in Chapter 45. Applicability provisions in Article 7 apply to owners instead of sources and a new definition of paving operations is added that clarifies the types of operations to which the provisions of the regulation apply. Since the standards and other provisions in this article are not substantively changed, no new compliance date is proposed. Chapter 40, Article 39 will be repealed at an appropriate time after the new Article 7 standards are effective.

6. The proposed regulatory action extends the standards and other provisions for Mobile Equipment Repair and Refinishing Operations (Chapter 40, Article 48) that are currently applicable only in the Northern Virginia and Fredericksburg VOC Emissions Control Areas into the Richmond VOC Emissions Control Area. A compliance deadline of May 1, 2010, is specified for applicability of those standards and other provisions within the Richmond VOC Emissions Control Area.

Permit Actions Before the Board - Request for Board Action on Exempt Final Regulation (Rev. B09): Public participation requirements for permit applications subject to the minor new source review program are found in Article 6 of 9VAC5 Chapter 80 (Permits for Stationary Sources) under 9VAC5-80-1170. Currently, subsection E of this section requires that permit applications for all sources subject to the minor NSR program to meet the public participation requirement of Code § 10.1-1307.01 (Localities particularly affected) that extends public comment for 15 days beyond the date of the public hearing. The public participation requirements of § 10.1-1307.01 are limited to permit applications for major stationary sources and major modifications. The current text of subsection E is contrary to Code § 10.1-1322.01 L (Permits; procedures for public hearings and permits before the board), which states that "[t]he public comment period will remain open for 15 days after the close of the public hearing **if** required by § 10.1-1307.01." (Emphasis ours.) Since permit applications for certain sources subject to the minor NSR program are not subject § 10.1-1307.01, this language is in error, and must be corrected.

The department is requesting approval of draft final regulation amendments that meet state statutory requirements. Approval of the amendments will ensure that the stationary source permit program will be in compliance with the Code of Virginia.

Because the state regulation consists only of changes in style or form or corrections of technical errors, the state regulation is exempt from the standard regulatory process (Article 2 (§ 2.2-4006 et seq.) of the Administrative Process Act) by the provisions of § 2.2-4006 A 3 of the Administrative Process Act. However, notice of the regulation adoption must be forwarded to the Registrar for publication in the Virginia Register 30 days prior to the effective date. The notice of adoption will be published in the Virginia Register subsequently. Further, in adopting the regulation amendments under the provisions of § 2.2-4006, the board is required to state that it will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Notice that the regulation would be considered by the board and that public comment would be accepted at the board meeting in accordance with the board's policy on public comment at board meetings was provided to the public by posting of the board's agenda to the Virginia Regulatory Town Hall and DEQ web site. In addition, email notification was provided to those persons signed up to receive notifications of board meetings through the Town Hall website.

The following is a brief summary of the substantive amendment the department is recommending be made to the regulation: 9VAC5-80-1170 E has been revised to indicate that for permits subject to § 10.1-1307.01,

comments will be accepted by the board for at least 15 days after any hearing, unless the board votes to shorten the period. [9VAC5-80-1170 E, page 2]

Ambient Air Quality Standards (9VAC5-30, Rev. A09) - Request for Board Action on Exempt Final Regulation: On November 12, 2008 (73 FR 66964), EPA issued a regulation revising the lead national ambient air quality standard (NAAQS) by adding a primary and secondary standard of 0.15 micrograms per cubic meter. The standards are met when the maximum arithmetic 3-month mean concentration for a 3-year period is less than or equal to 0.15 micrograms per cubic meter. The new standards became effective on January 12, 2009.

Chapter 30 contains the ambient air quality standards for the specific criteria pollutant standards set out in 40 CFR Part 50. Therefore, this chapter is the action effectively implementing the EPA requirements.

The department is requesting approval of draft final regulation amendments that meet federal statutory and regulatory requirements. Approval of the amendments will ensure that the Commonwealth will be able to meet its obligations under the federal Clean Air Act.

Because the state regulations are necessary to meet the requirements of the federal Clean Air Act and do not differ materially from the pertinent U.S. Environmental Protection Agency (EPA) regulations, the state regulations are exempt from the standard regulatory adoption process (Article 2 (§ 2.2-4006 et seq.) of the Administrative Process Act) by the provisions of § 2.2-4006 A 4 c of the Administrative Process Act. However, notice of the regulation adoption must be forwarded to the Registrar for publication in the Virginia Register 30 days prior to the effective date. Also, the Registrar must agree that the regulations are not materially different from the federal version and are, therefore, exempt from the standard regulatory adoption process and must notify the agency accordingly. This notification and the notice of adoption will be published in the Virginia Register subsequently. Further, in adopting the regulation amendments under the provisions of § 2.2-4006, the board is required to state that it will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Notice that the regulation would be considered by the board and that public comment would be accepted at the board meeting in accordance with the board's policy on public comment at board meetings was provided to the public by posting of the board's agenda to the Virginia Regulatory Town Hall and DEQ web site. In addition, email notification was provided to those persons signed up to receive notifications of board meetings through the Town Hall website.

The following is a brief summary of the substantive amendment the department is recommending be made to the regulation:

1. Appendix Q and Appendix R to 40 CFR Part 50 have been added to the federal documents incorporated by reference list. [9VAC5-20-21 E 1 a (1) (q) and (r), page 3]
2. Specifics relative to the lead standard have been added to the section on reference conditions. [9VAC5-30-15, page 11]
3. The new 0.15 ppm lead standard has been added. [9VAC5-30-80 B and C, page 11]

Northern Virginia Opacity Revision Comments and Recommendation: Comments were received from MWAQC and the City of Alexandria in support of revising the opacity standards from 20% to at least 10%. Comments were received from the Department of the Navy, GPSF Securities Inc, VMA, Dominion, VIPP, Georgia-Pacific, and Mirant in opposition to revising the opacity standards.

Supportive comments generally point to the potential for reductions in emissions; the deleterious nature of fine particulate matter; MD's and DC's more stringent opacity standards; and the need to ensure continued compliance with the PM_{2.5} NAAQS. Opposing comments generally note that PM_{2.5} air quality in the Commonwealth meets the NAAQS for PM_{2.5} and that PM_{2.5} air quality trends show continued improvement in measured concentrations. Several commenters pointed out the expense involved in retrofit, replacement, or upgrades needed to meet a revised standard of 10%.

The Air Division recommends that the petition for regulatory revision not be granted at this time. Reducing the opacity requirements from 20% to 10% would provide emissions benefits and most likely reduce emissions of PM_{2.5} as well as other pollutants such as VOC from at least some emissions units. However, the fact that the Commonwealth already complies with the PM_{2.5} NAAQS, mitigates, to a certain extent, the need for such emission reductions. Also, VDEQ-Air Division has significant budget restraints, and the regulatory process for the petitioned regulatory revision would be quite lengthy and time consuming. At present, using scarce Air Division resources on such a project would not be prudent, considering the challenges imposed by the new ozone NAAQS as well as other CAA mandates. Should more resources be made available to the Air Division in the future, further consideration of this matter may, at that time, be warranted.

Specific Comments

The following paragraphs provide an overview of each commenter's concerns and issues.

- MWAQC
 - (1) MWAQC supports reducing the opacity standards from 20% to 10%.
 - (2) MWAQC develops regional control strategies for the metropolitan Washington, D.C. area. MWAQC takes a regional approach to improving air quality, which in this case means adopting consistent opacity standards between the three states.
 - (3) Opacity is closely linked to particulate emissions, and MWAQC is concerned that 20% is not protective enough of human health.
 - (4) Opacity readings provide a good method for evaluating the effectiveness of emission controls. For evaluating operations where no stack is in place, opacity readings are likely the only method available for evaluating control effectiveness as well as compliance with emission rates. Tightening the opacity standard will reduce emissions, and reducing emissions will help ensure that the region's fine particulate levels stay below the standard.
- City of Alexandria
 - (1) Alexandria strongly supports a reduction in the opacity standards.
 - (2) Opacity is an indicator of PM emissions, especially fine PM emissions from stationary sources. A reduction in the opacity standards to 10% will contribute to reducing PM emissions.
 - (3) VDEQ's current opacity standard was derived from regulations in effect in 1985 and is archaic. In the last two decades, the particulate matter NAAQS has been revised three times. Reducing the opacity standard will contribute towards mitigating the adverse health effects of PM emissions and promote attainment and maintenance of the NAAQS.
 - (4) MD and DC both have significantly more stringent opacity requirements.
 - (5) Data from EPRI and EPA show opacity positively correlates with PM emissions, especially fine particulate matter. A reduction in opacity standards will reduce PM_{2.5} emissions. Data was provided by the commenter.
- Department of the Navy
 - (1) The SAPCB should postpone consideration of a rulemaking until after the final 2006 24-hour PM_{2.5} NAAQS designations are published (December, 2008). The results of the designations should be strongly considered in the decision to go forward with a rulemaking.
 - (2) A rule making lowering the opacity standard should only apply to new and modified sources and only to those air pollutant emission sources resulting in the most effective fine particulate matter reductions.
 - (3) A cost benefit analysis has not been presented. The DOD would have to reprogram millions of dollars toward retrofitting or replacing existing equipment. which seems excessive since VA projects attainment for the PM_{2.5} NAAQS.
- GPSF Securities Inc/GESF Birchwood-GP LLC

- (1) The attainment plan for PM_{2.5} and the ambient monitoring data demonstrate that more stringent opacity limits are not required to attain the NAAQS.
- (2) If the opacity regulations are revised for purposes of consistency, the revised rules should contain all the exemptions provided by the rules being matched. Examples provided note that MD allows differing opacity limitations based on an area's designation. MD also allows a 40% occurrence for 6 minutes during each hour for soot blowing, start up, and cleaning of control equipment, among other listed activities.
- Virginia Manufacturer Association
 - (1) The rule making petition fails to meet the requirements of 9 VAC 5-170-90.C in that it does not state the need and justification for the proposed action, it does not state the impact on the petitioner and other affected people, and it does not contain supporting documents, as applicable.
 - (2) Lowering Virginia's opacity standards would force many of VMA's member companies (and many other companies as well) to needlessly retrofit their facilities with new PM emission controls at exorbitant costs. Many of those companies, particularly in today's economic turmoil, would likely choose to shut down rather than expend the large sums of money required to pay for such a retrofit.
 - (3) It is inappropriate and unnecessary to draw all of Virginia sources into the often rancorous relations between Mirant and the local jurisdictions through MWAQC's opacity petition.
 - (4) Virginians are protected against PM health risks by virtue of the Commonwealth's compliance with the PM_{2.5} NAAQS.
 - (5) There is no direct relationship between opacity and human health. PM is the pollutant of concern for human health and on an area-wide basis, there is no direct quantitative relationship between opacity and PM emissions.
 - (6) Opacity standards vary considerably from state to state. Virginia's standard of 20% is not out of line with other states. In recent rule makings, EPA has affirmed that 20% is a reasonable opacity level, for example see the opacity limitation for MACT requirements on new lime kilns.
 - (7) EPA advocates, in the PM_{2.5} Implementation Rule, the revising of opacity standards to enhance opacity monitoring requirements, not to lower the allowable percent opacity.
 - (8) MWAQC's petition fails to justify the assertion that changing Virginia's opacity standards would improve air quality.
- Dominion
 - (1) The commenter does not believe there is need or justification for lowering Virginia's opacity standard.
 - (2) Air quality in the region is improving, showing a steady decline in annual and 24-hour PM_{2.5} concentrations. Data show statewide compliance with the PM_{2.5} NAAQS, which is set at levels to protect human health. Therefore, air quality in Virginia is at levels considered by EPA to be protective of human health and does not justify the need for modifying the opacity standard.
 - (3) MWAQC provided no evidence linking Virginia opacity standards to PM_{2.5} air quality and health impacts or to support its contention that opacity standards in Virginia are set too high to be sufficiently protective of human health.
 - (4) A correlation between opacity levels and the amount of particulate matter emitted from a stack does not necessarily exist. Changes in opacity are generally used as an indicator of whether particulate matter emission controls are functioning properly. Much of EPA's focus in the Implementation Rule is on revising and improving opacity monitoring methods. EPA's guidance advocates an approach to address particulate emissions more directly through enhanced monitoring techniques rather than the revision of allowable opacity levels.
 - (5) A reduction from 20% to 10% would be particularly difficult to meet for EGU's operating intermittently and infrequently. A reduction in the opacity standard could require expensive pollution control retrofits or the use of alternative fuels. The commenter estimates potential expenditures in the tens of millions of dollars at the Possum Point facility alone. Since air quality levels are already meeting the NAAQS, such expenditures are difficult to justify without a more technically robust demonstration that such measures would provide actual air quality benefits.
 - (6) MWAQC fails to meet the provisions of 9 VAC 5-170-90 C. in the petition.
- Virginia Independent Power Producers, Inc.
 - (1) Opacity standards should not apply to fugitive dust emissions; start up, shut down, and malfunction emissions; and emergency and other typically inactive equipment.

- (2) Opacity limitations should also be considered for mobile sources, which contribute significant amounts of air pollution in the NoVA region. Specifically, mobile source opacity restrictions should be considered for gasoline and diesel engines powering ground based and air borne vehicles.
- (3) VIPP reiterated the comments made by Birchwood.
- Georgia-Pacific LLC
 - (1) GP supports the comments submitted by the VMA.
 - (2) GP owns and operates eight manufacturing facilities in Virginia. All are subject to the existing 20% opacity standard to some degree and would be adversely affected by the proposed reduction in that standard. The requested regulatory change is unnecessary and unjustified, as explained in the VMA comments.
- Mirant Mid-Atlantic, LLC
 - (1) Mirant objects to MWAQC's petition to change VA's opacity standard to 10%. MWAQC's petition is not factually accurate and will not result in improved air quality.
 - (2) MD's regulations have a lower opacity limit (10%) for nonattainment areas but allow significantly more deviations up to 40% for 6 minutes in any hour than do VA's regulations. MD's enforcement policy also provides leniency for opacity exceedances of up to 5% of the operating hours in any given quarter without enforcement action. DC's regulations also provide for exemptions. Therefore, MWAQC's characterization of MD and DC standards being "much stricter" than Virginia's standard is not accurate.
 - (3) EPA has pointed out that secondary particles formed from SO₂, NO_x, VOC's, and NH₃ are the main components of PM_{2.5}, not direct PM_{2.5} emissions. Direct PM_{2.5} emissions make up only a small fraction of monitored PM_{2.5} concentrations. Accordingly, restrictions on opacity miss the mark.
 - (4) PRGS became subject to a state operating permit that includes low PM, PM₁₀, and PM_{2.5} limits. Projects to implement PM reductions for the facility have not been selected. Concurrent impacts of these projects on opacity emissions cannot be determined. Mirant should be exempt from, or have deferred compliance requirements for, any change to the opacity standard. Facilities equipped with installed PM CEMS used for determining compliance with PM standards should be exempt from opacity requirements since the PM CEMS are a better monitor of PM than is the opacity surrogate.
 - (5) Air quality is improving and meets the PM_{2.5} NAAQS across Virginia. Mirant knows of no studies linking opacity to adverse impacts on human health. There is no need for a more stringent opacity standard in Virginia.
 - (6) If Virginia chooses to modify the opacity standard, the modified regulation should include exemptions for transient operations such as soot blowing, load ramping, shutdowns, and control equipment cleaning as well as an exemption for units with PM CEMS. Additionally, opacity regulation changes should be phased in.

Air Division Considerations

Air quality data from PM_{2.5} monitors across the Commonwealth show an improvement in PM_{2.5} air quality over a number of years. Table 1 and Table 2 show design values for monitors across the Commonwealth from 2000 through 2007, the latest available data. Monitors generally show decreasing design values, representing better air quality. All monitors show compliance with the 15.0 ug/m³ annual standard and the 35 ug/m³ 24 hour standard.

Site Name	Site ID #	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007
Arlington	510130020	14.8	14.6	14.5	14.6	14.2	14.1
Charles City	510360002	13.3	12.8	12.3	12.5	12.4	12.3
Chesterfield	510410003	14.2	13.6	13.4	13.6	13.4	13.3
Fairfax Lee Park	510590030	13.9	13.6	13.4	13.6	13.4	13.0
Fairfax Annandale	510591005	13.7	13.4	13.5	13.8	13.6	13.5
Fairfax McLean	510595001	14.5	14.0	13.9	14.1	13.9	13.7
Henrico Math & Science	510870014	13.9	13.7	13.7	13.8	13.6	13.2
Henrico West End	510870015	13.5	12.9	12.8	13.0	12.9	12.9
Loudoun	511071005	13.8	13.6	13.5	13.9	13.6	13.2

Table 3: Annual PM _{2.5} Speciation Data for 110010043 McMillan Site							
Year	PM _{2.5}	Ammonium Ion	Organic Carbon	Nitrate	Elemental Carbon	Sulfate	Others
	ug/m ³	ug/m ³	ug/m ³	ug/m ³	ug/m ³	ug/m ³	ug/m ³
2001	16.88	1.81	5.01	1.49	0.74	5.29	2.55
2002	15.93	1.99	4.79	1.57	0.68	5.38	1.52
2003	14.93	1.92	4.12	1.73	0.72	4.90	1.54
2004	15.11	1.96	3.81	1.84	0.61	5.17	1.73
2005	16.30	2.15	4.34	1.98	0.72	5.35	1.76
2006	14.27	1.65	4.07	1.45	0.66	4.34	2.10
2007	14.62	1.88	3.75	1.55	0.65	4.71	2.07

Table 4: Summertime Speciation Data for 110010043 McMillan Site (May 1 through September 30)							
Year	PM _{2.5}	Ammonium Ion	Organic Carbon	Nitrate	Elemental Carbon	Sulfate	Others
	ug/m ³	ug/m ³	ug/m ³	ug/m ³	ug/m ³	ug/m ³	ug/m ³
2001	18.83	2.11	5.03	0.92	0.66	6.77	3.33
2002	19.04	2.29	5.50	0.86	0.57	7.24	2.58
2003	18.28	2.23	4.65	1.13	0.69	6.89	2.70
2004	16.27	1.99	4.19	1.34	0.64	5.95	2.17
2005	18.47	2.36	4.54	0.90	0.61	7.48	2.58
2006	17.43	1.83	4.65	0.65	0.58	6.08	3.64
2007	17.63	2.04	4.56	0.72	0.53	6.46	3.32

Data in Tables 3 and 4 taken from AQS.

Tables 5 and 6 contain data from modeling runs predicting future concentrations of PM_{2.5}. The data labeled “BOTW+CAIR – 2009” reflects the results of modeling performed to support the attainment plan for the metropolitan Washington, D.C. area. These results do not consider SO₂ emission reductions from EGU’s since CAIR requirements do not become effective until 2010. However, the results labeled “ASIP-2018” do reflect the additional SO₂ reductions expected from the CAIR program. The future year modeling results support the conclusion that air quality will continue to improve.

Table 5: Predicted Future 24 Hour PM _{2.5} Design Values			
Site Name	Site ID	24 Hour PM _{2.5} Projected DV, ug/m ³	
		BOTW+CAIR - 2009	ASIP -2018
Arlington	510130020	29.7	29.5
Charles City	510360002	24.7	23.1
Chesterfield	510410003	25.8	24.9
Fairfax-Lee Park	510590030	27.1	26.9
Fairfax-Annandale	510591005	25.8	26.3
Fairfax-McLean	510595001	25.4	26.1
Henrico-Math & Science	510870014	24.6	24.1
Henrico-PRO	510870015	22.0	22.0
Loudoun	511071005	24.9	25.1
Page	511390004	24.5	24.0
Bristol	515200006	27.6	24.5

Table 5: Predicted Future 24 Hour PM_{2.5} Design Values			
Site Name	Site ID	24 Hour PM _{2.5} Projected DV, ug/m ³	
		BOTW+CAIR - 2009	ASIP -2018
Hampton	516500004	24.3	23.6
Norfolk	517100024	23.4	23.5
Roanoke	517700014	25.5	24.2
Virginia Beach	518100008	24.1	24.2

Table 6: Predicted Future Annual PM_{2.5} Design Values			
Site Name	Site ID	Annual PM _{2.5} Projected DV, ug/m ³	
		BOTW+CAIR-2009	ASIP-2018
Arlington	510130020	11.5	11.2
Charles City	510360002	10.2	9.7
Chesterfield	510410003	10.8	10.5
Fairfax-Lee Park	510590030	10.4	10.1
Fairfax-Annandale	510591005	10.5	10.5
Fairfax-McLean	510595001	10.7	10.8
Henrico-Math & Science	510870014	10.7	10.6
Henrico-PRO	510870015	9.8	9.9
Loudoun	511071005	10.1	10.1
Page	511390004	10.1	9.5
Bristol	515200006	12.0	10.8
Hampton	516500004	10.1	9.6
Norfolk	517100024	10.6	10.2
Roanoke	517700014	11.3	10.5
Virginia Beach	518100008	10.2	9.9

The data in the tables above indicate that PM_{2.5} air quality in Virginia currently meets the PM_{2.5} NAAQS and that PM_{2.5} air quality should continue to improve without a tightening of the opacity requirements.

A review of several Mid-Atlantic states' regulations show that opacity requirements are quite varied. New Jersey's regulations, for instance allow 20% opacity or no visible emissions, depending on boiler size. West Virginia limits most fuel burning operations to no more than 10% opacity, but West Virginia regulations allow exemptions to this standard at the Director's discretion. North Carolina allows 30% opacity for existing units, and a 20% opacity limitation for new units, with exceptions allowed. Table 7 give an overview of Mid-Atlantic states' requirements.

Table 7: Synopsis of Mid-Atlantic States' Opacity Requirements

State	Citation	Applicability	Requirement	Website
DC- DDOE	Chapter 6 Section 600.1	Fuel burning equipment placed into initial operation on or after 01/01/77	No visible emissions except 2 minutes in any 60 minute period not exceeding 40% opacity and an aggregate of 12 minutes in a 24 hour period during start up, cleaning, soot blowing, adjustment of controls, or malfunction.	http://www.ddoe.dc.gov/ddoe/frames.asp?doc=/ddoe/lib/ddoe/information2/air.reg.leg/aqd.rev.ch6.pdf
	Chapter 6 Section 600.2	Fuel burning equipment placed into initial operation before 01/01/77	10% except for 2 minutes in any hour not to exceed 40% and an aggregate of 12 minutes in any 24 hour period other than during start up During startup, not to exceed 40% over 6 minutes for 5 times per startup During shutdown, not to exceed 15% and not to exceed 30% over 3 minutes for 3 times per shutdown.	
WVA- DEP	Title 45 Series 7 (45-7-3.1 and 3.2)	Any process source operation except coke production, blast furnaces, or storage structures	No more than 20% opacity except for no more than 1 episode of 40% opacity for 5 minutes in any 60 minute period.	http://www.wvsos.com/csr/verify.asp?TitleSeries=45-07
	Title 45 Series 7 (45-7-2-3.1, 3.3, 3.4)	Fuel burning equipment	Not greater than 10% opacity based on a 6-minute block average. For soot blowing or cleaning, the Director may approve an alternative limitation, not greater than six 6-minute periods in a day exceeding 30%. The Director may approve an alternative limit from the 10% limitation, not to exceed 20%, based on a series of listed criteria.	http://www.wvsos.com/csr/verify.asp?TitleSeries=45-02
MD- MDE	COMAR 26.11.06.02 C	All sources with the exception of fireplaces, open fires, coke ovens, grain handling, oxygen lances, hot dip galvanizing, food prep, explosives and propellants. construction, and unconfined sources	No visible emissions for Anne Arundel, Baltimore, Carroll, Harford, Howard, Montgomery, and Prince George. 20% opacity for all other counties.	http://www.dsd.state.md.us/comar/26/26.11.06.02.htm (opacity requirements) http://www.dsd.state.md.us/comar/26/26.11.01.03.htm (area delineation)

Table 7: Synopsis of Mid-Atlantic States' Opacity Requirements

State	Citation	Applicability	Requirement	Website
NJ-DEP	Title 7 Chapter 27 Subchapter 3 7:27-3.2	Stationary indirect heat exchangers	<p>No visible emissions for stationary indirect heat exchangers with a rated hourly capacity of less than 200 mmbtu/hr.</p> <p>20% opacity for stationary indirect heat exchangers with a rated hourly capacity at least 200 mmbtu/hr.</p> <p>Both standards have an exception for visible smoke for no more than 3 minutes in any consecutive 30 minute period.</p>	http://www.nj.gov/dep/aqm/rules.html#27 (see subchapter 3)
NC-NCDE NR	15A NCAC 02D.0521	Fuel burning equipment and other process except for asphalt plants, pulp mills, NSPS facilities, BART facilities, NESHAP facilities, MWC's, MWI's, solid waste incinerators, and OSWI's	<p>For source manufactured as of July 1, 1971, opacity shall not be more than 30% averaged over a 6 minute period. 40% opacity may be exceeded if no 6 minute period exceeds 90%, and more than one 6 minute period exceeds 40% in any one hour, and no more than four 6-minute periods exceed 40% in any 24 hour period.</p> <p>For sources manufactured after July 1, 1971, opacity shall not exceed 20% averaged over a 6-minute period. 20% may be exceeded if no 6 minute period exceeds 87%, no more than one 6 minute period exceeds 20% in any hour, and no more than four 6 minute periods exceed 20% in any 24 hour period.</p>	http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environment%20and%20natural%20resources/chapter%2002%20-%20environmental%20management/subchapter%20d/15a%20ncac%2002d%20.0521.html
PA-DEP	Chapter 123.41	Any process except agricultural activities; construction or demolition; grading, paving, or other road maintenance; use of roads; land clearing; material stockpiling, open burning; blasting in pit mines; coke ovens;	<p>Less than 20% for periods aggregating more than 3 minutes in any 1 hour.</p> <p>No more than 60% at any time.</p>	http://www.pacode.com/secure/data/025/chapter123/chap123toc.html (See the Visible Emissions section)
VA-DEQ	9 VAC 5 Chapter 40 Article 8 (9 VAC 5-40-940)	Fuel burning equipment existing source requirement	No more than 20% opacity, except for 1 six-minute period in any one hour of not more than 60% opacity.	http://www.deq.virginia.gov/air/regulations/air40.html (See fuel burning equipment section)

Table 7: Synopsis of Mid-Atlantic States' Opacity Requirements

State	Citation	Applicability	Requirement	Website
	9 VAC 5 Chapter 40 Article 1 (9 VAC 5-40-80)	General requirements for existing sources	Visible emissions must be less than or equal to 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity.	http://www.deq.virginia.gov/air/regulations/air40.html (See Article 1)
	9 VAC 5 Chapter 50 Article 1 (9 VAC 5-50-80)	Anything not subject to the existing source regulations, NESHAPS, or NSPS.	No more than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity.	http://www.deq.virginia.gov/air/regulations/air50.html (See Part II, Article 1)

As several commenters mention, the potential exists that air pollution control equipment would either need to be installed or upgraded so that units could meet a tighter opacity standard. Such control installation and/or upgrade would reduce emissions, potentially for PM_{2.5} and for other types of pollutants such as VOC. However, opacity as a surrogate measurement of emissions and an indicator of control equipment operations presents challenges in quantifying such emission reductions. Emission reductions would be highly specific to each unit operations, making blanket assumptions against inventory data on SCC level data or SIC level data highly inaccurate. Known data and commenters' assertions that equipment retrofit and upgrade would be required for compliance with a lower opacity standard support the qualitative assertion that emission reductions would result from a lower opacity standard. Quantifying these emissions reductions, however, would be highly resource intensive and may not provide reliable estimates. Calculating cost effectiveness of a regulatory revision to change opacity limitations from 20% to 10% would be equally challenging without good estimates of potential emission reductions.

Another consideration is current resource constraints. Such a regulatory revision would be processed via the "long" regulatory process, necessitating the formation of an ad hoc committee to draft the regulation and multiple reviews of the draft regulation by Department of Planning and Budget, the Governor's office, and other state agencies. Such a process is expected to be quite contentious and 36 months may be a conservative estimate for the time needed to implement such a rule. Undoubtedly a significant amount of a regulatory analyst's time would be needed during the 36 months period. In December, 2008, the Air Division will have three analysts, for which a prodigious amount of mandated work exists, including, but not limited to, a revision of the minor new source review regulation, biofuel general permit development, CTG development and promulgation, and I&M regulatory updates. Additionally, these staff will also have to process any changes that result from the CAIR and CAMR vacatur.

Agency Recommendation

Based on the information and analysis provided in this memo, **the Air Division recommends that the petition for regulatory revision not be granted at this time.** In summary, the reasons for this recommendation are as follows:

- Fine particulate matter air quality has improved in VA as a result of other, highly effective control programs to the point where all monitors are currently in compliance with both the annual and daily standards. This improvement is expected to continue in the future. Therefore, a definitive air quality need justifying a more stringent opacity standard does not exist at this time.
- It would be quite difficult and time consuming to quantify the air quality benefit and cost effectiveness of tightening the opacity standard.
- The regulatory process for such an action would likely be a long and contentious process.
- Limited agency resources could be better utilized in advancing other, more beneficial air quality improvement programs.

If and when new information on the benefits of this action and more resources become available, this decision could be revisited in the future.

High Priority Violators (Hpv's) For The First Quarter, 2009

NOV's Issued from October through December 2008.

DEQ Region	Facility	Brief Description	Status
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<p>PRO</p>	<p>Waverly Particle Board Co, LLC</p> <p>Waverly, Virginia Sussex County</p> <p>Registration No. 50169</p>	<p>Discovery date – 10/1/08</p> <p>Alleged violations: Waverly Particleboard has not completed installation or testing of the Air Pollution Control Equipment as of October 1, 2008 and therefore has not met the requirements of the Plywood CWP MACT (40 CFR 63, Subpart DDDD).</p>	<p>NOV -Issued 10/22/08 CO -Executed 02/09/09 Civil Penalty - No Penalty</p> <p>Compliance Milestones: <i>Status reports are due to DEQ on 2/1/09, 5/1/09, 7/1/09, 11/1/09, 2/1/10, and 5/10/10.</i></p> <p><i>By 5/10/10, the facility shall comply with the PCWP MACT.</i></p> <p><i>By 11/5/10, the facility will have completed compliance testing.</i></p> <p><i>Final compliance will be determined after test results are submitted to DEQ for review.</i></p>
<p>TRO</p>	<p>ATC Panels Inc., - Aconcagua Timber Corp Franklin Particle Board Plant</p> <p>Franklin, Virginia Isle of Wight County</p> <p>Registration No. 60171</p>	<p>Discovery date – 10/1/08</p> <p>Alleged violations: ATC Panel Inc., has not completed installation or testing of the Air Pollution Control Equipment as of October 1, 2008 and therefore has not met the requirements of the Plywood CWP MACT (40 CFR 63, Subpart DDDD).</p>	<p>NOV -Issued 10/2/08 CO -Executed 10/2/08 Civil Penalty - No Penalty</p> <p>Compliance Milestones: Status reports received: 11/1/08 and 12/31/08.</p> <p><i>Status reports are due to DEQ on 1/1/09, 4/1/09, 7/1/09, 10/1/09, 1/1/10, and 4/1/10.</i></p> <p><i>By 3/31/10, the facility shall comply with the PCWP MACT.</i></p> <p><i>By 9/27/10, the facility will have completed compliance testing.</i></p> <p><i>Final compliance will be determined after test results are submitted to DEQ for review.</i></p>

CO's Issued from October through December 2008.

<p>SWRO</p>	<p>Consolidation Coal Co. – Buchanan Mine #1STP</p> <p>Mavisdale, Virginia Buchanan County</p> <p>Registration No. 10945</p>	<p>Discovery date - 4/23/08 - 7/22/08</p> <p>Alleged violations:</p> <p>1. The facility allegedly failed to perform the permit Visual Emission Observations requirements.</p> <p>Alleged violation for 2nd NOV:</p> <p>2. The Venturi scrubber water supply pressure was below the value required by the permit. Subsequent data indicated that the violation had been on going for several months. Additionally, the operators failed to document and report the excursion.</p>	<p>NOV - Issued 6/6/08 2nd NOV - Issued 8/13/08 CO - Executed 10/31/08</p> <p>Civil Penalty – Paid on 11/24/08 (\$9,581.00)</p> <p>Case Closure Date – 1/18/09</p> <p>Additional Information: 10/14/08 – DEQ observed stack test for PM, NOx, VOC, CO, and VEE. 12/31/08 – DEQ Review of Stack Test results - The facility demonstrated compliance.</p>
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CO's In Development – Previously Reported NOV's

<p>TRO</p>	<p>US Navy - Norfolk Naval Shipyard</p> <p>Portsmouth, Virginia Portsmouth City</p> <p>Registration No. 60326</p>	<p>Discovery date - 4/3/08</p> <p>Alleged violations: The violations involve incorrect Volatile Organic Compounds calculations and record keeping as required by the National Emission Standards for Shipbuilding and Ship Repair (MACT Subpart II).</p>	<p>NOV - Issued 6/30/08 CO - <i>In Development</i></p> <p>Additional Information: 9/29/09 – DEQ reviewed the corrected emission calculations and records.</p>
<p>PRO</p>	<p>Kaiser Aluminum Fabricated Products LLC</p> <p>Richmond, Virginia Chesterfield County</p> <p>Registration No. 50249</p>	<p>Discovery date - 6/12/08</p> <p>Alleged violations: The facility failed to submit the annual Title V certification.</p> <p>Facility was unable to have records available from July through December 2007</p>	<p>NOV - Issued 6/20/08 CO - <i>In Development</i></p> <p>Additional Information: 07/28/08 - DEQ reviewed follow-up records.</p>

VRO	O-N Minerals Chemstone Co. – Strasburg Strasburg, Virginia Shenandoah County Registration No. 80252	Discovery date – 5/19/08 Alleged violations: SO2 values from testing the Rotary Kiln (conducted on 10/30/07) were 66.1 lbs/hr. That emissions rate corresponds to a PTE of 289.5 tons/yr and is above PSD significance levels. The facility does not have a PSD permit.	NOV -Issued 6/3/08 EPA NOV - Issued 7/29/08 CO - <i>In Development</i> Additional Information: 8/21/08 – The facility conducted a second test on the rotary kiln. 9/24/08 - EPA met with the facility to discuss the NOV. 10/31/08 review of stack test report. Facility is in compliance.
TRO	Hampton University Hampton, Virginia Hampton City Registration No. 60106	Discovery date - 12/6/07 - 11/19/08 - 12/29/08 Alleged violations: 1st NOV- During Visible Emission Evaluations DEQ staff noted Opacity values that exceeded the 20 % opacity limit on Stack 1.	NOV - Issued 1/28/08 CO - <i>In Development</i> Additional Information: DEQ is negotiating with the facility. Stack Test Protocol was received 11/13/08 modifications were made to the protocol and the facility will be testing on March 9, 2009.

Hopewell Monitoring Study – Report available on line at: http://www.deq.virginia.gov/air/Air_report

2008 Ozone Standard Designation Recommendations available on line at: <http://www.deq.virginia.gov/air/emissions/ozone08.html>