

TENTATIVE AGENDA
STATE AIR POLLUTION CONTROL BOARD MEETING

FRIDAY, JUNE 19, 2015
HOUSE ROOM C
GENERAL ASSEMBLY BUILDING
9TH & BROAD STREETS

Convene – 10:30 a.m.

- I. Review and Approve Agenda**
- II. Minutes** (December 8, 2014)
- III. Regulations - Final Exempt**
 - Control of Motor Vehicle Emissions in the Northern Virginia Area (9VAC5-91, Rev. MP) Major
 - Federal Documents Incorporated by Reference, Wood Heaters (9VAC5-50, Rev. A15) Sabasteanski
- IV. Regulations - Final**
 - VOC Emissions Standards, Miscellaneous (9VAC5-40, Rev. D09) Sabasteanski
 - VOC Emissions Standards, Miscellaneous Metal and Plastic Parts Coating Operations (9VAC5-40, Rev. E09) Major
 - VOC Emissions Standards, Printing (9VAC5-40, Rev. C09) Graham
- V. High Priority Violators Report** Nicholas
- VI. Public Forum**
- VII. Other Business**
 - Air Division Director's Report Dowd
 - Future Meetings (September 11 and December 4)

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 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: cindy.berndt@deq.virginia.gov.

Control of Motor Vehicle Emissions in the Northern Virginia Area (9VAC5 Chapter 91, Rev. MP) - Request for Board Action: Two changes are being made to the Regulation for the Control of Motor Vehicle Emissions in the Northern Virginia Area. The first concerns the exemption for autocycles, as required under Chapter 95 of the 2015 Acts of the Assembly. The second concerns legislation passed in 2006, specifically Chapter 729 of the 2006 Acts of the Assembly. That legislation provided for amendments to §§ 46.2-1177 and 46.2-1180 B which would change the length of a valid enhanced emissions inspection from two to four years for vehicles titled for the first time. However, there was a stipulation in Enactment Clause 2 of Chapter 729 that stated:

"2. That the provisions of the act shall become effective upon approval by the Environmental Protection Agency of Virginia's State Implementation Plan for areas of the Commonwealth covered by the vehicle emissions inspection program established pursuant to Article 22 (§ 46.2-1176 et seq.) of Chapter 10 of Title 46.2 of the Code of Virginia, that does not include credit for emissions reductions achieved from testing motor vehicles that are less than four years of age."

The SIP was submitted June 12, 2007 and EPA's action was published on April 10, 2015. In light of the EPA action, the 4 year exemption for a vehicle titled for the first time is now required to be included in the regulation.

Under the provisions of § 2.2-4006 A 4 a of the Administrative Process Act, it is requested that the Board adopt the amendments as final regulations because they are necessary to conform to Virginia statutory law where no agency discretion is involved.

The Department is requesting approval of draft final regulation amendments that meet state and federal statutory and regulatory requirements. Approval of the amendments will ensure that the Board's regulations are consistent with the Code of Virginia while enabling the Commonwealth to meet its obligations under the federal Clean Air Act.

Below is a brief summary of the substantive changes the Department is recommending be made.

1. Modify definition of "Affected motor vehicle" to exclude any autocycle unless such autocycle has been emissions certified with an on-board diagnostic system by the U.S. Environmental Protection Agency.
2. Modify definition of "Affected motor vehicle" to exclude any vehicle that is manufactured for the current model year or any of the three immediately preceding model years unless identified by the remote sensing program as violating the emissions standards established for that program.
3. Modify 9VAC5-91-30 D so that vehicles titled for the first time shall be considered to have an enhanced emissions inspection valid for four years and clarify that a vehicle manufactured for the current model year or any of the three immediately preceding model years shall be considered to have a valid emissions inspection unless identified by the remote sensing program as violating the emissions standards established for that program.

Federal Documents Incorporated by Reference, Wood Heaters (Rev. A15) - Request for Board Action on Exempt Final Regulation: The purpose of the proposed action is to amend the regulation for federal New Source Performance Standards (NSPS), Rule 5-5 of the board's regulations.

Chapter 471 of the 2015 Acts of Assembly amends §§ 10.1-1300 and 10.1-1307 of the Code of Virginia to prohibit the State Air Pollution Control Board from adopting regulations that limit emissions from certain smaller wood heaters. The bill also prohibits the board from enforcing any federal regulation limiting emissions from wood heaters that was adopted after May 1, 2014. Subparts AAA and QQQQ of 40 CFR Part 60, which regulate NSPSs for wood heaters, are referenced in Rule 5-5. Although the board has entered into a delegation agreement to adopt NSPSs by reference in order to implement them at the state level, this is at the state's discretion, and the General Assembly has opted to leave implementation of Subparts AAA and QQQQ at the federal level. The board therefore needs to amend Rule 5-5 in order to indicate that the wood heater regulations of 40 CFR Part 60 will be implemented by EPA and not the board.

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

Below is a brief summary of the substantive changes the Department is recommending be made:

1. Under 9VAC5-50-400, the date of the Code of Federal Regulations book being incorporated by reference is being updated to the latest version. [page 1]
2. Under 9VAC5-50-410, the listings for Subpart AAA, Standards of Performance for New Residential Wood Heaters (40 CFR 60.530 through 40 CFR 60.539b), and Subpart QQQQ, New Residential Hydronic Heaters and Forced-Air Furnaces (40 CFR 60.5472 through 40 CFR 60.5483) are amended to indicate that authority to enforce the standards is being retained by EPA. [pages 13 and 20]
3. New reserved sections have been added in order to accommodate future amendments. [pages 20-21]

VOC Emission Standards, Miscellaneous (9VAC5 Chapter 40, Rev. D09) - Public Participation Report and Request for Board Action: Section 172(c)(1) of the federal Clean Air Act provides that state implementation plans (SIPs) for nonattainment areas must include reasonably available control techniques (RACT) for sources of emissions. Section 182(b)(2) provides that states must revise their SIPs to include RACT for sources of VOC emissions covered by a control techniques guidelines document (CTG) issued after November 15, 1990 and prior to the area's date of attainment. Section 183(e) directs the U.S. Environmental Protection Agency (EPA) to list for regulation those categories of products that account for at least 80% of the VOC emissions from commercial products in ozone nonattainment areas. RACT controls for listed source categories controlled by a CTG are known as CTG RACTs. CTG RACTs have been issued for industrial solvent cleaning operations (October 5, 2006, 71 FR 58745) and miscellaneous industrial adhesive application processes (July 14, 2008, 73 FR 40230). Therefore, states with moderate ozone nonattainment areas must implement these CTG RACTs as part of their attainment SIPs. These requirements therefore apply to sources within the Northern Virginia volatile organic compound (VOC) emissions control area (counties of Arlington, Fairfax, Loudoun, Prince William, Stafford; cities of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park).

The regulations developed in order to implement the CTGs require owners to limit emissions of air pollution from industrial solvent cleaning operations (Article 57), and miscellaneous industrial adhesive application processes (Article 58). They establish standards, control techniques, and provisions for determining compliance. The regulations also include provisions for visible emissions, fugitive dust, odor, toxic

pollutants, compliance, test methods and procedures, monitoring, notification, registration, malfunctions, and permits.

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

SUMMARY OF PROPOSED AMENDMENTS: For each new article:

1. An applicability section is established which specifies the affected source population.
2. Definitions of terms used in the rule are provided.
3. A standard for VOC emissions is established, along with provisions for achieving the standard.
4. Standard provisions are provided for visible emissions; fugitive dust/emissions; odor; toxic pollutants; compliance; a compliance schedule; test methods and procedures; monitoring; notification, records and reporting; registration; facility and control equipment maintenance or malfunction; and permits.

SUMMARY OF CHANGES TO PROPOSAL: Based on comments received during the public comment period, a number of amendments, primarily exemptions, were made to the proposal in order to make the regulations operate more efficiently.

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

1. SUBJECT: Malfunctions.

COMMENTER: U.S. Environmental Protection Agency (EPA)

TEXT: These regulations contain the provision "Facility and control equipment maintenance or malfunction," which incorporates by reference the provisions of 9VAC5-20-180. This regulation contains Virginia's affirmative defense for malfunction (subsection G). EPA cannot approve any State Implementation Plan (SIP) revisions containing 9VAC5-20-180 G as presently written.

By notice published on February 22, 2013 (78 FR 12459), EPA proposed to take action on a petition for rulemaking that the Sierra Club filed with the EPA Administrator on June 30, 2011. In that proposal notice, we described and proposed the EPA's response to the petition concerning the treatment of excess emissions from sources during periods of startup/shutdown/malfunction (SSM) in SIPs. EPA proposed to find these provisions are substantially inadequate because they are not consistent with fundamental legal requirements of the Clean Air Act, and EPA proposed to issue a SIP call to each affected state for these specific provisions. In the February 2013 proposal notice, EPA included Virginia's 9VAC5-20-180 G.

Subsequent to EPA's issuance of the February 2013 proposal, a federal court ruled that §§ 113 and 304 of the Act preclude EPA authority to create affirmative defense provisions in EPA's own regulations imposing

emission limits on sources, because such provisions purport to alter the jurisdiction of federal courts to assess liability and impose penalties for violations of those limits in private civil enforcement cases. See *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir.2014).

EPA believes that the reasoning of the United States Court of Appeals for the District of Columbia Circuit in *NRDC v. EPA* indicates that the states, like EPA, have no authority in SIP provisions to alter the jurisdiction of federal courts to assess penalties for violations of Act requirements through affirmative defense provisions. If states lack authority under the Act to alter the jurisdiction of the federal courts through affirmative defense provisions in SIPs, then the EPA lacks authority to approve any such provision in a SIP.

Therefore, in a supplemental proposed rulemaking (SNPR) on states' affirmative defense provisions for malfunctions in SIPs, we supplemented and revised what we had earlier proposed as our response to the Petitioner's requests in our February 2013 rulemaking, but only to the extent the requests narrowly concern affirmative defense provisions in SIPs. See 79 FR 55920 (September 17, 2014). This SNPR also identified Virginia's 9VAC5-20-180 G among other states' regulations. In the SNPR, EPA proposed to find that these provisions for affirmative defenses are substantially inadequate because they are not consistent with fundamental legal requirements of the Act, and EPA proposed to issue a SIP call to each affected state, including Virginia, for these specific provisions. EPA is addressing state regulations which contain provisions related to exemptions or affirmative defenses in this separate rulemaking. See 78 FR 12460 and 79 FR 55920. In the meantime, EPA encourages any state having deficient SSM provisions to take steps to correct them as soon as possible.

RESPONSE: In EPA's September 17, 2014 (79 FR 55920) supplemental proposal, EPA reiterated that 9VAC5-20-180 G is substantially inadequate to meet Act requirements and is thus proposing to issue a SIP call with respect to this provision. It is anticipated that this proposal will become final in May 2015; states will have 18 months after that date to submit a corrected SIP.

Virginia's current series of CTG rules for the control of VOC (Revisions C09, D09 and E09) were approved by the Governor to be issued for public comment on December 10, 2014. This started a mandatory Administrative Process Act (APA) clock for the remainder of the regulatory process. In order to meet the APA schedule (as well as fulfill the state's federal obligation to promulgate these regulations), the regulations will be adopted as final by the State Air Pollution Control Board at the June 2015 meeting.

Because the final SIP call malfunction rule was signed on May 22, 2015, the department will not have time to modify the malfunction rules in time such that reference to them in the CTG rules is not an issue. Therefore, the affected malfunction provisions of the CTG rules will simply not be submitted as part of the initial SIP revision for those rules. This will enable EPA to approve the remainder of the CTG rules into the SIP in a timely and administratively rational manner. When the final malfunction rule is published and the department is able to amend the malfunction regulations accordingly, the outstanding CTG provisions will be submitted as part of the SIP at the same time.

No change has been made to the proposal as a result of this comment.

2. SUBJECT: State-only provisions.

COMMENTER: U.S. EPA

TEXT: These regulations contain the provisions entitled "Standard for odor" and "Standard for toxic pollutants," which incorporate by reference the provisions in 9VAC5-40-130 (Emission Standards for Odor) and 9VAC5-60-200 (Emission Standards for Toxic Pollutants from Existing Sources). Section 107(a) of the

Clean Air Act provides that State Implementation Plans are for the attainment and maintenance of national ambient air quality standards (NAAQS). The provisions in 9VAC5-40-130 and 9VAC5-60-200 are not applicable to the NAAQS. Therefore, EPA is concerned with SIP-approving provisions not in accordance with § 107(a), unless Virginia can explain how these are related to attainment and maintenance of the NAAQS.

RESPONSE: As has been done in the past with other stationary source regulations for the control of VOC, the state-only odor and toxics provisions will not be submitted as part of the final SIP submittal. The public notice states, "It is planned to submit all provisions of the proposals as revisions to the Commonwealth of Virginia SIP with the exception of provisions related to state programs for odor and toxics."

No change has been made to the proposal as a result of this comment.

3. SUBJECT: Cleaning activities associated with digital printing.

COMMENTER: Specialty Graphic Imaging Association (SGIA)

TEXT: Our intent is to encourage adoption of a regulation that conforms with the industrial solvent cleaning regulations adopted by other states in the same geographic area. SGIA is not opposed to environmental controls. However, promulgation of any regulatory controls should allow an industry sector to use the materials that are technologically compatible with their manufacturing process. The comments we offer seek to explore alternative means to promulgate this regulation that will result in environmental benefit without sacrificing an entire industrial sector.

SGIA recommends that, similar to other state air control districts, that the rule be amended to exempt cleaning activities associated with digital printing. Further, SGIA recommends that the rule be amended to include control requirements for screen printing that allow for either use of solvent technology at 4.2 pounds of VOC per gallon, or the use of a product with a vapor pressure of 8 mm Hg. Adoption of these two amendments will provide conformance between the regulations adopted by your district with those that have been implemented in other jurisdictions.

Appendix C, Summary of NAICS Codes for nonattainment facilities estimated to meet the applicability criteria recommended in this CTG, specifically lists commercial screen printing. Screen printing facilities use solvents for a wide range of cleaning activities. Solvents are used for basic building maintenance activities, however, solvents are also used to clean the manufacturing equipment used for production purposes. SGIA opposes the adoption of these proposed changes. Specifically, SGIA opposes the implementation of the limit of 50 grams VOC per liter that is included in the draft revisions. We contend that EPA's CTG for industrial cleaning solvents did not intend for this limit to be applied across the board to all solvent cleaning activities. We contend that EPA specifically addresses the need for states to consider and adopt solvent limits that are appropriate to the industrial mix in a given area.

Further, when the EPA CTG for industrial cleaning solvents was first drafted, the agency did not consider the impact of this document on new and emerging industry sectors. And, when finally released in 2006, the agency did not address emerging industry sectors. The state rules referenced in the CTG did not include digital technologies, and since 2006, we have seen the inclusion of digital technologies in both solvent cleaning as well as graphic arts air pollution control standards. Specifically, the Bay Area Air Quality Management District in its recently adopted revisions to their graphic arts rule, Regulation 8, Rule 20, exempted digital printing operations and presses from all VOC control requirements, including those associated with cleaning solvents. So that this burgeoning technology is not crippled, SGIA recommends that digital operations be exempted from the Northern Virginia District's proposed regulations for industrial

cleaning solvents. EPA understood during the development of the final CTG that not all industry sectors were adequately represented during the development of the 1994 document. Further, in the CTG, EPA states that the recommendations contained in this CTG are based on data and information currently available to EPA. These general recommendations may not apply to a particular situation based upon the circumstances of a specific source. The data and information used by EPA was collected in 1994 and only addressed nine specific industry sectors.

State air pollution control agencies have adopted regulatory language similar to proposal offered by SGIA. Connecticut regulation 22a-174-20 (ii) General Solvent Cleaning contains provisions impacting both screen and digital printing facilities. The requirements do not apply to the use of cleaning solvent in a digital printing operation, where digital printing means a method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a substrate. Further, screen printing facilities that use cleaning solvents with an as-applied VOC content that does not exceed 500 grams per liter (4.2 pounds per gallon) is also exempt from the general cleaning solvent requirements.

Maryland adopted a different approach. The state's regulation, Control of VOC Emissions from Industrial Solvent Cleaning Operations Other Than Cold and Vapor Degreasing (26.11.19.09-1), exempts cleaning operations at sources subject to any other VOC regulations in this subtitle (26.11.19.09-1 A.6.b.ii). COMAR Rule 26.11.19.18, Control of Volatile Organic Compound Emissions from Screen Printing and Digital Imaging, includes requirements for cleaning operations for screen printing and also covers digital printing operations, thus, both industry sectors were considered exempt from the requirements contained in the Industrial Solvent Cleaning regulation.

The District of Columbia in its recently amended Rule 20-770, Miscellaneous Industrial Solvent Cleaning Operations, included an exemption for printing operations using electron beam or ultraviolet inks (which would include both digital and screen printing processes) and cleaning and surface preparation operations related to screen printing.

Currently SGIA is working with the State of New Jersey Department of Environmental Protection on the development of regulations to govern emissions from industrial solvent cleaning operations that consider the requirements of the screen printing industry as well as exemption of digital printing operations from coverage. Other states, such as Illinois, Indiana, Wisconsin and Ohio have already adopted regulations that consider the unique requirements of the screen printing industry and have included an exemption for cleaning activities associated with digital printing operations.

RESPONSE: We agree that an industry sector should use the materials that are technologically compatible with their manufacturing process, and that the inclusion of digital printing processes in this particular CTG regulation is not appropriate.

This comment is acceptable and the proposal has been modified accordingly.

4. SUBJECT: Coatings, inks, adhesives and resin manufacturing operations.

COMMENTER: American Coatings Association (ACA)

TEXT: ACA is very concerned about the proposed Industrial Solvent Cleaning VOC limit (50 g/l) since this that will not allow effective cleaning at coatings, inks, adhesives and resin manufacturing operations. Solvents that meet the 50 g/l limit are less effective, more expensive, more evaporative, and more flammable than current solvents used today. As a result, there will likely be an increase in VOC emissions if the 50 g/l limit were adopted for these operations. ACA recommends DEQ either exempt coatings, ink, adhesives and

resin manufacturing operations from the proposed regulations (as Maryland, Delaware, and Texas have done) or adopt similar language that Wisconsin, Illinois, Ohio, Indiana, North Carolina, and Missouri have adopted, which provides several specific options for cleaning at coatings, ink, adhesives and resin manufacturing operations.

RESPONSE: We agree that an alternative limit that recognizes the use of current, more effective solvents is appropriate.

This comment is acceptable and the proposal has been modified accordingly.

VOC Emission Standards, Miscellaneous Metal and Plastic Parts Coating Operations (9VAC5 Chapter 40, Rev. E09) - Public Participation Report and Request for Board Action: Section 172(c)(1) of the federal Clean Air Act provides that state implementation plans (SIPs) for nonattainment areas must include reasonably available control techniques (RACT) for sources of emissions. Section 182(b)(2) provides that states must revise their SIPs to include RACT for sources of VOC emissions covered by a control techniques guidelines document (CTG) issued after November 15, 1990 and prior to the area's date of attainment. Section 183(e) directs EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from commercial products in ozone nonattainment areas. RACT controls for listed source categories controlled by a CTG are known as CTG RACTs. Therefore, states with moderate ozone nonattainment areas must implement this CTG RACT as part of their attainment SIP. These requirements, therefore, apply to sources within the Northern Virginia volatile organic compound (VOC) emissions control area (counties of Arlington, Fairfax, Loudoun, Prince William, Stafford; cities of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park).

The regulation developed in order to implement the CTG requires owners to limit emissions of air pollution from miscellaneous metal and plastic parts coating operations (Article 59). They establish standards, control techniques, and provisions for determining compliance. The regulation also includes provisions for visible emissions, fugitive dust, odor, toxic pollutants, compliance, test methods and procedures, monitoring, notification, registration, malfunctions, and permits.

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

SUMMARY OF DRAFT REGULATION AMENDMENTS: 1. An applicability section is established which specifies the affected source population.

2. Definitions of terms used in the rule are provided.

3. A standard for VOC emissions is established, along with provisions for achieving the standard.

4. Standard provisions are provided for visible emissions; fugitive dust/emissions; odor; toxic pollutants; compliance; a compliance schedule; test methods and procedures; monitoring; notification, records and reporting; registration; facility and control equipment maintenance or malfunction; and permits.

SUMMARY OF CHANGES TO PROPOSAL: Below is a brief summary of the substantive changes the department is recommending be made to the original proposal.

1. Include additional exemptions:

aerosol products and powder coatings (9VAC5-40-8810 D 5),

specific metal coatings (9VAVC5-40-8810 E),
specific plastic coatings (9VAC5-40-8810 F),
automotive/transportation and business machine plastic part coatings (9VAC5-40-8810 G), and
recommended application methods for pleasure craft surface coatings (9VAC5-40-8810 H).

2. Add definitions for "Antifouling Sealer/Tie Coat", "Biocide", "EMF/RIF shielding"
3. Modify definition for Business machines.
4. Modify VOC content limit and per volume solid for High performance architectural coating.
5. Modify VOC content limit and per volume solid for Extreme high gloss topcoat for pleasure craft surface coating.
6. Added a new coating category for pleasure craft industry: Antifouling Sealer/Tie Coat and corresponding limits for VOC limit and per volume solid.

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

1. SUBJECT: Malfunctions.

COMMENTER: U.S. Environmental Protection Agency (EPA)

TEXT: These regulations contain the provision "Facility and control equipment maintenance or malfunction," which incorporates by reference the provisions of 9VAC5-20-180. This regulation contains Virginia's affirmative defense for malfunction (subsection G). EPA cannot approve any State Implementation Plan (SIP) revisions containing 9VAC5-20-180 G as presently written.

By notice published on February 22, 2013 (78 FR 12459), EPA proposed to take action on a petition for rulemaking that the Sierra Club filed with the EPA Administrator on June 30, 2011. In that proposal notice, we described and proposed the EPA's response to the petition concerning the treatment of excess emissions from sources during periods of startup/shutdown/malfunction (SSM) in SIPs. EPA proposed to find these provisions are substantially inadequate because they are not consistent with fundamental legal requirements of the Clean Air Act, and EPA proposed to issue a SIP call to each affected state for these specific provisions. In the February 2013 proposal notice, EPA included Virginia's 9VAC5-20-180 G.

Subsequent to EPA's issuance of the February 2013 proposal, a federal court ruled that §§ 113 and 304 of the Act preclude EPA authority to create affirmative defense provisions in EPA's own regulations imposing emission limits on sources, because such provisions purport to alter the jurisdiction of federal courts to assess liability and impose penalties for violations of those limits in private civil enforcement cases. See *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir.2014).

EPA believes that the reasoning of the United States Court of Appeals for the District of Columbia Circuit in *NRDC v. EPA* indicates that the states, like EPA, have no authority in SIP provisions to alter the jurisdiction of federal courts to assess penalties for violations of Act requirements through affirmative defense

provisions. If states lack authority under the Act to alter the jurisdiction of the federal courts through affirmative defense provisions in SIPs, then the EPA lacks authority to approve any such provision in a SIP.

Therefore, in a supplemental proposed rulemaking (SNPR) on states' affirmative defense provisions for malfunctions in SIPs, we supplemented and revised what we had earlier proposed as our response to the Petitioner's requests in our February 2013 rulemaking, but only to the extent the requests narrowly concern affirmative defense provisions in SIPs. See 79 FR 55920 (September 17, 2014). This SNPR also identified Virginia's 9VAC5-20-180 G among other states' regulations. In the SNPR, EPA proposed to find that these provisions for affirmative defenses are substantially inadequate because they are not consistent with fundamental legal requirements of the Act, and EPA proposed to issue a SIP call to each affected state, including Virginia, for these specific provisions. EPA is addressing state regulations which contain provisions related to exemptions or affirmative defenses in this separate rulemaking. See 78 FR 12460 and 79 FR 55920. In the meantime, EPA encourages any state having deficient SSM provisions to take steps to correct them as soon as possible.

RESPONSE: In EPA's September 17, 2014 (79 FR 55920) supplemental proposal, EPA reiterated that 9VAC5-20-180 G is substantially inadequate to meet Act requirements and is thus proposing to issue a SIP call with respect to this provision. It is anticipated that this proposal will become final in May 2015; states will have 18 months after that date to submit a corrected SIP.

Virginia's current series of CTG rules for the control of VOC (Revisions C09, D09 and E09) were approved by the Governor to be issued for public comment on December 10, 2014. This started a mandatory Administrative Process Act (APA) clock for the remainder of the regulatory process. In order to meet the APA schedule (as well as fulfill the state's federal obligation to promulgate these regulations), the regulations will be adopted as final by the State Air Pollution Control Board at the June 2015 meeting.

Because the final SIP call malfunction rule was signed on May 22, 2015, the department will not have time to modify the malfunction rules in time such that reference to them in the CTG rules is not an issue. Therefore, the affected malfunction provisions of the CTG rules will simply not be submitted as part of the initial SIP revision for those rules. This will enable EPA to approve the remainder of the CTG rules into the SIP in a timely and administratively rational manner. When the final malfunction rule is published and the department is able to amend the malfunction regulations accordingly, the outstanding CTG provisions will be submitted as part of the SIP at the same time.

No change has been made to the proposal as a result of this comment.

2. SUBJECT: State-only provisions.

COMMENTER: U.S. EPA

TEXT: These regulations contain the provisions entitled "Standard for odor" and "Standard for toxic pollutants," which incorporate by reference the provisions in 9VAC5-40-130 (Emission Standards for Odor) and 9VAC5-60-200 (Emission Standards for Toxic Pollutants from Existing Sources). Section 107(a) of the Clean Air Act provides that State Implementation Plans are for the attainment and maintenance of national ambient air quality standards (NAAQS). The provisions in 9VAC5-40-130 and 9VAC5-60-200 are not applicable to the NAAQS. Therefore, EPA is concerned with SIP-approving provisions not in accordance with § 107(a), unless Virginia can explain how these are related to attainment and maintenance of the NAAQS.

RESPONSE: As has been done in the past with other stationary source regulations for the control of VOC, the state-only odor and toxics provisions will not be submitted as part of the final SIP submittal. The public notice states, "It is planned to submit all provisions of the proposals as revisions to the Commonwealth of Virginia SIP with the exception of provisions related to state programs for odor and toxics."

No change has been made to the proposal as a result of this comment.

3. SUBJECT: Definition of the term "Business machine"

COMMENTER: David L. Arnold, Acting Director, Air Protection Division, United States Environmental Protection Agency (EPA).

TEXT: Current proposal uses the definition listed in the Standard Industrial Classification (SIC) codes which was recommended in the 2008 Control Technology Guidelines, upon which the regulation is based. EPA believes this was an error in the CTG and the definition should now be based on the more relevant National American Industry Classification System (NAICS) codes which are currently used in EPA regulations.

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

4. SUBJECT: High Performance Architectural Coatings

COMMENTER: David Darling, Senior Director, Environmental Affairs, American Coatings Association

TEXT: The proposal includes a limit of 3.5 lb VOC/gal coating for baked and air dried "High Performance Architectural" coatings, whereas the Environmental Protection Agency (EPA) Miscellaneous Metal Control Techniques Guideline (CTG) recommends a limit of 6.2 lb VOC/gal coating for baked and air dried "High Performance Architectural" coatings. ACA recommends that Virginia Department of Environmental Quality (DEQ) adopt the 6.2 lb VOC/gal limit; since these coatings are used on exterior metal panels that are under constant exposure to harsh weather conditions, a higher VOC content limit will help assure more durable coatings.

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

5. SUBJECT: Exemption of powder coatings and UV coatings

COMMENTER: David Darling, Senior Director, Environmental Affairs, American Coatings Association

TEXT: ACA recommends that Virginia DEQ exempt powder coatings and UV coatings since these are inherently low VOC alternatives to many liquid coatings (see page 30 of the CTG).

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

6. SUBJECT: EPA recommended exemptions to the rule

COMMENTER: David Darling, Senior Director, Environmental Affairs, American Coatings Association

TEXT: ACA recommends that Virginia DEQ include the EPA-recommended exemptions found on pages 30, 31 and 32 of the CTG document, including exemptions from the metal part, plastic part, and automotive/transportation VOC limits and application methods.

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

7. SUBJECT: VOC limits for Pleasure Craft Coatings; Extreme High Gloss Coatings

COMMENTER: John Hopewell, Director, International Affairs, American Coatings Association

TEXT: The Extreme High Gloss Coatings category represents a comparatively small but critical, high value segment of the overall pleasure craft market.

The aesthetic properties that topcoats give to the topsides of pleasure craft are of primary importance to boat owners, a fact that should be neither underestimated nor dismissed. If boat owners cannot achieve the desired super-glossy, mirror-like finish, they will not settle for an inferior solution – they will simply have their boats painted elsewhere. These coatings are professionally applied so any restriction on their use that reduces the competitiveness of individual yards will have a direct and immediate bearing on employment levels and local revenues.

High solids topcoats have not been well received in the North American pleasure craft coating market. In general, applicators and boat owners have found the finish that these products provide to be inferior to traditional, higher VOC containing products. This can be seen clearly in the situation where a yacht coated with a high solids topcoat is moored alongside one coated with a traditional finish. Although high solids and water-based technologies are available and in use in other industries (e.g. car refinishing and aviation) the controlled application conditions which make the use of these coatings possible in those industries are neither available nor possible for the pleasure craft coating industry.

Despite much product development activity, the lower VOC technologies available at this time do not provide the appearance and functionality required from a pleasure craft Extreme High Gloss Coating. Some low VOC topcoats, originating from the car refinish market and now being marketed for pleasure craft usage, are based on a polymer type that provides reduced durability. These coatings have a reduced lifetime and their use will necessitate a more frequent recoating schedule which means in relative terms, more VOC is emitted.

In a typical extreme high gloss coatings scheme, the topcoat represents less than 40% of the overall VOC burden and less than 10% of total yacht coatings on an annualized basis. The industry feels that restricting the VOC of some of the other coating categories and setting the VOC limit for Extreme High Gloss topcoats to 600 g/L, will provide the state with a balanced VOC reduction strategy that is appropriate to the challenge and that does not seriously impact the competitiveness of the industry. This VOC limit change should be permanent as industry does not foresee any new technology emerging that can offer a route to providing performance characteristics which are acceptable by the pleasure craft coating industry.

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

8. SUBJECT: New coating category: Antifouling Sealer/Tie Coat

COMMENTER: John Hopewell, Director, International Affairs, American Coatings Association

TEXT: There are more recent requirements for an additional category to reflect pleasure craft coatings of the modern day which are more environmentally friendly and/or compliant with International law.

A new category is required as a result of the International Maritime Organization Antifouling Systems convention (IMO AFS) and should be added. This convention was ratified in 2007 and houses a list of

substances banned from use in antifoulings in Annex 1. Tri Butyl Tin (TBT) is the first addition to Annex 1 and the use of this biocide in antifoulings on the hulls of any marine vessels entering the waters of countries which are signatories to the convention is controlled according to the requirements of Annex 1 of the AFS. A specialized coating type is required to seal in old TBT containing antifoulings and to promote adhesion of biocide-free, non-stick foul release coatings when applied to vessels. The use of biocide-free coatings brings significant environmental benefits.

The category should be named ‘Antifouling Sealer/Tie Coat’ with a maximum VOC content of 420 g/L. Antifouling Sealer Coats and Tie Coats have been introduced into the market largely to facilitate compliance with Annex 1 of the IMO-Antifouling Systems Convention (2001).

Antifouling Sealer/Tie Coats must contain a VOC up to 420 g/L in order to facilitate adequate penetration into an underlying paint film for maximum adhesion. They also contain a high degree of polymeric material (hence need a higher VOC content to maintain an acceptable application viscosity) so the coating can form a flexible yet complete barrier over an underlying paint film.

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

9. SUBJECT: Definition for Antifouling Sealer/Tie Coat

COMMENTER: John Hopewell, Director, International Affairs, American Coatings Association

TEXT: An appropriate definition for this type of coating would be:

“Antifouling Sealer/Tie Coat” means a coating applied over biocidal antifouling coating for the purpose of preventing release of biocides into the environment and/or to promote adhesion between an antifouling and a primer or other antifoulings.”

RESPONSE: This comment is acceptable and the proposal has been modified accordingly.

VOC Emissions Standards, Printing (9VAC5 Chapter 40, Rev. C09) - Public Participation Report and Request for Board Action: Section 172(c)(1) of the federal Clean Air Act provides that state implementation plans (SIPs) for nonattainment areas must include reasonably available control techniques (RACT) for sources of emissions. Section 182(b)(2) provides that states must revise their SIPs to include RACT for sources of VOC emissions covered by a control techniques guidelines document (CTG) issued after November 15, 1990 and prior to the area’s date of attainment. Section 183(e) directs EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from commercial products in ozone nonattainment areas. RACT controls for listed source categories controlled by a CTG are known as CTG RACTs. CTG RACTs have been issued for offset lithographic printing operations and letterpress printing operations (October 5, 2006, 71 FR 58745). Therefore, states with moderate ozone nonattainment areas must implement these CTG RACTs as part of their attainment SIPs. These requirements therefore apply to sources within the Northern Virginia volatile organic compound (VOC) emissions control area (counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford; cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park).

The regulations developed in order to implement the CTGs require owners to limit emissions of air pollution from letterpress printing operations (Article 56) and offset lithographic printing operations (Article 56.1). They establish standards, control techniques, and provisions for determining compliance. The regulations also include provisions for visible emissions, fugitive dust, odor, toxic pollutants, compliance, test methods and procedures, monitoring, notification, registration, malfunctions, and permits.

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.

SUMMARY OF DRAFT REGULATION AMENDMENTS: For existing Article 53 pertaining to earlier standards for lithographic operations in all VOC emissions control areas, applicability provisions for facilities located in the Northern Virginia VOC emissions control area are deleted. Provisions of Article 53 applicable to sources in the Northern Virginia VOC emissions control area are preserved in Article 56.1, most notably (i) offset lithographic printing process dryer control provisions for sources with a facility potential to emit between 10 tons of VOC per year and having individual presses with a theoretical potential to emit 25 tons of VOC per year, and (ii) limits on the VOC content of cleaning materials (30% instead of 70%).

For each new article (Article 56 pertaining to emission standards for letterpress printing operations in the Northern Virginia Volatile Organic Compound Emissions Control Area, and Article 56.1 pertaining to offset lithographic printing operations in the Northern Virginia Volatile Organic Compound Emissions Control Area):

1. An applicability section is established which specifies that facilities in the Northern Virginia VOC emissions control area are affected.
2. Definitions of terms used in the rule are provided.
3. A standard for VOC emissions is established, along with provisions for achieving the standard.
4. Compliance provisions are provided detailing how compliance is determined with the standards.
5. Test methods are provided by which compliance may be determined.
6. Monitoring provisions are provided to ensure that the owner is able to stay in compliance with the standards.
7. Standard provisions are provided for visible emissions; fugitive dust/emissions; odor; toxic pollutants; a compliance schedule; notification, records and reporting; registration; facility and control equipment maintenance or malfunction; and permits.

SUMMARY OF CHANGES TO PROPOSAL: Below is a brief summary of the substantive changes that the Department is recommending be made to the original proposal. Based on comments received during the public comment period, a number of amendments were made to the proposal in order to make the regulations operate more efficiently. The conditions under which performance testing would be conducted were revised, default retention factors and capture efficiencies were added, terms were updated, an additional provision allowing an exemption of a certain amount of cleaning materials was added, and corrections to definitions and standards were made to conform to the new control techniques guidelines.

ANALYSIS OF COMMENT: Below is a summary of each person's comments and the accompanying analysis. Included is a brief statement of the subject, the identification of the commenter, the text of the comment and the Board's response (analysis and action taken). Each issue is discussed in light of all of the comments received that affect that issue. The Board has reviewed the comments and developed a specific

response based on its evaluation of the issue raised. The Board's action is based on consideration of the overall goals and objectives of the air quality program and the intended purpose of the regulation.

1. SUBJECT: Malfunctions.

COMMENTER: U.S. Environmental Protection Agency (EPA)

TEXT: These regulations contain the provision "Facility and control equipment maintenance or malfunction," which incorporates by reference the provisions of 9VAC5-20-180. This regulation contains Virginia's affirmative defense for malfunction (subsection G). EPA cannot approve any State Implementation Plan (SIP) revisions containing 9VAC5-20-180 G as presently written.

By notice published on February 22, 2013 (78 FR 12459), EPA proposed to take action on a petition for rulemaking that the Sierra Club filed with the EPA Administrator on June 30, 2011. In that proposal notice, we described and proposed the EPA's response to the petition concerning the treatment of excess emissions from sources during periods of startup/shutdown/malfunction (SSM) in SIPs. EPA proposed to find these provisions are substantially inadequate because they are not consistent with fundamental legal requirements of the Clean Air Act, and EPA proposed to issue a SIP call to each affected state for these specific provisions. In the February 2013 proposal notice, EPA included Virginia's 9VAC5-20-180 G.

Subsequent to EPA's issuance of the February 2013 proposal, a federal court ruled that §§ 113 and 304 of the Act preclude EPA authority to create affirmative defense provisions in EPA's own regulations imposing emission limits on sources, because such provisions purport to alter the jurisdiction of federal courts to assess liability and impose penalties for violations of those limits in private civil enforcement cases. See *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir.2014).

EPA believes that the reasoning of the United States Court of Appeals for the District of Columbia Circuit in *NRDC v. EPA* indicates that the states, like EPA, have no authority in SIP provisions to alter the jurisdiction of federal courts to assess penalties for violations of Act requirements through affirmative defense provisions. If states lack authority under the Act to alter the jurisdiction of the federal courts through affirmative defense provisions in SIPs, then the EPA lacks authority to approve any such provision in a SIP.

Therefore, in a supplemental proposed rulemaking (SNPR) on states' affirmative defense provisions for malfunctions in SIPs, we supplemented and revised what we had earlier proposed as our response to the Petitioner's requests in our February 2013 rulemaking, but only to the extent the requests narrowly concern affirmative defense provisions in SIPs. See 79 FR 55920 (September 17, 2014). This SNPR also identified Virginia's 9VAC5-20-180 G among other states' regulations. In the SNPR, EPA proposed to find that these provisions for affirmative defenses are substantially inadequate because they are not consistent with fundamental legal requirements of the Act, and EPA proposed to issue a SIP call to each affected state, including Virginia, for these specific provisions. EPA is addressing state regulations which contain provisions related to exemptions or affirmative defenses in this separate rulemaking. See 78 FR 12460 and 79 FR 55920. In the meantime, EPA encourages any state having deficient SSM provisions to take steps to correct them as soon as possible.

RESPONSE: In EPA's September 17, 2014 (79 FR 55920) supplemental proposal, EPA reiterated that 9VAC5-20-180 G is substantially inadequate to meet Act requirements and is thus proposing to

issue a SIP call with respect to this provision. It is anticipated that this proposal will become final in May 2015; states will have 18 months after that date to submit a corrected SIP.

Virginia's current series of CTG rules for the control of VOC (Revisions C09, D09 and E09) were approved by the Governor to be issued for public comment on December 10, 2014. This started a mandatory Administrative Process Act (APA) clock for the remainder of the regulatory process. In order to meet the APA schedule (as well as fulfill the state's federal obligation to promulgate these regulations), the regulations will be adopted as final by the State Air Pollution Control Board at the June 2015 meeting.

Because the final SIP call malfunction rule was signed on May 22, 2015, the department will not have time to modify the malfunction rules in time such that reference to them in the CTG rules is not an issue. Therefore, the affected malfunction provisions of the CTG rules will simply not be submitted as part of the initial SIP revision for those rules. This will enable EPA to approve the remainder of the CTG rules into the SIP in a timely and administratively rational manner. When the final malfunction rule is published and the department is able to amend the malfunction regulations accordingly, the outstanding CTG provisions will be submitted as part of the SIP at the same time.

No change has been made to the proposal as a result of this comment.

2. SUBJECT: State-only provisions.

COMMENTER: U.S. EPA

TEXT: These regulations contain the provisions entitled "Standard for odor" and "Standard for toxic pollutants," which incorporate by reference the provisions in 9VAC5-40-130 (Emission Standards for Odor) and 9VAC5-60-200 (Emission Standards for Toxic Pollutants from Existing Sources). Section 107(a) of the Clean Air Act provides that State Implementation Plans are for the attainment and maintenance of national ambient air quality standards (NAAQS). The provisions in 9VAC5-40-130 and 9VAC5-60-200 are not applicable to the NAAQS. Therefore, EPA is concerned with SIP-approving provisions not in accordance with § 107(a), unless Virginia can explain how these are related to attainment and maintenance of the NAAQS.

RESPONSE: As has been done in the past with other stationary source regulations for the control of VOC, the state-only odor and toxics provisions will not be submitted as part of the final SIP submittal. The public notice states, "It is planned to submit all provisions of the proposals as revisions to the Commonwealth of Virginia SIP with the exception of provisions related to state programs for odor and toxics." No change has been made to the proposal as a result of this comment.

3. SUBJECT: The definition of "non-heatset" needs to be revised.

COMMENTER: Jay K. Goldscher, Printing and Graphics Association MidAtlantic (PGAMA).

TEXT: The definition for "Non-heatset" in 9VAC5-40-8382 and 9VAC5-40-8422 needs to have "and/" inserted between "absorption" and "or" so that it reads as follows:

"Non-heatset" means a printing process in which the printing inks are set and dried by absorption and/or oxidation rather than heat. For the purposes of this article, UV-cured and electron beam-cured inks are considered non-heatset.

RESPONSE: The use of informal terms such as "and/or" is not consistent with the standards for style in regulatory technical writing. In this case, the word "or" is proper to convey the thought of "one, or the other, or any of them." No change has been made to the proposal as a result of this comment.

4. SUBJECT: The definitions of "letterpress printing operation" and "offset lithographic printing operation" need to be revised.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definitions for "Letterpress printing operation" in 9VAC5-40-8382 and "Offset lithographic printing operation" in 9VAC5-40-8422 are very confusing and need to be revised so that it reflects the intent of the applicability.

"Letterpress printing operation" means one or more letterpress printing ~~processes employing letterpress printing on letterpress printing~~ presses and the related processes necessary to directly support the operation of those presses including, but not limited to, cleaning, prepress, and post-press operations.

"Offset lithographic printing operation" means one or more printing ~~processes employing offset lithographic printing on offset lithographic printing~~ presses and includes the related processes necessary to directly support the operation of those offset lithographic printing processes including, but not limited to, pre-press and post-press operations. Varnishes, glues, and other coatings that are applied by an offset lithographic printing process are part of offset lithographic printing operations and are not considered as a separate process (e.g., paper coating)

RESPONSE: As proposed, the definitions describe the facility (letterpress printing operation or offset lithographic printing operation) in terms of specific equipment (letterpress printing presses or offset lithographic printing presses) using a specific technique (letterpress printing or offset lithographic printing), the printing system that uses the defined equipment and technique (letterpress printing process or offset lithographic printing process), and the ancillary processes necessary to keep the system operating. Omitting the term "printing process" from the definition might be interpreted as excluding surface coating operations and this interpretation would not be correct. However, the point that the definitions are wordy and repetitive and therefore confusing is well taken. Appropriate changes reflecting the intent of the comment have been made to the proposal.

5. SUBJECT: The definition for "Printing Process" needs to be revised.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definition for "Printing Process" in 9VAC5-40-8382 and 9VAC5-40-8422 needs to be slightly revised as it includes terms that are not applicable to printing presses or other printing equipment. Therefore, the definition should be revised as follows:

"Printing process" means any operation or system wherein printing ink or a combination of printing ink and surface coating is applied, dried, or cured and that is subject to the same emission standard. A printing process may include any equipment that applies, conveys, dries,

or cures inks or surface coatings including, but not limited to, presses, digital output devices, fountain solutions, heaters, and dryers. ~~flow-coaters, flashoff areas, air-dryers, drying areas, and ovens.~~

RESPONSE: The term "printing process" is more inclusive than applying only to printing techniques. It also refers to surface coatings that may be applied as part of the same process. It is therefore appropriate to describe equipment and terms that may be used in surface coating operations as well as those used on printing presses. Additionally, the listed equipment are examples of equipment that may be found on such a process. The list is not intended to be a list of required equipment or to imply that the presence of other equipment would exclude a certain printing line from the definition. That said, this definition can be revised to be particular to the printing process that is regulated in that article (Article 56 for letterpress printing operations and Article 56.1 for offset lithographic printing operations), so it is appropriate to include specific equipment that is proposed by stakeholders as being more appropriate to that printing process. Appropriate changes reflecting the intent of the comment have been made to the proposal.

6. SUBJECT: The definition of "Theoretical Potential to Emit" needs revision.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definition for "Theoretical potential to emit" in 9VAC5-40-8382 includes a reference to heatset web offset lithographic, which limits its applicability to only those types of printing operations and the reference should be deleted. In addition the term "emissions" needs to be inserted between "limit" and "production" as USEPA allows certain types of sources, including printing operations to limit their potential to emit by taking limits on emissions. USEPA's position can be found in Section 6.3 of the June 2007 Technical Support Document (TSD) for Title V Permitting of Printing Facilities (<http://www.epa.gov/airquality/permits/memoranda/tsd.pdf>). Section 6.3 was specifically included in the document to provide printing operations with an enforceable mechanism that allows them the ability to maintain compliance with a limit while simultaneously providing needed operational flexibility. Section 6.3 is attached as Appendix A.

Therefore, the definition should be revised as follows:

"Theoretical potential to emit" means for the purposes of this article the maximum capacity of a letterpress printing process to emit VOC and shall be based on emissions at design capacity or maximum production and maximum operating hours (8,760 hours/year) before add-on controls, unless the ~~heatset web offset lithographic~~ printing process is subject to state and federally enforceable permit conditions that limit emissions, production rates, or hours of operation.

RESPONSE: The definition contains an erroneous reference to a lithographic printing press instead of the intended letterpress printing press. This comment is appropriate and changes reflecting the intent of this portion of the comment have been made to the proposal.

The definition of "theoretical potential to emit" serves the only use of the term in 9VAC5-40-8284 (standard for volatile organic compounds) subsection B. The term is used as the method for determining the 25 ton per year dryer emissions exception to the dryer control requirements of subsection B of that section. Subdivision 3 of that subsection is clear that enforceable limits on the

VOC content and application rates of inks and coatings (among other limits) may be used to meet that exception. No change has been made to the proposal as a result of this portion of the comment.

7. SUBJECT: A definition for “Batch” needs to be added.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: A definition for “batch” should be added to 9VAC5-40-8382 and it should read as follows:

"Batch" means a supply of fountain solution that is prepared in a discrete amount or continuously blended with an automatic mixing unit, or a cleaning solution that is prepared in a discrete amount or blended and delivered with an automatic blanket or roller wash system and used without alteration until completely used or removed from the printing process.

RESPONSE: Because fountain solution is not applied on letterpress printing presses and because the term "batch" is not used in Article 56, there is no reason to define such a term in 9VAC5-40-8382. No change has been made to the proposal as a result of this comment.

8. SUBJECT: The definition for “Unit” needs to be revised.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definition for “Unit” in 9VAC5-40-8382 needs to be revised because it describes a lithographic printing press unit and not a letterpress printing unit. It should read as follows:

"Unit" means the smallest, complete printing component, composed of an inking ~~and dampening~~ system of a printing press.

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

9. SUBJECT: The 25 ton exemption for letterpress inks is applied inappropriately.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9 VAC5-40-8384 (B) of the proposed rule is an exemption from requirements of 9 VAC5-40-8384 (B) for any heatset web letterpress printing process with the potential to emit of 25 tons per year of VOC or more from the heatset web letterpress printing dryer.

This exemption level is not consistent with the CTG as this exemption threshold applies only to the emissions of ink oil and not total VOC from the press dryer. EPA purposely focused on ink oil or ink VOC as ink oil constitutes almost all of the VOC that is released in the dryer. It is important to note that letterpress inks are identical to offset lithographic inks. This means that the provisions identified by the USEPA and the CTG for offset lithographic inks would apply to letterpress inks.

On page 5 of the CTG, EPA states the following:

“We recommend a different applicability threshold for the RACT recommendations in this CTG relating to heatset web offset lithographic printing and letterpress printing operations. Specifically, we recommend applying the add-on control recommendations for heatset web offset lithographic printing operations and heatset web letterpress printing operations only to those presses with potential to emit from the dryer, prior to controls, of at least 25 tpy of VOC (petroleum ink oil) from heatset inks.

In addition, the provision needs to be revised so that it clearly states it applies to a single heatset web offset lithographic printing process.

Therefore, Subdivision 9 VAC5-40-8384 (B) should be revised to read as follows:

B. The following provisions apply to each dryer on each heatset web letterpress printing process, except that these provisions do not apply to (i) any heatset web letterpress printing process with a theoretical potential to emit less than 25 tons per year of VOC (petroleum ink oil) from the dryer, prior to controls; (ii) any heatset web letterpress printing process used exclusively for book printing; or (iii) any heatset web letterpress printing process with a maximum web width of 22 inches or less. These provisions also do not apply to non-heatset web letterpress printing processes or to sheet-fed letterpress printing processes.

RESPONSE: The CTG clearly intended that the 25 tpy exception to apply only to ink oils and not to dryer combustion emissions or VOC emissions from other coatings. This comment is appropriate and changes reflecting the intent of the comment have been made to the proposal.

10. SUBJECT: The reference to "other coatings applied" needs to be deleted.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9 VAC5-40-8384 (B)(3) needs to be revised to reflect that the 25 ton limit is for petroleum ink oil and “other coatings applied” needs to be deleted as only inks and varnishes contain ink oil. In addition, “VOC emissions” needs to be added as option (v) as limiting emissions from printing operations and presses can be used as a federally enforceable approach per Section 6.3 of the June 2007 Technical Support Document (TSD) for Title V Permitting of Printing Facilities.

Therefore, Subdivision 9 VAC5-40-8384 (B)(3) should be revised to read as follows:

3. Federally enforceable limitations on (i) the VOC (petroleum ink oil) content of inks and varnishes, ~~and other coatings applied~~; (ii) the total amounts of inks and varnishes, ~~and other coatings applied~~; (iii) the press application rates of inks and varnishes, ~~and other coatings~~; or (iv) the hours of press operation; or (v) emissions of VOC (petroleum ink oil) may be used to meet the 25 ton per year exception to this subsection.

RESPONSE: The CTG clearly intended that the 25 tpy exception to apply only to petroleum ink oils and not to dryer combustion emissions or non-petroleum ink oil VOC emissions from other coatings. See the response to comment 9. This comment is appropriate and changes reflecting the intent of this portion of the comment have been made to the proposal.

The phrase "other coatings applied" as used in the proposed subdivision 3 of that subsection will include varnishes that contain ink oil and also any other coatings that contain petroleum ink oil that

may be used in the future. Limiting the description of the coatings to varnishes would unnecessarily limit the applicability of future contributors to the 25 tpy petroleum ink oil exception. However, since only petroleum ink oil contributors are applied prior to the dryer, a change has been made to the proposal as a result of this portion of the comment.

Settling the issue of whether federally enforceable emissions limitations are practically enforceable based upon equations in a Title V TSD is beyond the scope of this revision. No change has been made to the proposal as a result of this portion of the comment.

11. SUBJECT: Testing requirements needs to be revised so that it is not mandatory.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8396 (B) needs to be revised by adding the phrase “If requested” between “performed” and “to” as there is not mandatory testing requirement contained in the CTG. Due to the significant costs involved with testing of an oxidizer, it should only be required if requested by the VADEQ. In addition, testing is usually mandated when a facility obtains an operating permit and including a provision of this nature could require a facility to retest an oxidizer that would have been recently tested.

To prevent mandatory retesting at a frequency not mandated by an operating permit, an additional sentence needs to be added to this provision allowing for previous testing to be acceptable. The sentence should be, “Board may accept the results of an emission test conducted prior to the effective date of this rule, if the owner or operator provides information and data which demonstrate that an approved USEPA emission test method was employed and the test report was accepted.”

The provision needs to be revised to reflect the testing requirements necessary for a successful destruction efficiency determination for an oxidizer used to control emissions from a heatset letterpress press. The nature of the emissions from heatset letterpress press is such that simply following EPA protocols will result in failure forcing either re-testing or enforcement action. As such, USEPA recommended compliance testing should be conducted at operating conditions representative of a typical production schedule.

On page 67 of the Technical Support Document for Title V Permitting of Printing Operations, USEPA states:

“5.7 WHAT ARE THE APPROPRIATE PERFORMANCE TEST CONDITIONS?”

Compliance testing for VOC and HAP emissions at printing facilities should be conducted under normal or representative operating conditions, in accordance with 40 CFR 60 subpart QQ, §60.433(a)(8); 40 CFR 63 subpart KK, §63.827(d)(1)(vii); the draft CTG for Offset Lithography (EPA, 1993b); and our National Stack Testing Guidance (EPA, 2004). These sections require compliance testing to be conducted under normal or representative operating conditions. We also recognize that a pre-test meeting between the printing facility owner or operator and you may provide a convenient opportunity to define normal, representative operation. During such a meeting, the owner or operator may propose an operating scenario for testing that is representative of actual operating conditions and the VOC/HAP input rate to the control device. Such operating conditions should strive to minimize downtime while running as many presses as practicable, when multiple presses are being served by a common

control device. The proposed operating scenario should also be reflective of a typical normal production schedule. As necessary, proposed testing conditions should rely on historical production records for establishing average coverage rates, press speeds, or ink and other input material consumption rates, run times, and average time of intermittent events such as press cleaning, web breaks or similar shutdown situations.

Because activities such as cycling of automatic blanket washing systems, press speed variations, web breaks or other short-term events in which the print quality is being checked, may be a part of normal, representative operations, we recommend that sampling continue during these short-term events while the control device is being tested. All testing conditions should be thoroughly discussed and approved by you prior to the actual test date.”

Therefore, Subdivision 9 VAC5-40-8396 (B) should be revised so that it reads as follows:

B. An emission test of the control device installed on a heatset web letterpress printing process dryer shall be performed under normal representative conditions, if requested, to demonstrate compliance with the provisions of 9VAC5-40-8384 B and C and 9VAC5-40-8398. The negative dryer pressure shall be established during the initial test using an airflow direction indicator, such as a smoke stick, aluminum ribbons, or a differential pressure gauge. The board may accept the results of an emission test conducted prior to the effective date of this rule if the owner or operator provides information and data that demonstrate an approved USEPA emission test method was employed and the test report was accepted.

RESPONSE: Concerning the request to make testing and retesting non-mandatory, this portion of the comment is appropriate and changes reflecting the intent of the comment have been made to the proposal.

Testing during normal representative conditions is required by 9VAC5-40-30 C, which is incorporated into this Article by 9VAC5-40-8438 A. No change has been made to the proposal as a result of this portion of the comment.

12. SUBJECT: Testing requirements need to be revised to preserve flexibility.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8400 (C) needs the phrase “or one of the following methods” inserted after “Reference Method 24” as the current phrasing does not allow subdivisions 9VAC5-40-8400 (C) (1), (C) (2), (C)(3), or (C) (4) to be used to meet the condition.

Therefore, Subdivision 9 VAC5-40-8400 (C) should be revised so that it reads as follows:

C. The VOC content of as-applied inks, varnishes and other coatings, fountain solutions, and cleaning materials shall be determined using Reference Method 24 or one of the following methods:

RESPONSE: The requirement is that the VOC content be determined by Reference Method 24. It does not specify who must do that determination. The subdivisions are not alternatives to the requirement for testing with Reference Method 24. Subdivisions under subsection C clarify how the

owner may demonstrate compliance with that Reference Method 24 requirement. . Subdivision 1 says that the required Reference Method 24 testing may be done by other persons in the supply chain instead of by the owner of the printing facility. Subdivision 2 says that the owner can rely upon the Reference Method 24 testing information supplied by several documents provided by the manufacturer or supplier. Subdivision 3 allows a dilution calculation using supplied Reference Method 24 information. Subdivision 4 requires the owner to test using the reference method at any time if requested by the board. No change has been made to the proposal as a result of this comment.

13. SUBJECT: Testing requirements need to be updated for OSHA form changes.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivisions 9VAC5-40-8400 (C) (2) and 9VAC5-40-8438 (C) (2) should have the words “MSDS sheet” deleted and replaced with Safety Data Sheet (SDS) as the changes OSHA made to the Hazard Communication Standard has eliminated Material Safety Data Sheets and replaced them with Safety Data Sheets.

Therefore, Subdivisions 9 VAC5-40-8400 (C) (2) and 9VAC5-40-8438 (C) (2) should be revised so that they read as follows:

2. The owner may use VOC content information provided by the manufacturer or supplier, such as the container label, the product data sheet, or the ~~MSDS sheet~~ Safety Data Sheet (SDS) to document the VOC content of the as-supplied material.

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

14. SUBJECT: Testing requirements need revision to reflect batch calculations.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8400 (C) (3) needs to add the words “fountain solution or” between “If” and “cleaning materials.” Also an additional sentence needs to be added that should be revised to indicate that the calculation only needs to be performed once for each batch of fountain solution or cleaning material being used, not for each use of a batch of a solution. Since more than one fountain solution or cleaning material can be used on different presses in one operation, the calculation needs to be performed for each fountain solution and cleaning material. This is important as once the printing operation determines the proper mix ratio for its fountain solution or cleaning material, the mix ratio is not altered.

Therefore, Subdivision 9 VAC5-40-8400 (C) (3) should be revised so that it reads as follows:

3. If fountain solution or cleaning materials are diluted by the owner prior to use, a calculation that combines the as-supplied VOC content information provided by the manufacturer or supplier, the VOC content of the diluent, and the proportions in which they are mixed, may be used to make a determination of the VOC content of the as-applied fountain solution or cleaning material in lieu of Reference Method 24. The VOC content shall be calculated only

once representing for each batch of press-ready, as applied, fountain solution's or cleaning material's mix ratio and recorded in the form of a batch log.

RESPONSE: Letterpress printing operations do not use fountain solution. Nothing in subdivision C 3 precludes a calculation "per batch" or requires a calculation "per use", so it is entirely appropriate to calculate the VOC content per batch instead of per use according to subdivision C 3. No change has been made to the proposal as a result of this comment.

15. SUBJECT: Testing requirements need revision to preserve flexibility.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8400 (D) needs the phrase "or one of the following methods" inserted after "Reference Method 24" as the current phrasing does not allow subdivisions 9VAC5-40-8400 (D) (1), (D) (2), (D)(3), or (D) (4) to be used to meet the condition.

Therefore, Subdivision 9 VAC5-40-8400 (D) should be revised so that it reads as follows:

D. The VOC composite partial vapor pressure of cleaning solutions shall be determined using the formula provided in 9VAC5-40-8382 C or by an appropriate test method approved by the board or one of the following methods:

RESPONSE: The requirement is that the VOC composite partial vapor pressure be determined by the referenced formula (or equivalent method). It does not specify who must do that determination. The subdivisions are not alternatives to the requirement for determining the VOC composite partial vapor pressure. Subdivisions under subsection C clarify how the owner may demonstrate compliance with that calculation requirement. Subdivision 1 says that the determination may be done by other persons in the supply chain instead of by the owner of the printing facility. Subdivision 2 says that the owner can rely upon the determinations supplied by several documents provided by the manufacturer or supplier. Subdivision 3 allows a dilution calculation using supplied information. Subdivision 4 requires the owner to test if requested by the board. No change has been made to the proposal as a result of this comment.

16. SUBJECT: Testing requirements need to be updated for OSHA form changes.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivisions 9VAC5-40-8400 (D) (2) and 9VAC5-40-8438 (E) (2) should have the words "Material Safety Data Sheet (MSDS)" deleted and replaced with Safety Data Sheet (SDS) as the changes OSHA made to the Hazard Communication Standard has eliminated Material Safety Data Sheets and replaced them with Safety Data Sheets.

Therefore, Subdivisions 9 VAC5-40-8400 (D) (2) and 9VAC5-40-8438 (E) (2) should be revised so that it reads as follows:

2. The owner may use VOC composite partial vapor pressure information provided by the manufacturer or supplier, such as the container label, the product data sheet, or the ~~Material~~

~~Safety Data Sheet (MSDS)~~ Safety Data Sheet (SDS), to document the VOC composite partial vapor pressure of the as supplied or as-applied cleaning materials.

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

17. SUBJECT: Definition of "heatset web offset lithographic printing dryer" needs to be revised.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definition for "Heatset web offset lithographic printing dryer" in 9VAC5-40-8422 needs to be revised because heatset lithographic inks do not cure, but dry by evaporation. Therefore, the definition should be revised as follows:

"Heatset web offset lithographic printing dryer" means the dryer or dryers installed as part of a heatset web offset lithographic printing process that dries ~~or cures~~ inks or surface coatings.

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

18. SUBJECT: The definition of "lithographic printing" needs to be revised.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definition for "Lithographic printing" in 9VAC5-40-8422 needs to be revised by deleting the last sentence which describes letterpress printing. Therefore, the definition should be revised as follows:

"Lithographic printing" means a planographic printing process in which the image and nonimage areas are chemically differentiated with the image area being oil receptive and the nonimage area being water receptive. ~~This process differs from other printing processes, where the image is a raised or recessed surface.~~

RESPONSE: The sentence in question differentiates lithographic printing from many other types of printing, not just letterpress printing. Flexographic printing and rotogravure printing are two other examples of printing processes that are so differentiated. This sentence is not an exclusion so much as it is a clarification by example. No change has been made to the proposal as a result of this comment.

19. SUBJECT: The definition of "Theoretical Potential to Emit" needs revision.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The definition for "Theoretical potential to emit" in 9VAC5-40-8422 includes a reference to heatset web offset lithographic, which limits its applicability to only those types of printing operations and the reference should be deleted. In addition the term "emissions" needs to be inserted between "limit" and "production" as USEPA allows certain types of sources, including printing

operations to limit their potential to emit by taking limits on emissions. USEPA's position can be found in Section 6.3 of the June 2007 Technical Support Document (TSD) for Title V Permitting of Printing Facilities (<http://www.epa.gov/airquality/permits/memoranda/tsd.pdf>). Section 6.3 was specifically included in the document to provide printing operations with an enforceable mechanism that allows them the ability to maintain compliance with a limit while simultaneously providing needed operational flexibility. Section 6.3 is attached as Appendix A.

Therefore, the definition should be revised as follows:

"Theoretical potential to emit" means, for the purposes of this article, the maximum capacity of a letterpress printing process to emit VOC and shall be based on emissions at design capacity or maximum production and maximum operating hours (8,760 hours/year) before add-on controls, unless the ~~heatset web offset lithographic~~ printing process is subject to state and federally enforceable permit conditions that limit emissions, production rates or hours of operation.

RESPONSE: The definition in 9VAC5-40-8422 specifies that it applies only to the proposed Article 56.1 and as such will only apply to offset lithographic printing processes.

The definition of "theoretical potential to emit" in this section serves the uses of the term in 9VAC5-40-8424 (standard for volatile organic compounds) subsection B subdivision 3 a and subsection C, both of which apply only to heatset web offset lithographic printing processes. The term is used as the method for determining the 25 ton per year dryer emissions exception to the dryer control requirements of subsection B and C of that section. Subdivision 3 of subsection C is clear that enforceable limits on the VOC content and application rates of inks and coatings (among other limits) may be used to meet that exception in subsection C. No change has been made to the proposal as a result of this portion of the comment.

20. SUBJECT: The 25 tpy VOC exception is not consistent with the CTG.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9 VAC5-40-8424 (B)(3)(a) of the proposed rule is an exemption from requirements of 9 VAC5-40-8424 (B) for any heatset web offset lithographic printing process with the potential to emit of 25 tons per year of VOC or more from the heatset web offset lithographic printing dryer.

This exemption level is not consistent with the CTG as the requirements for add on controls only apply to presses with potential VOC (petroleum ink oil) emissions that are greater than 25 tons per year. EPA chose this threshold due to the cost associated with installing and operating a control device and deemed controlling emissions that are less than this threshold to be excessive and not reasonable.

This exemption threshold needs to be revised as it only applies to the emissions of ink oil and not total VOC from the press dryer. EPA purposely focused on ink oil or ink VOC as ink oil constitutes almost all of the VOC that is released in the dryer.

On page 5 of the CTG, EPA states the following:

“We recommend a different applicability threshold for the RACT recommendations in this CTG relating to heatset web offset lithographic printing and letterpress printing operations. Specifically, we recommend applying the add-on control recommendations for heatset web offset lithographic printing operations and heatset web letterpress printing operations only to those presses with potential to emit from the dryer, prior to controls, of at least 25 tpy of VOC (petroleum ink oil) from heatset inks. We recommend providing printers with the option of using an enforceable limitation on potential emissions to keep an individual press below this 25 tpy potential to emit threshold. Guidance on limiting potential to emit from printing operations is provided in the Technical Support Document (TSD) for Title V Permitting of Printing Facilities (see Appendix A). We believe add-on control for heatset presses with potential to emit below 25 tpy is too costly for the emission reduction that would be achieved.

In addition, the provision needs to be revised so that it clearly states it applies to a single heatset web offset lithographic printing process.

Therefore, Subdivision 9 VAC5-40-8424 (B)(3)(a) should be revised to read as follows:

a. Any single heatset web offset lithographic printing process with a theoretical potential to emit of 25 tons per year of VOC (petroleum ink oil) or ~~more~~ (less) from the heatset web offset lithographic printing dryer. VOC standards for heatset web offset lithographic printing process with a theoretical potential to emit of 25 tons per year of VOC (petroleum ink oil) or more are provided in subsection C of this section.

RESPONSE: Subdivision 9 VAC5-40-8424 B 3 a is an exception to the dryer standards for facilities that were subject to Article 53 (covered in subsection B of this section). By the current wording of subsection B 3, it applies to each dryer. It directs the reader to the section C for standards for applicable dryers with a theoretical potential to emit (TPTE) of 25 tons per year of VOC or more. So this exception is correct as "25 tons per year of VOC (petroleum ink oil) or more." No change has been made to the proposal as a result of this portion of the comment.

This portion of the comment concerning the addition of "(petroleum ink oil)" after "VOC" is appropriate and changes reflecting the intent of this portion of the comment have been made to the proposal.

21. SUBJECT: Dryer outlet concentration is not consistent with the CTG.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9 VAC5-40-8424 (B)(2) needs to be revised by deleting “50 parts per million volume (ppmv) or less, as carbon (minus methane and ethane)” and replacing it with “20 parts per million volume (ppmv) or less, as hexane on a dry basis.” This would provide consistency with the CTG and 9VAC5-40-8424 (C)(2).

Therefore, subdivision 9 VAC5-40-8424 (B)(2) should be revised to read as follows:

2. Where the heatset web offset lithographic printing process control device inlet VOC concentration is too low to achieve the control device efficiency requirements specified in subdivisions (1) (C) of this subsection or there is no identifiable measurable inlet, the control device shall reduce the VOC concentration of the heatset web offset lithographic printing

process dryer exhaust air to ~~50 parts per million volume (ppmv) or less, as carbon (minus methane and ethane).~~ 20 parts per million volume (ppmv) or less, as hexane on a dry basis.

RESPONSE: The proposed Article 56.1 is to be applicable in certain areas (specifically the Northern Virginia VOC Emissions Control Area) where the CTG- specified RACT must be applied to the specified source category. However, there are standards already applicable to offset lithographic printing operations in Virginia in 9VAC5 Chapter 40 Article 53. Even though the new RACT for the Northern Virginia VOC Emissions Control Area is more restrictive in some ways for press dryers with a theoretical potential to emit (TPTE) greater than 25 tons per year of VOC, the existing rule applies some dryer standards to facilities down to a potential to emit of 10 tons of VOC per year. For those facilities, the standards of Article 53 must be carried forward into the new Article 56.1. Subsection 9VAC5-40-8424 B does that, so the appropriate standard for heatset web offset lithographic printing process dryers (carried from Article 53, 9VAC5-40-7820 B 2 with a TPTE less than 25 TPY) is 50 parts per million volume (ppmv) or less, as carbon (minus methane and ethane). No change has been made to the proposal as a result of this comment.

22. SUBJECT: The reference to "other coatings applied" needs to be deleted.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9 VAC5-40-8424 (C)(3) needs to be revised to reflect that the 25 ton limit is for petroleum ink oil and "other coatings deleted" as only inks and varnishes contain ink oil. In addition, "VOC emissions" needs to be added as option (v) as limiting emissions from printing operations and presses can be used as a federally enforceable approach per Section 6.3 of the June 2007 Technical Support Document (TSD) for Title V Permitting of Printing Facilities.

Therefore, Subdivision 9 VAC5-40-8424 (C)(3) should be revised to read as follows:

3. Federally enforceable limitations on (i) the VOC (petroleum ink oil) content of inks and varnishes, ~~and other coatings applied~~; (ii) the total amounts of inks and varnishes, ~~and other coatings applied~~; (iii) the press application rates of inks and varnishes, ~~and other coatings~~; or (iv) the hours of press operation; or (v) emissions of VOC (petroleum ink oil) may be used to meet the 25 ton per year exception to this subsection.

RESPONSE: The CTG clearly intended that the 25 tpy exception to apply only to petroleum ink oils and not to dryer combustion emissions or non-petroleum ink oil VOC emissions from other coatings. See the response to comment 9. This comment is appropriate and changes reflecting the intent of this portion of the comment have been made to the proposal.

The phrase "other coatings applied" as used in the proposed subdivision 3 of that subsection will include varnishes that contain ink oil and also any other coatings that contain petroleum ink oil that may be used in the future. Limiting the description of the coatings to varnishes would unnecessarily limit the applicability of future contributors to the 25 tpy petroleum ink oil exception. However, since only petroleum ink oil contributors are applied prior to the dryer, a change has been made to the proposal as a result of this portion of the comment.

Settling the issue of whether federally enforceable emissions limitations are practically enforceable based upon equations in a Title V TSD is beyond the scope of this revision. No change has been made to the proposal as a result of this portion of the comment.

23. SUBJECT: A 110 gallon cleaning material exclusion is needed.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9 VAC5-40-8424 (E) needs to have an exclusion provided for up to 110 gallons per year of any cleaning material that does meet either limit in 9 VAC5-40-8424 (E)(1) or (E) (2).

Due the nature of the materials and equipment being cleaned, an exclusion for 110 gallons per year for cleaning materials not meeting the limits will provide a covered printing operation the flexibility to clean difficult areas on the press. The use of those types of cleaning solutions on a limited basis was recognized by USEPA and was included in its CTG, with an exclusion of 110 gallons per year as a reasonable amount.

This request is supported by the information on page 3 of the CTG where USEPA states:

“...the cleaning control approaches recommended in this CTG include limitations on the VOC composite vapor pressure of cleaning materials and limits on the VOC content of cleaning materials, with an exclusion of 110 gallons per year of cleaning materials which meet neither the low VOC composite vapor pressure recommendation nor the lower VOC content recommendation, and work practices.”

In addition, 9 VAC5-40-8424 (E)(1) needs to be revised by deleting “30%” and replacing it with “70%” per the CTG requirements for cleaning solutions. Although this limit was originally included in the 1993 draft CTG for Offset Lithography, it was subsequently superseded by the 70% by weight limit with the issuance of the 2006 CTG for Offset Lithographic Printing and Letterpress printing.

During the development of the 2006 final CTG, the printing industry demonstrated to EPA that the 30% by weight VOC content limit in the 1993 CTG did not constitute an achievable technology and therefore EPA revised the limit to 70% by weight.

On page 12 of the CTG, EPA states the following:

“Water miscible cleaning materials with less than 30 weight percent VOC were developed and tested for offset lithographic printing in the early 1990’s. These materials were recommended as RACT in the 1993 draft CTG. These materials did not provide adequate performance and therefore they are not being used by the offset lithographic printing industry today.

There are some water-miscible or exempt solvent containing cleaning materials that contain 70 weight percent VOC or less in use today. These lower VOC content materials are capable of performing many of the tasks, such as metering roller cleaning, which cannot be performed with low VOC composite vapor pressure cleaning materials. A small number of cleaning tasks cannot be carried out with low VOC composite vapor pressure cleaning materials or reduced VOC content cleaning materials.”

Therefore, Subdivision 9 VAC5-40-8424 (E) should be revised so that it reads as follows:

E. Cleaning materials used at each offset lithographic printing operation shall meet one of the following limits, as applied:

1. A VOC content of ~~30~~ 70% by weight; or
2. A composite vapor pressure of 10 mm Hg at 20°C (68°F).

The use of cleaning materials not meeting the limits in subdivision 9 VAC5-40-8424 (E) (1) or (E)(2) is permitted provided that the quantity used does not exceed 110 gallons over any twelve consecutive months

RESPONSE: The portion of the comment concerning the 110 gallon exclusion is appropriate and changes reflecting the intent of the comment have been made to this portion of the proposal.

Regardless of what the 2006 CTG says the VOC content limit should be (i. e. 70%), the fact that a regulation already exists that applies to these sources that imposes the more restrictive standard (30%) means that we must retain the more restrictive standard. To do otherwise would be backsliding. No change has been made to the proposal as a result of this portion of the comment.

24. SUBJECT: Testing requirements needs to be revised so that it is not mandatory.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8434 (B) needs to be revised by adding the phrase “If requested” between “performed” and “to” as there is not a mandatory testing requirement contained in the CTG. Due to the significant costs involved with testing of an oxidizer, it should only be required if requested by the VADEQ. In addition, testing is usually mandated when a facility obtains an operating permit and including a provision of this nature could require a facility to retest an oxidizer that would have been recently tested.

To prevent mandatory retesting at a frequency not mandated by an operating permit, an additional sentence needs to be added to this provision allowing for previous testing to be acceptable. The sentence should be, “board may accept the results of an emission test conducted prior to the effective date of this rule, if the owner or operator provides information and data which demonstrate that an approved USEPA emission test method was employed and the test report was accepted.”

The provision needs to be revised to reflect the testing requirements necessary for a successful destruction efficiency determination for an oxidizer used to control emissions from a heatset web offset lithographic press. The nature of the emissions from heatset web offset press is such that simply following EPA protocols will result in failure forcing either re-testing or enforcement action. As such, USEPA has recommended compliance testing should be conducted at operating conditions representative of a typical production schedule.

On page 67 of the Technical Support Document for Title V Permitting of Printing Operations, USEPA states:

“5.7 WHAT ARE THE APPROPRIATE PERFORMANCE TEST CONDITIONS?”

Compliance testing for VOC and HAP emissions at printing facilities should be conducted under normal or representative operating conditions, in accordance with 40 CFR 60 subpart QQ, §60.433(a)(8); 40 CFR 63 subpart KK, §63.827(d)(1)(vii); the draft CTG for Offset Lithography (EPA, 1993b); and our National Stack Testing Guidance (EPA, 2004). These

sections require compliance testing to be conducted under normal or representative operating conditions. We also recognize that a pre-test meeting between the printing facility owner or operator and you may provide a convenient opportunity to define normal, representative operation. During such a meeting, the owner or operator may propose an operating scenario for testing that is representative of actual operating conditions and the VOC/HAP input rate to the control device. Such operating conditions should strive to minimize downtime while running as many presses as practicable, when multiple presses are being served by a common control device. The proposed operating scenario should also be reflective of a typical normal production schedule. As necessary, proposed testing conditions should rely on historical production records for establishing average coverage rates, press speeds, or ink and other input material consumption rates, run times, and average time of intermittent events such as press cleaning, web breaks or similar shutdown situations.

Because activities such as cycling of automatic blanket washing systems, press speed variations, web breaks or other short-term events in which the print quality is being checked, may be a part of normal, representative operations, we recommend that sampling continue during these short-term events while the control device is being tested. All testing conditions should be thoroughly discussed and approved by you prior to the actual test date.”

Therefore, Subdivision 9 VAC5-40-8434 (B) should be revised so that it reads as follows:

B. An emission test of the control device installed on a heatset web offset lithographic printing process dryer shall be performed under normal representative conditions, if requested, to demonstrate compliance with the provisions of 9VAC5-40-8424 B and C and 9VAC5-40-8436. The negative dryer pressure shall be established during the initial test using an airflow direction indicator, such as a smoke stick, aluminum ribbons, or a differential pressure gauge. The board may accept the results of an emission test conducted prior to the effective date of this rule, if the owner or operator provides information and data which demonstrate that an approved USEPA emission test method was employed and the test report was accepted.

RESPONSE: Concerning the request to make testing and retesting non-mandatory, this portion of the comment is appropriate and changes reflecting the intent of the comment have been made to the proposal.

Testing during normal representative conditions is required by 9VAC5-40-30 C, which is incorporated into this Article by 9VAC5-40-8438 A. No change has been made to the proposal as a result of this portion of the comment.

25. SUBJECT: Testing requirements need to be revised to preserve flexibility.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8438 (C) needs to the phrase “or one of the following methods” inserted after “Reference Method 24” as the current phrasing does not allow subdivisions 9VAC5-40-8438 (C) (1), (C) (2), (C)(3), or (C) (4) to be used to meet the condition.

Therefore, Subdivision 9 VAC5-40-8438 (C) should be revised so that it reads as follows:

C. The VOC content of as-applied inks, varnishes and other coatings, fountain solutions, and cleaning materials shall be determined using Reference Method 24 or one of the following methods:

RESPONSE: The requirement is that the VOC content be determined by Reference Method 24. It does not specify who must do that determination. The subdivisions are not alternatives to the requirement for testing with Reference Method 24. Subdivisions under subsection C clarify how the owner may demonstrate compliance with that Reference Method 24 requirement. . Subdivision 1 says that the required Reference Method 24 testing may be done by other persons in the supply chain instead of by the owner of the printing facility. Subdivision 2 says that the owner can rely upon the Reference Method 24 testing information supplied by several documents provided by the manufacturer or supplier. Subdivision 3 allows a dilution calculation using supplied Reference Method 24 information. Subdivision 4 requires the owner to test using Reference Method 24 at any time if requested by the board. No change has been made to the proposal as a result of this comment.

26. SUBJECT: Testing requirements need revision to reflect batch calculations.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8438 (C) (3) needs to have an additional sentence added that should be revised to indicate that the calculation only needs to be performed once for each batch of fountain solution or cleaning material being used, not for each use of a batch of a solution. Since more than one fountain solution or cleaning material can be used on different presses in one operation, the calculation needs to be performed for each fountain solution and cleaning material. This is important as once the printing operation determines the proper mix ratio for its fountain solution or cleaning material, the mix ratio is not altered.

Therefore, Subdivision 9 VAC5-40-8438 (C) (3) should be revised so that it reads as follows:

3. If fountain solution or cleaning materials are diluted by the owner prior to use, a calculation that combines the as supplied VOC content information provided by the manufacturer or supplier, the VOC content of the diluent, and the proportions in which they are mixed may be used to make a determination of VOC content of the as-applied fountain solution or cleaning material in lieu of Reference Method 24. The VOC content shall be calculated only once representing for each batch of press-ready, as applied, fountain solution's or cleaning material's mix ratio and recorded in the form of a batch log.

RESPONSE: Nothing in subdivision C 3 precludes a calculation "per batch" or requires a calculation "per use," so it is entirely appropriate to calculate the VOC content per batch instead of per use according to subdivision C 3. The definition of "batch" in 9VAC5-40-8422 C specifies that the supply of fountain solution is used unaltered after mixing. No change has been made to the proposal as a result of this portion of the comment.

However, because the definition of "batch" in 9VAC5-40-8422 C is only applicable to fountain solution, a change to that definition of "batch" to add "or cleaning solution" would be necessary to provide for batch determinations of VOC content of cleaning solutions. Appropriate changes reflecting the intent of this portion of the comment have been made to the proposal.

27. SUBJECT: Testing requirements need revision to preserve flexibility.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: Subdivision 9VAC5-40-8438 (E) needs to include the phrase “or one of the following methods” inserted after “Reference Method 24” as the current phrasing does not allow subdivisions 9VAC5-40-8438 (E) (1), (E) (2), (E)(3), or (E) (4) to be used to meet the condition.

Therefore, Subdivision 9 VAC5-40-8438 (E) should be revised so that it reads as follows:

E. The VOC composite partial vapor pressure of cleaning solutions shall be determined using the formula provided in 9VAC5-40-8422 C or by an appropriate test method approved by the board or one of the following methods:

RESPONSE: The requirement is that the VOC composite pressure be determined by a specified formula or an approved test method. It does not specify who must do that determination. The subdivisions are not alternatives to the requirement for testing using those methods. Subdivisions under subsection C clarify how the owner may demonstrate compliance with that testing requirement. Subdivision 1 says that the required testing may be done by other persons in the supply chain instead of by the owner of the printing facility. Subdivision 2 says that the owner can rely upon the testing information supplied by several documents provided by the manufacturer or supplier. Subdivision 3 allows a dilution calculation using supplied testing information. Subdivision 4 requires the owner to test using at any time if requested by the board. No change has been made to the proposal as a result of this comment.

28. SUBJECT: Key emission factors and retention factors need to be added.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The proposed rule does not address key emission and retention factors that are specific to the lithographic printing industry and are necessary to perform accurate emission determinations. In order to ensure that the proper emission and retention factors are applied for purposes of determining applicability and compliance, the appropriate factors need to be included in the revisions to the rule. The recommended section will clarify the methodology for estimating actual emissions in the lithographic printing industry, saving administrative time and costs for both the VADEQ and the printing industry.

The inclusion of the emission and retention factors are supported by USEPA as the CTG states on Pages 18-20:

“This section provides a summary of some of the recommendations EPA has previously made to States concerning factors that may be considered in determining VOC emissions from offset lithographic printing and letterpress printing operations. These factors are important for a number of reasons including determining whether a facility or a press exceeds the applicability thresholds recommended in this CTG or other applicability thresholds that a state may consider including in its regulations. The factors described below and other relevant factors are discussed in the 1993 draft CTG, the 1994 ACT and the 2005 Printing TSD.”

Therefore, a new subdivision needs to be added and should read as follows:

Retention Factors and Capture Efficiencies - For purposes of determining volatile organic compounds emissions from offset lithographic printing operations, the following retention factors and capture efficiencies shall be used:

- (1) A portion of the volatile organic compounds contained in inks and cleaning solution is retained in the printed web or in the shop towels used for cleaning. The following retention factors shall be used:
 - (i) A 20% volatile organic compound retention factor shall be used for heatset inks printed on absorptive substrates, meaning 80% of the volatile organic compounds in the ink is emitted during the printing process and is available for capture and control by an add-on pollution control device.
 - (ii) A 95% volatile organic compounds retention factor shall be used for sheet-fed and non-heatset web inks printed on absorptive substrates, meaning 5% of the volatile organic compounds in the ink are emitted during the printing process.
 - (iii) A 50% volatile organic compounds retention factor shall be used for cleaning solution VOC in shop towels for cleaning solutions with a volatile organic compounds composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F) if the contaminated shop towels are kept in closed containers. This means 50% of the VOC used on the shop towels is emitted during the cleaning process.

- (2) A portion of the volatile organic compounds contained in inks, fountain solutions, and automatic blanket washes on heatset presses is captured in the press dryer for control by add-on pollution control devices. Capture efficiency testing for heatset dryers is not required if it demonstrated that pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer. Continuous dryer air flow monitoring is not required. The following capture efficiencies are to be used:
 - (i) A 100% volatile organic compounds carry over efficiency shall be used for inks. All the volatile organic compounds in the ink that is not retained are assumed to be volatilized in the press dryer.
 - (ii) A 70% volatile organic compounds carry over efficiency shall be used for fountain solutions containing alcohol substitutes.
 - (iii) A 40% volatile organic compounds carry over efficiency shall be used for automatic blanket wash solutions with a VOC composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F).

RESPONSE: Retention factors and emission factors are important pieces of information that need to be used in determining how much VOC (petroleum ink oil) that is applied to the substrate is likely to be emitted. However, both retention factors and emission factors are technical information "that may be considered" according to the CTG. In certain situations, they may be different for a specific situation at a specific facility, and should not be mandatory. If there are questions about how VOC applied translates to VOC emitted for the purposes of determining "theoretical potential to emit" and applicability, the source is encouraged to consult with the printing expert at the appropriate DEQ

regional office. Appropriate changes reflecting the intent of this comment have been made to the proposal.

29. SUBJECT: The proposed rule lacks a material use alternative.

COMMENTER: Jay K. Goldscher, PGAMA.

TEXT: The proposed rule does not provide a material use alternative for facilities to determine applicability. The material use approach makes it much easier for facilities to determine their applicability and was approved by EPA in its Potential to Emit (PTE) Guidance for Specific Source Categories released on April 14, 1998.

Therefore, a new paragraph, subdivision, needs to be added and should read as follows:

Facilities may determine if they are subject to the requirements of this rule using the following methods.

- (1) A facility shall use one of the following methods to determine if it meets the applicability limits of subdivision 9VAC5-40-8380 and 9VAC5-40-8420:
 - (i) Material use records that show the facility consumes less than the following material use thresholds shall be equivalent to demonstrating actual volatile organic compound emissions did not equal or exceed three (3) tons of volatile organic compounds per 12-month rolling period:

Type of Offset Lithographic Printing Operation	12-Month Rolling Material Use Threshold
Sheet-fed	855 gallons of cleaning solvent and fountain solution additives
Non-heatset Web	855 gallons of cleaning solvent and fountain solution additives
Heatset Web	6,000 pounds of ink, cleaning solvent, and fountain solution additives

- (ii) The following monthly records and calculations demonstrating actual VOC emissions:
 - (A) The total amount of each or each class of ink, fountain solution, and cleaning solvent used in pounds or gallons
 - (B) The volatile organic compound content of each or each class of ink, fountain solution, and cleaning used:
 - (C) Volatile organic compounds calculations shall be based on the following formula using applicable retention factors identified subsection (1).

$$VOC_{Tot} = \frac{\sum_{i=1}^N W_{INK_i} \cdot VOC_{INK_i} \cdot \left(1 - \frac{RF_{INK_i}}{100}\right) + \sum_{i=1}^N VOL_{CS_i} \cdot VOC_{CS_i} + \sum_{i=1}^N VOL_{FS_i} \cdot VOC_{FS_i} + \sum_{i=1}^N VOL_{CN_i} \cdot VOC_{CN_i} \cdot \left(1 - \frac{RF_{CN_i}}{100}\right)}{2000}$$

Where:

VOC_{TOT} = Total VOC emissions, expressed as tons

W_{INK} = Weight of each ink or conventional varnish used or total of all inks and/or conventional varnishes, expressed as pounds

VOC_{INK} = Weight fraction of VOC in each ink or the ink with the highest VOC content, expressed as weight percent

RF_{INK} = Retention factor of the ink, expressed as a percent

m = Number of inks

W_{CT} = Weight of coating used or total of all coatings, expressed as gallons or pounds

VOC_{CT} = Weight fraction of VOC in each coating or the coating with the highest VOC content, expressed as pounds per gallon or weight percent

p = Number of coatings

VOL_{FS} = Volume of fountain solution concentrate and/or additive used for each fountain solution or total of all fountain solutions, expressed as gallons

VOC_{FS} = VOC content of each fountain solution concentrate and/or additive or the fountain solution concentrate and/or additive with the highest VOC content, expressed as pounds per gallon

n = Number of fountain solutions

VOL_{CS} = Volume of each cleaning solution used or a total of all cleaning solutions used, expressed as gallons

VOC_{CS} = VOC content of each cleaning solution or the cleaning solution with the highest VOC content, expressed as pounds per gallon

RF_{CS} = Retention factor of the cleaning solution, expressed as a Percent

r = Number of cleaning solutions

- (2) A facility with a heatset web offset printing press shall use one of the following methods to determine if it meets the applicability limits of subdivisions 9VAC5-40-8424 (B):

- (i) Material use records that show the facility consumes less than the following material use threshold shall be equivalent to demonstrating actual volatile organic compounds emissions did not equal or exceed ten (10) tons of volatile organic compounds per rolling twelve-month period:

Type of Offset Lithographic Printing Operation	Annual Material Use Threshold
Heatset Web	25,000 pounds of ink and varnish

- (ii) The following monthly records and calculations demonstrating actual volatile organic compounds emissions did not equal or exceed ten (10) tons of volatile organic compounds per rolling twelve-month period:

(A) The amount of each heatset ink used or total amount of all heatset inks used.

(B) The volatile organic compounds content of each heatset ink or the ink used with the highest VOC content.

(C) Volatile organic compounds calculations shall be based on the following formula using applicable retention factors identified subsection (l) of this rule:

$$VOC_{TOT} = \frac{\sum_{i=1}^n W_{INK_i} * VOC_{INK_i} * \left(1 - \frac{RF_{INK_i}}{100}\right)}{2000}$$

Where:

VOC_{TOT} = Total VOC emissions, expressed as tons

W_{INK} = Weight of ink used, expressed as pounds

VOC_{INK} = Weight fraction of VOC in the ink

RF_{INK} = Retention factor of the ink, expressed as a percent

n = Number of inks

- (3) A facility with a heatset web offset printing press shall use one of the following methods to determine if it meets the applicability limits of subdivisions 9VAC5-40-8424 (B)(3)(a) and 9VAC5-40-8424 (C):

- (i) Material use records that show the facility consumes less than the following material use threshold shall be equivalent to demonstrating actual volatile organic compounds emissions did not equal or exceed twenty five (25) tons of volatile organic compounds per rolling twelve-month period:

Type of Offset Lithographic Printing Operation	Annual Material Use Threshold
Heatset Web	62,500 pounds of ink and varnish

(ii) The following monthly records and calculations demonstrating actual volatile organic compounds emissions did not equal or exceed twenty five (25) tons of volatile organic compounds per rolling twelve-month period:

(A) The amount of each heatset ink used or total amount of all heatset inks used.

(B) The volatile organic compounds content of each heatset ink or the ink used with the highest VOC content.

(C) Volatile organic compounds calculations shall be based on the following formula using applicable retention factors identified subsection (l) of this rule:

$$VOC_{TOT} = \frac{\sum_{i=1}^n W_{INK_i} * VOC_{INK_i} * \left(1 - \frac{RF_{INK_i}}{100}\right)}{2000}$$

Where:

VOC_{TOT} = Total VOC emissions, expressed as tons

W_{INK} = Weight of ink used, expressed as pounds

VOC_{INK} = Weight fraction of VOC in the ink

RF_{INK} = Retention factor of the ink, expressed as a percent

n = Number of inks

RESPONSE: The use of a material use alternative is not supported by EPA's 2006 Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing (CTG) upon which the proposed regulation is based. There are differences between the recommendations in the CTG and the 1998 EPA document "Potential to Emit (PTE) Guidance for Specific Source Categories" referenced in the PGAMA comment. The referenced 1998 document defers to the CTGs and It is significant that the method endorsed by the 1998 PTE document is omitted from EPA's much later comprehensive 2006 update to the CTG for this source category. Also, as of this date EPA has issued no correction to the CTG to incorporate or allow the proposed material use alternative for applicability purposes. No change has been made to the proposal as a result of this comment.

High Priority Violators (Hpv's) For The First And Second Quarters, 2015

NOV's Issued from October 2014 through March 2015

BRRO	MW Manufacturers, Inc. Rocky Mount, Virginia Registration No. 30386	Discovery Date: 3/11/2015 Alleged Violations: Failure to timely submit Title V Semi-Annual Report and Annual Compliance Certifications	NOV – Issued 3/18/2015
------	---	--	------------------------

TRO	Dominion – Chesapeake Energy Center Chesapeake, Virginia Registration No. 60163	Discovery Date: 7/17/2014 Alleged Violations: Exceeded NOx 30 day rolling average in TV Permit and 2003 Federal Consent Decree	NOV – Issued 10/9/2014
TRO	Dominion – Yorktown Power Station Yorktown, Virginia Registration No. 60137	Discovery Date: 6/26/2014 Alleged violations: Failed stack test – exceeded PM emission limit in TV Permit and 2003 Federal Consent Decree.	NOV – Issued 9/22/2014, 10/3/2014
VRO	O-N Minerals Chemstone Company - Strasburg Bristol, Virginia Registration No. 80252	Discovery Date: 8/14 /2014 Alleged violations: Failed stack tests – exceeded PM emission limit in TV Permit and 2013 Consent Order.	NOV – Issued 8/19/2014, 10/22/2014, 12/3/2014

CO's issued from October 2014 through March 2015

BRRO	Virginia Electric and Power Company Altavista Power Station, Altavista, Virginia Registration No. 30859	Discovery Date: 2/12/2014 Alleged violations: Excess Emissions Report review showed exceeded 30 day rolling average and hourly CO limits for Boiler #2.	NOV – Issued 4/7/2014 Consent Order executed 1/28/2015, including \$94,476.00 civil charge.
BRRO	Wolverine Advanced Materials – Cedar Run Blacksburg, Virginia Registration No. 21240	Discovery Date: 7/14/2014 Alleged violations: Stack test not properly conducted – did not conduct three separate test runs. Catalytic oxidizer not meeting 98% destruction efficiency.	NOV – Issued 7/22/2014 Consent Order effective on 1/28/2015, including civil charge of \$29,250.00.

SWRO	Strongwell Corporation – Bristol Division Bristol, Virginia Registration No. 10211	Discover Date: 8/4/2014 Alleged violations: Failed to submit initial notification for 40 CFR Part 63, Subpart DDDDD, exceeded monthly paint usage throughput limit for 4 months, exceeded monthly VOC limit for 4 months, records not kept pursuant to 40 CFR Part 63, Subpart PPPP	NOV – Issued 9/19/2014 Consent Order executed 12/22/2014, including \$7,106.00 civil charge.
TRO	Dominion – Chesapeake Energy Center Chesapeake, Virginia Registration No. 60163	Discovery Date: 7/17/2014 Alleged Violations: Exceeded NOx 30 day rolling average in TV Permit and 2003 Federal Consent Decree	NOV – Issued 10/9/2014 Consent Order effective on 1/30/2015, including civil charge of \$16,166.00.
TRO	Dominion – Yorktown Power Station Yorktown, Virginia Registration No. 60137	Discovery Date: 6/26/2014 Alleged violations: Failed stack test – exceeded PM emission limit in TV Permit and 2003 Federal Consent Decree.	NOV – Issued 9/22/2014, 10/3/2014 Consent Order effective on 1/30/2015, including civil charge of \$106,207.00.

CO's In Development – Previously Reported NOV's

BRRO	South Boston Energy, LC South Boston, Virginia Registration No. 21526	Discover Date: 3/19/2014 Alleged violations: Late submittal of performance test results, failure to conduct RATA, failure to submit EERs for 3rd and 4th quarters of 2013, improper stack testing.	NOV – Issued 5/29/2014 Regional Enforcement staff negotiating consent order.
SWRO	Virginia City Hybrid Energy Center	Discovery date: 4/8/2013	NOV's – Issued 4/10/2013, 9/30/2013

	Wise County, Virginia Registration No. 11526	Alleged violations: Exceeded CO limit for 30 day rolling average variable permit limit for CFB Units 1 and 2.	EPA issued a letter approving Dominion's request for carbon dioxide diluent cap on 1/28/2014. Dominion recently submitted recalculated data, DEQ staff are reviewing this information. Region is currently negotiating consent order.
VRO	O-N Minerals Chemstone Company - Strasburg Bristol, Virginia Registration No. 80252	Discovery Date: 8/14 /2014 Alleged violations: Failed stack tests – exceeded PM emission limit in TV Permit and 2013 Consent Order.	NOV – Issued 8/19/2014, 10/22/2014, 12/3/2014

EPA CD's In Development – Previously Reported NOV's

<p>**The inspections at the Hopewell facilities were conducted as part of EPA Region III's Hopewell Geographic Initiative, which is an enforcement strategy created, in part to better understand the transfer of volatile organic compounds and hazardous air pollutants between facilities in the Hopewell geographic air shed.</p>			
**EPA	Hopewell Regional Wastewater Treatment Facility (WWTP) Hopewell, Virginia Hopewell City Registration No. 50735	Discovery dates – 11/07/2007 Alleged violations: Violations of 40 CFR 63 Subpart VVV (Publically Owned Treatment Works - POTW) and Reasonably Available Control Technology (RACT) that include failure to provide appropriate notification, meet control requirements, conduct inspections and monitoring, properly calculate emission values.	EPA 1 st NOV - Issued 07/06/2009 EPA 2 nd NOV - Issued 12/17/2010 Additional Information: Amended draft Consent Decree sent to WWTP October 28, 2014. Met with WWTP, EPA and DOJ on November 3, 2014, for settlement meeting. Settlement conference took place May 28-29, 2015, at EPA Region 3 Headquarters.
DEQ - PRO		Discovery dates: 02/04/2011 Alleged violations: Failure to meet 92% HAP mass removal present in wastewater.	NOV - Issued 05/25/2011 Additional Information: This NOV cites the same violations as the EPA NOV issued on 12/17/2010.
**EPA	Smurfit-Stone	Discovery dates – 07/27/2010	NOV - Issued 09/27/2010

	<p>Container Corp. / Hopewell Mill (RockTenn)</p> <p>Hopewell, Virginia</p> <p>Registration No. 50370</p>	<p>Alleged violations: Failure to operate in a manner to demonstrate compliance with HAP reduction requirements.</p> <p>Failure to submit periodic startup, shutdown and malfunction reports.</p>	<p>Additional Information: NOV meetings were held with EPA, DEQ, and the Responsible Party on 01/31/2011, 8/7/2012 and 1/27-28/2015. Administrative settlement reached between EPA and RockTenn in early 2015.</p>
--	---	---	--