To: Board of Directors  
Sacramento Metropolitan Air Quality Management District  

From: Larry Greene  
Executive Director/Air Pollution Control Officer  

Subject: Continued Public Hearing to Adopt a Resolution Approving Amendments to Rule 450, Graphic Arts Operations  

Recommendations  

1. Conduct a Public Hearing;  
2. Determine that the amendments to Rule 450 is exempt from the California Environmental Quality Act (CEQA); and  
3. Adopt the attached resolution approving the amendments to Rule 450.  

Executive Summary  

On September 25, 2008, the Board conducted a public hearing on proposed amendments to Rule 450, Graphic Arts Operations. Staff had proposed amendments to reduce the allowable VOC content of materials used in the cleaning of graphic arts ink application equipment and maintenance cleaning. Staff had also proposed amendments to address potential issues identified by U.S. EPA regarding the approvability of this rule into the State Implementation Plan (SIP) and to meet federal requirements for Reasonably Available Control Technology (RACT).  

During the public hearing, Mr. Gerry Bonetto with Printing Industries of California and Mr. Richard Crowe with PRISCO Printer’s Service testified that the proposed rule would bring hardship to the printing industry, especially to small operators. Specific concerns were addressed regarding some definitions, the recordkeeping requirements, the 15% usage limitation and the flammability of acetone.  

The Board continued the public hearing to October 23, 2008 and directed Staff to work with Mr. Bonetto and Mr. Crowe to resolve the issues and revise the proposed rule amendments as appropriate. Staff held separate discussions with Mr. Bonetto and Mr. Crowe. Staff also sent a letter to Mr. Bonetto that proposed resolutions to issues raised at the public hearing. As a result, Staff has made the following revisions to the proposed amendments for Rule 450:  

- Revised the definitions by:  
  - Renaming “Other On-Press Component” to “On-Press Component” and modifying the definition for clarification.
Modifying the definition for “Blanket and Roller Washes” and “Removable Press Component” for clarification.

Reformatted and revised the table in Section 302.1 to clarify the limits that apply to on-press components and removable press components.

Mr. Bonetto concurs with the proposed revisions.

Attachments

The table below identifies the attachments to this memo.

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Background

At the September 25, 2008 public hearing, Staff proposed amendments to reduce the allowable VOC content of materials used in the cleaning of graphic arts ink application equipment, surface preparation, product cleaning, and maintenance cleaning. The proposed limits have been implemented in the South Coast Air Quality Management District (SCAQMD) and have been demonstrated to be feasible. The San Joaquin Valley Unified Air Pollution Control District (SJUAPCD) has also adopted these requirements.

Staff also proposed amendments to address potential issues identified by U.S. EPA regarding the approvability of this rule into the State Implementation Plan (SIP) and to meet federal requirements for Reasonably Available Control Technology (RACT). The proposed amendments will conform to recent Control Technique Guideline documents (CTGs) that establish presumptive RACT for graphic arts operations regulated under Rule 450.

During the public hearing, two members of the public, Gerry Bonetto (Printing Industries of California) and Richard Crowe (PRISCO Printer’s Service), expressed the following concerns with the proposed amendments to Rule 450:

- Clarify the definitions of “Other On-Press Components” and “Removable Press Components”.
- Require only three years of recordkeeping for small sources.
- Eliminate the 15% usage limitation for metering roller/printing plate cleaners.
- Address the flammability issues associated with using acetone as a cleaning solvent.
After hearing testimony from the public and discussing the above issues with Staff, the Board continued the public hearing for Rule 450 to October 23, 2008, and directed Staff to resolve the issues raised in the testimony.

Discussion of Issues Raised at the September Board Hearing

At the September Board Hearing, Mr. Bonetto and Mr. Crowe gave testimony on the proposed amendments to Rule 450. The following issues were raised during testimony and discussed with the commenters subsequent to the Board Hearing.

Definition of Other On-Press Components and Removable Press Components: Mr. Bonetto requested that the term “On-Press Component” be defined in the rule, and that the definition be clarified to distinguish between an “On-Press Component” and a “Removable Press Component”. After discussions with Mr. Bonetto, Staff revised the proposed term from “Other On-Press Component” to “On-press Component” and the definition to include on-press components. In addition, the table of VOC standards for cleaning materials in Section 302.1 was revised and reformatted to reflect the changes that were requested.

Duration of Records: Mr. Bonetto stated other air districts, including SCAMQD and SJVUAPCD, required records to be retained for 3 years, not 5 years as proposed. He also stated that the requirement to maintain records for 5 years may burden small operators with additional costs and that non-major sources should be required to keep records for only 3 years. Staff noted that the requirement to maintain records for 5 years has been in place since March 23, 2000. In his response letter dated October 7, 2008, Mr. Bonetto recognized that the requirement for Rule 450 has been in place since 2000, and that the South Coast and San Joaquin Valley districts also require 5 years. As a result, Mr. Bonetto will not oppose the recordkeeping requirement and will support this provision in the rule.

15% Usage Limitation for Metering Roller/Printing Plate Cleaners: Mr. Bonetto initially submitted a comment letter on May 7, 2008, requesting that Staff eliminate the 15% volumetric limit on the usage of metering roller/printing plate cleaners. In response to this letter, Staff analyzed the emissions impact of removing the 15% usage limit, and concluded that removing the requirement immediately would lead to an increase in emissions. To avoid an increase in emissions, Staff proposed to sunset the 15% usage limit on 1/1/2011, when the VOC limits for the metering roller cleaners, printing plate cleaners and blanket and roller washers will all be reduced to 100 grams per liter. In addition, the proposal included an exemption from the 15% limitation for early compliance by presses using metering roller/printing plate cleaners containing no greater 100 grams per liter of VOC.

At the public hearing, Mr. Bonetto again requested that the 15% limit on the usage of metering roller/printing plate cleaners be removed from the rule language. Mr. Bonetto stated that this 15% limit will create compliance issues with small printers. As an example, Mr. Bonetto stated that a printer in our District had been issued a Notice of Violation (NOV) for exceeding the 15% limit.
The 15% limit was added in the March 23, 2000 amendment of the rule as a compromise in exchange for allowing metering roller/printing plate cleaners a higher VOC vapor pressure than is allowed for blanket and roller washes. Regarding the NOV issued by the District, the case file shows that the NOV was rescinded. The source had incorrectly logged usage volumes, but when the recordkeeping problem was resolved, Staff determined that the source did not exceed the 15% limit. No other NOVs for exceeding the 15% limit have been issued.

Staff discussed the 15% usage limit with Mr. Bonetto. After the discussion, Staff proposed an alternative option which may eliminate the 15% usage limit. Staff proposed that if current metering roller/printing plate cleaners can comply with the current requirement for blanket and roller washers (300 g/l VOC or 10 mm Hg vapor pressure), then Staff may be able to remove the 15% usage limit from the rule. However, since no sources have exceeded the 15% usage limit, Staff believed that there would be more impact on printers from switching to new metering roller/printing plate cleaners than from keeping the 15% limit in effect until January 1, 2011, as proposed.

Staff requested that Mr. Bonetto check on the availability of the cleaning products and suggest a compliance timeframe for implementing the blanket and roller washers limits for metering roller/printing plate cleaners. Mr. Bonetto responded to Staff’s request. Mr. Bonetto stated that since there were at least two available products that would meet the 100 grams per liter limit necessary to qualify for the proposed exemption from the 15% limit, he would no longer oppose the 15% usage limit.

Mr. Crowe also testified that the 15% usage limit does not make sense because the use of impregnated cloth cleaning systems is reducing the volume of blanket and roller washes. Staff contacted Mr. Crowe to discuss the issue further. Mr. Crowe indicated that he knew one source that could not comply with the 15% limit. Staff reviewed the source and determined that the source is operating under a variance and uses a metering roller/printing plate cleaner that contains no more than 100 g/l of VOC. This source will be in compliance with the rule if the proposed amendments are adopted.

**Flammability issues with using acetone as a cleaning solvent:** Mr. Crowe testified that the use of acetone or products containing a high percentage of acetone may create a fire hazard, especially in small print shops. In response, Staff reviewed the characteristics of acetone and compared them with conventional solvents and other potential replacement solvents. Acetone has characteristics that are similar to conventional solvents; however, acetone has a lower flash point compared to other solvents. Nevertheless, acetone vapors cannot cause an explosion until the vapor concentration exceeds 26,000 ppm. Operating under state and federal Occupation Safety and Health Administration (OSHA) guidelines by working with flammable materials in well-ventilated areas, it would be difficult to achieve concentrated streams of such vapors. Furthermore, many sources in the South Coast AQMD are currently using non-acetone cleaning products to comply with the 100 g/l limit.
Proposed Revisions to Rule Amendments

Staff sent a letter to Mr. Bonetto on October 3, 2008, proposing resolutions to the above issues. Staff had further discussion with Mr. Bonetto on October 6, 2008, to clarify the revised proposed rule. Mr. Bonetto responded to Staff’s letter in a letter dated October 7, 2008. (These letters are included in Attachment C.) As a result, Staff has revised the original proposal to include the following:

- Revised the definitions by:
  - Renaming “Other On-Press Component” to “On-Press Component” and modifying the definition for clarification.
  - Modifying the definition for “Blanket and Roller Washes” and “Removable Press Component” for clarification.
- Reformatted and revised the table in Section 302.1 to clarify the limits that apply to on-press components and removable press components.

Mr. Bonetto concurs with the proposed revisions.

Environmental Review and Compliance

Staff finds that the proposed rule is exempt from the California Environmental Quality Act as an action by a regulatory agency for protection of the environment (Class 8 Categorical Exemption, Section 15308 State CEQA Guidelines) and because it can be seen with certainty that there is no possibility that the activity in question may have a significant adverse effect on the environment (Section 15061(b)(3), State CEQA Guidelines).

California Public Resources Code (Section 21159) requires an environmental analysis of the reasonably foreseeable methods of compliance. Compliance is expected to be achieved by the replacement of current cleaning solvents with compliant products. Compliant products may contain higher levels of exempt compounds, but these exempt compounds are generally less toxic than the VOC solvents they replace. Some replacement compounds may have greater flammability and lower flash points than currently used materials, but worker safety is sufficiently protected by applicable state and federal OSHA regulations. The proposed rule will not increase emissions and will not cause any other significant adverse effects on the environment; therefore Staff has concluded that no environmental impacts will be caused by compliance with the proposed rule.
Conclusion

The proposed amendments will achieve VOC emission reductions that will help the District attain the federal 8-hour ozone standard, and will fulfill a state plan commitment to adopt more stringent solvent cleaning standards based on “all feasible measures.” The proposed amendments will also satisfy federal RACT and other requirements that will allow EPA to approve it for inclusion in the SIP. Staff recommends that the Board determine that the proposed rule is exempted from CEQA and approve the attached resolution adopting the rule as proposed.

Respectfully submitted,

Larry Greene
Executive Director/Air Pollution Control Officer

Approved as to from:

Kathrine Pittard
District Counsel

Attachments