To: Board of Directors  
Sacramento Metropolitan Air Quality Management District  

From: Larry Greene  
Executive Director/Air Pollution Control Officer  

Subject: Adopt a Resolution Approving Amendments to Rule 451, Surface Coating of Miscellaneous Metal Parts and Products  

Recommendations  

1. Determine that the amendments to Rule 451 are exempt from the California Environmental Quality Act (CEQA); and  
2. Adopt the attached resolution approving the amendments to Rule 451.  

Executive Summary  

Rule 451, Surface Coating of Miscellaneous Metal Parts and Products, currently establishes requirements on: (1) the maximum amount of volatile organic solvents used in coating, coating removal (stripping), surface preparation, and cleanup operations for metal parts and products, and (2) work practice requirements to minimize evaporation of those solvents. Staff is proposing to amend Rule 451 to incorporate the federal minimum level of control for the miscellaneous metal parts and products surface coating source category.1 The proposed amendments will lower the existing coating limits for extreme performance coatings, aluminum coatings for window and door frames, and non-skid coatings. The proposed amendments will also add the etching filler coating category and its VOC content limits and include an exemption for automobile and light-duty truck assembly coating operations. All facilities in Sacramento County that are subject to Rule 451 already meet the proposed limits.  

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1 The Clean Air Act Section 182(b)(2)(A) requires a minimum control level in nonattainment areas with moderate or worse ozone air quality problems to reduce ozone’s respiratory and cardiovascular health impacts. We are classified as having severe ozone air quality problems.
Background

The District is designated as a “severe” nonattainment area for the federal 8-hour ozone standard. Ground level ozone is a secondary pollutant formed from photochemical reactions of nitrogen oxides (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Ozone is a strong irritant that adversely affects human health and damages crops and other environmental resources. As documented by the Environmental Protection Agency in the most recent Criteria Document for ozone, both short-term and long-term exposure to ozone can irritate and damage the human respiratory system, resulting in:

- decreased lung function;
- development and aggravation of asthma;
- increased risk of cardiovascular problems such as heart attacks and strokes;
- increased hospitalizations and emergency room visits; and
- premature deaths.

Section 182(b)(2)(A) of the federal Clean Air Act requires Reasonably Available Control Technology (RACT) in nonattainment areas classified as “moderate” or worse. EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

On October 7, 2008, EPA published a Control Techniques Guidelines (CTG) document for Miscellaneous Metal and Plastic Parts Coatings. This CTG provides the presumptive minimum RACT for metal parts and products coating. The proposed amendments to Rule 451 will satisfy the RACT requirements for the miscellaneous metal parts and products coating source category.

Summary of Proposed Rule Amendments

The major proposed rule changes are summarized below. Please refer to Appendix B of the Staff Report (Attachment C) for a more detailed description of changes.

- Reduce the VOC limit from 420 grams per liter to 275 grams per liter for baked aluminum coatings for window frames/door frames.
• Reduce the VOC limit from 420 grams per liter to 360 grams per liter for baked extreme performance coatings.
• Reduce the VOC limits from 420 grams per liter to 340 grams per liter for air-dried non-skid coatings and from 360 grams per liter to 275 grams per liter for baked non-skid coatings. The non-skid coating category will have the same VOC content limit as the “all other coatings” category. For simplicity, the non-skid coating category will be removed, and any non-skid coating applied to miscellaneous metal parts and products would be subject to the VOC limit of the “all other coatings” category.
• Add the etching filler coating category with VOC limits of 420 grams per liter for air-dried and baked coatings.
• Add an exemption for automobile and light-duty truck coating operations performed on an assembly line.

Impact on Businesses

Staff has found that all facilities located in Sacramento County subject to Rule 451 are already in compliance with the proposed amendments.

District Impacts

The proposed amendments are not expected to result in additional costs to the District because no sources are affected by the proposed rule amendments.

Emission Impacts

Even though there are changes to VOC limits, since no sources in Sacramento County must change products or practices, no emission reductions are expected from these amendments.

Environmental Review and Compliance

California Public Resources Code (Section 21159) requires an environmental analysis of the reasonably foreseeable methods of compliance. Since all sources meet the proposed limits, this provision is not applicable.

Staff finds that the proposed rule is exempt from the California Environmental Quality Act: (1) because it is an action by a regulatory agency for protection of the environment (Class 8 Categorical Exemption, Section 15308 State CEQA Guidelines), and (2) 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).
Public Outreach and Comments

Staff held a public workshop to discuss the proposed Rule 451 amendments on September 16, 2010. The noticing for this workshop included:

- Mailing and/or e-mailing notices to:
  - interested and affected parties, including all permitted stationary sources (except gas stations and dry cleaners); since facilities subject to Rule 451 have permits, they were included in the notice;
  - industry associations, coating manufacturers and distributors; and
  - all persons who have requested rulemaking notices.
- Publishing a notice as a display ad in the Sacramento Bee.
- Posting a notice on the District web site. The draft rule and staff report were available for public review prior to the public workshop.

A legal notice for this public hearing was published in the Sacramento Bee on September 27, 2010. The notice was also mailed and/or e-mailed to attendees of the public workshop, permitted stationary sources subject to Rule 451, and all persons who requested rulemaking notices.

Staff received oral comments and questions from the attendees at the public workshop, as well as written comments from coating manufacturers and distributors. The responses to oral comments from the workshop and written comments during the public comment period are included in Appendix C of the Staff Report (Attachment C). EPA and California Air Resources Board reviewed the proposed amendments and had no comments.

The primary comments received during the public workshop and public comment period concerned the proposed solids content in the definition of “pretreatment wash primer” and the proposed prohibition on atomizing cleanup and surface preparation materials. These comments are discussed below.

Proposed solids content in the definition of “pretreatment wash primer”: In the current version of Rule 451, pretreatment wash primers must contain at least 0.5% acid by weight, but there is no restriction on the solids content. Staff had proposed to add a solids content of no more than 12% by weight to this definition to be consistent with the CTG for Miscellaneous Metal and Plastic Parts Coatings. Oral comments at the workshop and written comments from coating manufacturers and distributors expressed concerns that for some situations, VOC-compliant pretreatment wash primers may not be available if the coating must contain no more than 12% solids by weight. To address the need for higher solids content in those situations, Staff proposed to add the category “etching filler”. The CTG includes “etching filler,” defined as a coating which contains at least 0.5% acid by weight and less than 23% solids by weight, and is used instead of pretreatment wash primer followed by a primer. The VOC limit for baked and air-dried coatings for “etching filler” are 420 grams per liter and are the same as “pretreatment wash primer.” These changes are consistent with the changes requested in written comments from PPG Industries, a coating manufacturer. The changes were discussed with a local distributor who attended the public workshop, and the distributor agreed the changes satisfactorily addressed the issue.

Proposed prohibition on atomizing cleanup and surface preparation materials: Staff had proposed to add a CTG-recommended work practice requirement prohibiting the atomization
of cleanup and surface preparation materials. Oral comments at the workshop expressed concern that prohibiting this practice will require operators to prepare surfaces or clean equipment using solvent-laden towels or rags, a less effective cleaning technique that may increase spillage and VOC emissions. The CTG did not recommend a VOC limit for materials used for cleanup or surface preparation; however, the current VOC limit for these materials in Rule 451 is 25 grams per liter. Staff discussed this issue with EPA. EPA responded that the stringent 25 grams per liter VOC content limit for cleanup and surface preparation materials may be used in lieu of the prohibition on atomizing cleanup and surface preparation materials. Consequently, Staff is no longer proposing to prohibit atomization of cleanup and surface preparation materials.

Additionally, after the rule and Staff Report were posted for this hearing, Staff received a written comment from American Coatings Association. This association is located in Washington D.C. and is a non-profit organization that represents coating manufacturers, suppliers and distributors and technical professionals. The comment concerned changes to the rule’s applicability section. Staff proposes to clarify that the rule applies to any person who supplies, sells, offers for sale, manufactures, or distributes any coatings, coating removers (strippers), surface preparation materials, and cleanup materials. The comment stated that the proposed changes to the applicability would make coating suppliers liable for choices made by end-users. The comment stated that coating manufacturers should not be held responsible for products that were formulated, labeled, and recommended for one purpose but used by the end-user for a different purpose.

The noticed proposed changes to the applicability are consistent with other District coating rules. Although the current Section 102 (Applicability) did not explicitly list suppliers, sellers, manufacturers, and distributors, Section 402 requires any person who sells coatings, coating removers, surface preparation materials, and cleanup materials to provide a material data sheet that must include the product’s name, code, manufacturer and VOC content to the purchaser at the time of sale. Sections 403 and 404 specify the calculation methods for determining the VOC content of a coating, coating remover, or cleanup/surface preparation material, and Section 502 specifies the appropriate test methods to determine the contents of a product such as VOC, acid, metal and solids content. Suppliers, sellers, manufacturers, and distributors have been complying with these sections. To clarify that only Sections 402, 403, 404, and 502 apply to suppliers, sellers, manufacturers, and distributors, Staff made a non-substantive change to the proposed rule language. This will clarify that the manufacturers are not liable for the situations described in the comment letter. The revised proposed language for Rule 451 is included in Attachment B.
Conclusion

The proposed amendments to Rule 451 are needed to satisfy federal requirements to implement Reasonably Available Control Technology for the coating of miscellaneous metal parts and products. The proposed amendments will not affect any sources in the District because all sources subject to Rule 451 in Sacramento County are already in compliance with the proposed amendments. The applicability was clarified to include suppliers, sellers, distributors, and manufacturers; however these businesses have been complying with the sections applicable to them and are not impacted by the proposed amendments. Staff recommends that the Board determine that the proposed amendments to the rule are exempt from CEQA and approve the attached resolution approving the rule amendments as proposed.

Respectfully submitted,              Approved as to form:

Larry Greene                      Kathrine Pittard
Executive Director/Air Pollution Control Officer  District Counsel

Attachments
Attachment A

Board Resolution
Attachment B

Draft Rule 451
Attachment C

Staff Report
Attachment E

Evidence of Public Notice