SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Staff Report
Proposed Amended Rule 1107 – Coating of Metal Parts and Products

January 2020

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CHAPTER 1: BACKGROUND

INTRODUCTION

Rule 1107 – Coating of Metal Parts and Products was adopted in June 1979 to control volatile organic compound (VOC) emissions from metal coating operations. The rule has been amended 17 times since, the last in January 2006. Rule 1107 establishes VOC limits for 22 categories of coatings classified as air-dried (cured below 194 degrees F) or baked (cured at or above 194 degrees F). VOC limits are prescribed for metal coatings in general and include multiple specialty categories. The broadest of the specialty categories include prefabricated architectural one- and multi- component coatings and extreme high-gloss coatings. The remainder of the coating categories encompasses mostly niche operations.

Non-attainment areas are required to implement recommendations in applicable Control Techniques Guidelines (CTG) as soon as practicable. The United States Environmental Protection Agency (U.S. EPA) issued a CTG for Miscellaneous Metal and Plastic Parts Coatings in September 2008.[1] Proposed Amended Rule 1107 is needed to address Reasonably Achievable Control Technology (RACT) deficiencies raised by U.S. EPA for certain exemptions that are overly broad. The California Air Resources Board (CARB) also requested that the limits for baked metallic and baked camouflage coatings be reduced consistent with other air districts.

BACKGROUND

Metal coatings protect, and in some cases, beautify the substrate they are applied upon. These coatings provide some level of protection from impact, abrasion, and corrosion. They may also need to retain a consistent color and gloss level over an extended period of time. In addition to the desired properties of coating after curing, coatings must also have other acceptable characteristics, especially during application. This can include shelf life, sprayability, rheology, flow, pot life (for multi-component coatings), time-to-tack free, time-to-dry to recoat, and time until full cure. Quick drying times are not always the most desired feature. Acceptable drying times usually fall within a range that varies per the coating process and operation.

The industry sectors that make extensive use of coatings applied to metal parts and products include:

- Steel Product Manufacturing from Purchased Steel (NAICS 3312)
- Cutlery and Handtool Manufacturing (NAICS 3322)
- Architectural and Structural Metals Manufacturing (NAICS 3323)
- Boiler, Tank, and Shipping Container Manufacturing (NAICS 3324)
- Hardware Manufacturing (NAICS 3325)
- Coating, Engraving, Heat Treating, and Allied Activities (NAICS 3328)
- Other Fabricated Metal Product Manufacturing (NAICS 3329)
- Machinery Manufacturing (NAICS 333)
- Computer and Electronic Product Manufacturing (NAICS 334)
- Electrical Equipment, Appliance, and Component Manufacturing (NAICS 335)

[1] Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, U.S. Environmental Protection Agency, Office of Air Quality Planning Standards, Sector Policies and Program Division, September 2008, https://www3.epa.gov/airquality/ctg_act/200809_voc_epa453_r-08-003_misc_metal_plasticparts_coating.pdf

- Motor Vehicle Parts Manufacturing (NAICS 3363)
- Other Transportation Equipment Manufacturing (NAICS 3369)
- Metal Household Furniture Manufacturing (NAICS 337124)
- Institutional Furniture Manufacturing (NAICS 337127)
- Office Furniture (except Wood) Manufacturing (NAICS 337214)
- Showcase, Partition, Shelving, and Locker Manufacturing (NAICS 337215)
- Other Miscellaneous Manufacturing (NAICS 3399)

The industries that supply coatings to facilities are covered by the Paint and Coating Manufacturing sector (NAICS 325510).

REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)

The U.S. EPA has defined Reasonably Available Control Technology (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. RACT for a particular source is determined on a case-by-case basis, considering the circumstances of the individual source. Non-attainment areas are required to implement recommendations in applicable Control Techniques Guidelines (CTG) as soon as practicable[2]. The U.S. EPA issued a CTG for Miscellaneous Metal and Plastic Parts Coatings in September 2008[3]. As part of the development of the CTG, U.S. EPA evaluated the sources of VOC emissions from the metal products coating industries and the available control approaches for addressing these emissions, including the costs of such approaches.

NEED FOR PROPOSED AMENDED RULE 1107

PAR 1107 is needed to address several RACT deficiencies identified by the U.S. EPA. In particular, the exemptions for high-performance architectural, vacuum-metalizing, and pretreatment coatings (paragraph (f)(4)) and for electrocoatings (paragraph (f)(8)) are overly broad. In both cases, the exemption threshold is in excess of those allowed under the CTG. Additionally, U.S. EPA recommended improving work practices for storage and handling of metal coatings. CARB requested that the VOC limits for baked metallic and baked camouflage coatings be reduced from 420 grams/liter (g/L) to 360 g/L to improve rule effectiveness as these limits have been in place in multiple air districts for two decades. Other amendments update test methods, remove obsolete language, and clarify rule language.

AFFECTED INDUSTRIES

Approximately 1,100 facilities are subject to existing Rule 1107. Proposed Amended Rule 1107 (PAR 1107) will not result in direct emission reductions and will not increase costs. Facilities are already using compliant coatings in the high-performance architectural, vacuum-metalizing, and pretreatment coatings and electrocoating categories. Excluding electrocoating, these specialty

2 Title 40, Code of Federal Regulations (CFR), Section 51.912

3 Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, U.S. Environmental Protection Agency, Office of Air Quality Planning Standards, Sector Policies and Program Division, September 2008, https://www3.epa.gov/airquality/ctg_act/200809_voc_epa453_r-08-003_misc_metal_plasticparts_coating.pdf

coating categories already have a 420 g/L VOC limit with numerous compliant coatings available for each category. Electrocoatings are a low-VOC alternative to traditional metal coatings. Reducing the limits for baked metallic and baked camouflage coatings will not result in emission reductions as these technologies have been in use for two decades. The work practice for storage and handling of metal coatings, application equipment, and waste materials consists of keeping VOC-containing or VOC-laden materials in closed containers when not in use. The updated test methods and removal of obsolete language provide clarification only.

PUBLIC PROCESS

PAR 1107 is being developed through a public process. A Public Workshop was held December 4, 2019.

CHAPTER 2: SUMMARY OF PROPOSED AMENDED RULE 1107

INTRODUCTION

Proposed Amended Rule 1107 (PAR 1107) will revise certain exemptions to be consistent with Reasonable Available Control Technology (RACT) requirements as recommended in United States Environmental Protection Agency's (U.S. EPA's) *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (September 2008)*. Baked metallic and baked camouflage coating limits will be reduced to be consistent with other air districts. Other amendments address work practices for coating-related activities, update test methods, remove obsolete provisions, and add clarifications.

PROPOSED AMENDED RULE 1107

Definitions (Subdivision (b))

A definition for Energy Curable Metal Coatings has been included to recognize this technology and provide manufacturers a test method to measure volatile organic compound (VOC) content from these coatings. An Energy Curable Coating is a single-component reactive product that cures when exposed to visible light, ultra-violet light, or an electron beam. ASTM D7767-11 (2018) – Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them may be used to calculate VOC content for Energy Curable Metal Coatings. Manufacturers will be able to use this test method to more accurately determine VOC content for recordkeeping and reporting. The method relies upon testing the coating for VOC content prior to admixing with known interferences such as pigments and sunblockers. Manufacturers then use U.S. EPA Reference Method 24 (Title 40, Code of Federal Regulations, Part 60, Appendix A) – Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings to determine the VOC content of the known interferences separately. The overall VOC content is calculated from the results of ASTM D7767-11 and U.S. EPA Reference Method 24. The separation aspect limits the utility of the method for compliance samples taken from the field as there is currently no way to separate the coatings after admixing them. Staff will continue to work with interested parties to develop an acceptable procedure to further incorporate into ASTM D7767-11. However, until the field sample issue is resolved, compliance sample testing will continue to be conducted using U.S. EPA Reference Method 24 or other applicable test methods.

The test method for extreme high-gloss coating has been updated to identify the correct method. The test method identified in high-performance architectural coatings has been updated to reflect changes made in Architectural Aluminum Manufacturer Association publications.

Requirements (Subdivision (c))

Obsolete language in the table containing VOC limits in paragraph (c)(2) has been removed. VOC limits for Baked Metallic and Baked Camouflage are reduced from 420 grams/liter (g/L) to 360 g/L. The technology has been in use for two decades and these limits have been in place in multiple air districts during that time.

Work practices for storage and handling of metal coatings, application materials, and waste materials is included in paragraph (c)(4). VOC emissions may be reduced by storing VOC-containing coatings, thinners, and coating-related waste materials in closed containers. VOC-laden application tools, including brushes, cloth, or paper, shall be stored and disposed in closed containers.

Methods of Analysis (Subdivision (e))

For clarity, the titles have been added to: (e)(1)(A) for U.S. EPA Reference Method 24; (e)(2) for ASTM D1613; (e)(5) for U.S. EPA Test Methods 25, 25A and 18 and CARB Method 422.

Paragraph (e)(4) adds additional test methods to determine capture efficiency to reflect changes to U.S. EPA's technical guidance document[1]. The test methods in the 1995 guidelines were codified into Title 40, Code of Federal Regulations, Part 51, Appendix M, Methods 204-204F. Although several test methods are listed in paragraph (e)(4) for determination of capture efficiency and control device efficiency, staff's experience is that the majority of capture efficiency determinations will utilize EPA Method 204 and control efficiency determinations will utilize South Coast AQMD Methods 25.1 and/or 25.3. Other methods listed in paragraph (e)(4) may be used in rare circumstances but are most often not applicable.

Paragraph (e)(6) includes the guideline document that complement the referenced test procedure.

Exemptions (Subdivision (f))

Obsolete language has been removed from the exemption in paragraph (f)(2), the provision became effective July 1, 2006.

The exemption in paragraph (f)(4) for high-performance architectural, vacuum-metalizing and pretreatment coatings used at facilities that emit a total of 10 tons or less of VOC per year will be eliminated. The categories listed in this exemption already are allowed specialty VOC content coating limits of 420 g/L. The only facility that qualified under the existing high-performance architectural coating category already vents emissions to a control device. Previous rule amendments have eliminated the one gallon per day exemption. There are no known impacts from removing this exemption.

The high volume (66 gallon per month) exemption in paragraph (f)(8) for electrocoating will be eliminated. Advances in electrocoating technology have made electrocoating a low-VOC, non-Hazardous Air Pollutant (HAP) extension of the electroplating line. The electrocoating process is now a low-VOC alternative to traditional VOC-containing metal painting.

The exemption in paragraph (f)(8) adds flexibility to allow other spray equipment options where high viscosity coatings are used, typically in industrial maintenance applications. This situation may arise for very high solids coatings that would otherwise need to be thinned in order to be sprayed with HVLP guns. Thinning the coating would increase the VOC content. This exemption is consistent with similar provisions in Rule 1168 – Adhesive and Sealant Applications and Rule 1106 – Marine and Pleasure Craft Coatings.

[1] Guidance Document for Correcting Common VOC & Other Rule Deficiencies, U.S. Environmental Protection Agency, August 2001, https://ww3.arb.ca.gov/drdb/lbb2001.pdf

CHAPTER 3: IMPACT ASSESSMENT

INTRODUCTION

PAR 1107 is applicable to approximately 1,100 metal coating facilities. These facilities include fabricated metal product manufacturing, architectural and structural metals manufacturing, hardware and machinery manufacturing, and motor vehicle parts manufacturing among other categories. It does not include coatings used for aerospace assembly, magnet wire, marine craft, motor vehicle, metal container, and coil coating operations, or for architectural components coated at the structure site.

RULE ADOPTION RELATIVE TO COST EFFECTIVENESS

PAR 1107 is not expected to result in direct emission reductions and will not increase costs.

COMPLIANCE COSTS

No additional costs are expected to be incurred. Facilities are already using compliant coatings in the high-performance architectural, vacuum-metalizing, and pretreatment coatings and electrocoating categories. Those specialty coating categories already have a 420 g/L limit with numerous compliant coatings available for each category. Reducing the limits for baked metallic and baked camouflage coatings reflects technology that has been in use for the past two decades. The work practice for storage and handling of metal coatings, application equipment, and waste materials consists of keeping VOC-containing or VOC-laden materials in closed containers when not in use. The exemption for transfer efficiency on high-viscosity coatings provides added flexibility. The updated test methods and removal of obsolete language provide clarification only.

SOCIOECNOMIC ASSESSMENT

The amendments proposed are not expected to impose any additional costs to facilities or result in other socioeconomic impacts. The proposed amendments do not significantly affect air quality or emissions limitations since facilities are already using compliant coatings, and therefore, no socioeconomic analysis is required under California Health and Safety Code Sections 40440.8 and 40728.5.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, will prepare a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the proposed project. Proposed Amended Rule 1107 has been reviewed pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. Since Proposed Amended Rule 1107 does not contain any project elements requiring physical modifications that would cause an adverse effect on the environment, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity

Proposed Amended Rule 1107 is needed to revise exemptions to be consistent with Reasonable Available Control Technology requirements as recommended in United States Environmental Protection Agency's *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (September 2008)*. Other amendments address work practices for coating-related activities, update test methods, remove obsolete provisions, align requirements with other air districts, provide flexibility, and add clarifications.

Authority

The South Coast AQMD Governing Board has authority to adopt Proposed Amended Rule 1107 pursuant to the California Health and Safety Code Sections 39002, 40000, 40001, 40440, 40702, 40725 through 40728, and 41508 and Title 40 of the Code of Federal Regulations (CFR) Section 51.912.

Clarity

Proposed Amended Rule 1107 is written or displayed so that its meaning can be easily understood by the persons directly affected by it. The removal of obsolete provisions and clarifications will improve the clarity.

Consistency

Proposed Amended Rule 1107 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

Non-Duplication

Proposed Amended Rule 1107 will not impose the same requirements as any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

Reference

By adopting Proposed Amended Rule 1107 the South Coast AQMD Governing Board will be implementing, interpreting or making specific the provisions of the Title 40 CFR 51.192.

COMPARATIVE ANALYSIS

Under California Health and Safety Code Section 40727.2, the South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal requirements, existing or proposed South Coast AQMD rules and air pollution control requirements and guidelines which are applicable to metal coating operation. See Table 3-1 below.

Table 3-1: PAR 1107 Comparative Analysis

Rule Element	PAR 1107	40 CFR Subpart MMMM National Emission Standard for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products	40 CFR Subpart NNNN National Emission Standard for Hazardous Air Pollutants (NESHAP): Surface Coating of Large Appliances	Control Techniques Guidelines for Metal Furniture Coatings	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts	Control Techniques Guidelines for Large Appliance Coatings
Applicability	Coating of metal parts and products excluding aerospace assembly, magnet wire, marine craft, motor vehicle, metal container, and coil coating operations, or for architectural components coated at the structure site	Metal coating operations excluding aerospace, large appliances, metal wire or cable, marine craft, coil coating, motor vehicles located at a major source of Hazardous Air Pollutant emissions	Metal coating operations on large appliances located at a major source of Hazardous Air Pollutant emissions	Coatings on metal furniture	Metal coatings excluding aerospace, large appliances, metal wire or cable, marine craft, coil coating, motor vehicles	Coatings on large metal appliances
VOC Limits	VOC limits by individual coating category or use of add-on controls; VOC limits are the same or lower than U.S. EPA Control Techniques Guidelines	Organic Hazardous Air Pollutant (HAP) emissions limited to 0.31 kg organic HAP per liter of coating solids used during each 12-month compliance period	Organic Hazardous Air Pollutant (HAP) emissions limited to 0.23 kg organic HAP per liter of coating solids used during each 12-month compliance period	VOC limits by individual coating category or use of add-on controls; all VOC limits are higher than PAR 1107	VOC limits by individual coating category or use of add-on controls; VOC limits are the same or higher than PAR 1107	VOC limits by individual coating category or use of add-on controls; all VOC limits are the same as PAR 1107
Transfer Efficiency	Use of HVLP or equivalent transfer efficiency	None	None	Use of HVLP or equivalent transfer efficiency	Use of HVLP or equivalent transfer efficiency	Use of HVLP or equivalent transfer efficiency
Work Practices	Storage, use, and disposal of coatings and waste; VOC limits and work practices for solvent cleaning	None	None	Storage, use, and disposal of coatings and waste; VOC limits and work practices for solvent cleaning	Storage, use, and disposal of coatings and waste; VOC limits and work practices for solvent cleaning	Storage, use, and disposal of coatings and waste; VOC limits and work practices for solvent cleaning

Reporting	None	Semiannual compliance, performance test reports, startup, shutdown, and malfunction reports	Semiannual compliance, performance test reports, startup, shutdown, and malfunction reports	None	None	None
Notification	None	Initial, performance test compliance status, and continuous emission monitor	Initial and compliance status	None	None	None
Recordkeeping	Compliance documentation maintained for two years	Compliance documentation maintained for five years	Compliance documentation maintained for five years	None	None	None

APPENDIX A: COMMENTS AND RESPONSES

Comment Letter #1
Metropolitan Water District
December 9, 2019

Hi Mr. Morris,

We appreciate that Rule 1107, Coating of Metal Parts and Products, is currently being amended for consistency with US EPA Reasonable Available Control Technology requirements, update of test methods, and language clean-up and clarifications. Along these lines and as has been discussed in the previous PAR 1107 rulemaking activities (5-11-11 correspondence attached), Metropolitan is requesting that a transfer efficiency provision for high viscosity coatings be also incorporated into the amended rule.

Specifically, the wording provided in the 7/18/12 Draft Proposed Amended Rule language, page 19, Section (f) Exemptions (8) (copy attached), is as follows: "The provisions of paragraph (c)(1) shall not apply to metal coatings with a viscosity of 650 centipoise or greater, as applied." This provision will recognize the lower VOC containing coatings and facilitate their proper application on a practical scale, as these types of coatings can require specialized applicators such as heated plural component airless, air-assisted spray guns or cartridge guns. Such an amendment would provide an alternative to using the higher VOC containing compliant coatings which typically are more readily applied with a HVLP gun.

Thank you for your consideration of this request. Incorporation of a transfer efficiency provision for high viscosity coatings will be consistent with similar requirements existing in Rules 1168 (Adhesive and Sealant Applications) and 1106 (Marine Coating Operations).

Should you have any questions or wish to discuss this matter further, please do not hesitate to contact me or Roxana Ramirez [rramirez@mwdh2o.com; (213) 217-6407].

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Best Regards,

Carol Kaufman

Air Quality Program Manager
Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012
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~~containing materials added to the original coating as supplied by the manufacturer, effective July 1, 2006.~~

(3) The provisions of paragraphs (c)(1), (c)(2), ~~and~~ (c)(3), (d)(1) and (d)(2) of this rule do not apply to ~~the application of~~ coatings and ~~use of~~ cleaning solvents ~~while~~ used for conducting performance tests on the coatings at paint manufacturing facilities.

~~(4) The provisions of paragraph (c)(2) of this rule shall not apply to high performance architectural, vacuum metalizing, and/or pretreatment coatings used at a facility which has the potential to emit a total of 10 tons or less per year of VOCs, before application of add-on controls.~~

(~~5~~4) The provisions of paragraphs (c)(1), (c)(2), (d)(1), (d)(2) and (j)(1) of this rule shall not apply to aerosol coating products.

(~~6~~5) The provisions of paragraphs (c)(2), (c)(3), (d)(1), (d)(2) and (j)(1) of this rule shall not apply to ~~the use of~~ essential public service coatings with VOC contents of 500 g/l or less provided such aggregate use does not exceed 55 gallons in any one calendar year per facility.

(~~7~~6) The provisions of paragraphs (c)(2) and (d)(1) of this rule shall not apply to ~~the use of~~ optical anti-reflective coatings provided such aggregate use does not exceed 10 gallons in any one calendar year, per facility.

~~(8) The provisions of paragraph (c)(2) shall not apply to electrocoatings provided the VOC content of coating concentrates do not exceed 450 grams per liter, less water and less exempt compounds, and the usage of coating concentrates is less than 66 gallons per calendar month, per facility, including any VOC-containing materials added to the concentrate, as supplied by the manufacturer, and any VOC-containing materials added to the bath as make-up solvents.~~

(~~9~~7) The provisions of paragraphs (c)(2) and (d)(1) shall not apply to photoresist operations applying liquid photoresist coating used for photofabrication of metal substrates with a thickness not exceeding 0.060 inches provided the annual usage per facility is 10 gallons or less.

(8) The provisions of paragraph (c)(1) shall not apply to metal coatings with a viscosity of 650 centipoise or greater, as applied.

(9) The provisions of paragraph (j)(1) shall not apply to any Super Compliant Material(s). This exemption shall only apply to facilities that demonstrate that total permitted and non-permitted facility VOC emissions do not

Response to Comment 1-1

Proposed Amended Rule 1107 includes an exemption adding flexibility to allow other spray equipment options where high viscosity coatings are used, typically in industrial maintenance applications. This situation may arise for very high solids coatings that would otherwise need to be thinned in order to be sprayed with HVLP guns. Thinning the coating would add unnecessary VOC emissions. This exemption is consistent with similar provisions in Rule 1168 – Adhesive and Sealant Applications and Rule 1106 – Marine and Pleasure Craft Coatings.

Comment Letter #2
California Air Resources Board
December 10, 2019

Hi Mike,

Below are comments from CARB staff regarding PAR 1107, *Coating of Metal Parts and Products*:

The California Air Resources Board (CARB) received Proposed Amended Rule (PAR) 1107, *Coating of Metal Parts and Products*, on November 22, 2019 for review. The South Coast Air Quality Management District (South Coast AQMD) held a public workshop on December 4, 2019 to present and solicit information and comments on PAR 1107. The South Coast AQMD Governing Board plans to hear PAR 1107 on February 7, 2020.

CARB has reviewed the rule and have comments below. CARB believes that the comments are important to the effectiveness and enforceability of Rule 1107.

On December 10, 2019, Ms. Joyce Wong of the Technical Development Section, Consumer Products and Air Quality Assessment Branch, Air Quality and Planning Science Division, discussed the comments with you.

If you have any questions about the comments, please contact Ms. Joyce Wong, Air Pollution Specialist, Technical Development Section, at (916) 323-1182 or at joyce.wong@arb.ca.gov, or Mr. Glen Villa, Air Resources Engineer, Technical Development Section, at (916) 324-8177 or at glen.villa@arb.ca.gov.

Rule review comments are below.

California Air Resources Board Staff Comments on South Coast Air Quality Management District Proposed Amended Rule (PAR) 1107

Rule 1107 – Coating of Metal Parts and Products

1. General: At the header of pages 2-14 in PAR 1107, the previous amended date, which has strikethrough marking, is January 6, 2016. The correct date is January 6, 2006.

2. Section (c)(2): Section (c)(2) provides limitations for the VOC Content of coatings. The VOC limit for camouflage/baked coatings is 420 grams/liter (g/L), which exceeds the VOC limit of 360 g/L contained in metal parts coating rules for seven local air districts. For improved rule effectiveness, CARB recommends that the South Coast AQMD revise the VOC limit for camouflage/baked coatings to 360 g/L.

Section (c)(2): Section (c)(2) provides limitations for the VOC Content of coatings. The VOC limit for metallic/baked coatings is 420 grams/liter (g/L), which exceeds the VOC limit of 360 g/L contained in metal parts coating rules for six local air districts. For improved rule effectiveness, CARB recommends that the South Coast AQMD revise the VOC limit for metallic/baked coatings to 360 g/L.

Thank you.

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2-2

Sincerely,
Stephanie

Stephanie Parent,
Air Pollution Specialist
California Air Resources Board
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Response to Comment 2-1

The typographical error has been corrected.

Response to Comment 2-2

VOC limits for baked metallic and baked camouflage are reduced from 420 grams/liter (g/L) to 360 g/L in paragraph (c)(2). The technology has been in use for two decades and these limits have been in place in multiple air districts during that time. No additional emission reductions or costs are expected to occur from these changes.

Comment Letter #3
RadTech
December 18, 2019

December 18th, 2019

Mr. Michael Morris
Panning and Rules Manager
South Coast Air Quality Management District
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mmorris@aqmd.gov

Re: Public comments to Proposed Amended Rule 1107 (Coating of Metal Parts and Products)

Dear Mike:

RadTech International is pleased to comment on the proposed amendments to Rule 1107. Although UV/EB/LED technology does not dominate the metal parts and products coatings market, it is being used for this type of coating application. RadTech supports the district's efforts to improve air quality in the Basin without sacrificing a healthy business climate and believes that the implementation of UV/EB technology can accomplish both goals.

Request for Exemption

The staff presentation at the workshop states that there are "No changes to VOC limits" contemplated by the amendment. Our Association believes that the district can achieve voluntary emission reductions from companies who convert their processes to UV/EB/LED technology. RadTech urges the district to provide regulatory flexibility to UV/EB/LED processes. Our materials are typically well below 50 grams/liter in VOC content which is minimal compared to the proposed limits, some as high as 420 grams/liter. In keeping with past district policies and direction from the Governing Board, we respectfully request that UV/EB/LED materials be exempted from the rule requirements. An exemption would be an incentive for businesses to voluntarily choose UV/EB/LED technology resulting in additional emission reductions for the District.

3-1

Test Method

We very much appreciate the inclusion of a definition for energy curable materials in the rule and inclusion of ASTM D7767 (the test method for thin film UV/EB curable materials). We are also encouraged by your commitment to "continue to work with stakeholders to develop an acceptable procedure to allow use of ASTM D 7767-11 for field samples." We stand ready to collaborate with the District on any effort to address the issue. In order to increase consistency and avoid confusion, we urge the district to include ASTM F7767-11 in Section (e) "Methods of Analysis". The current

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language that allows "multiple" test methods is vague and could result in enforcement problems for our members and their customers. 3-2 (Cont)

Support for other Stakeholders

It is our understanding that other stakeholders such as the Metropolitan Water District, may be interested in an exemption for high viscosity (above 650 cps) materials from the transfer efficiency requirements of the rule. Flexibility should be offered to UV/EB/LED processes as related to the requirements for transfer efficiency in the rule. UV/EB materials not only meet, but far exceed any proposed rule requirements and any added flexibility to companies that choose these pollution preventive processes will encourage voluntary emission reductions thereby furthering the district's mission. 3-3

We appreciate your attention to this matter and look forward to a productive rulemaking process.

Sincerely,

Rita M. Loof

Director, Environmental Affairs

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Response to Comment 3-1

Staff acknowledges the typically low VOC content of UV/EB/LED processes. Exemptions are included in rules for operations where there are challenges with complying with rule requirements. Staff is unaware of any situation where UV/EB/LED processes are having difficulty and therefore an exemption is unnecessary. Staff does not see any incentive difference between a compliant process and an exempt process.

Response to Comment 3-2

Staff will continue to collaborate with stakeholders to develop an acceptable procedure to allow the use of ASTM D7767 for field samples and appreciate your offer to provide expertise and assistance in this endeavor.

Response to Comment 3-3

Please see Response to Comment 1-1.