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September 13, 2024

Mr. Christopher Bradley  
Planning, Rule Development and Implementation  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

**SENT BY EMAIL**  
[cbradley@aqmd.gov](mailto:cbradley@aqmd.gov)

**RE: BASF Comments on South Coast Air Quality Management District Proposed Amended Rule 1151**

Dear Mr. Bradley,

BASF submits the following comments to South Coast Air Quality Management District (SCAQMD) regarding Proposed Amended Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations. BASF manufactures and sells automotive refinish coatings into the North American market under the brands Glasurit®, R-M®, baslac®, Limco®, and Norbin®. BASF refinish products are currently used by over 8,000 body shops across the US. BASF appreciates the opportunity to work with SCAQMD throughout the rule amendment process, including this opportunity to comment on the preliminary draft rule.

**VOC Limits for Basecoats**

BASF supports SCAQMD's proposal to implement a Phase II VOC limit of 250 g/L for basecoats, which includes the existing category Color Coating, and the proposed new categories Metallic Color Coating and Tinted Mid-Coat.

BASF's Glasurit® 100 Line waterborne basecoat system has been commercially available in North America since 2020 and is already used at over 800 body shops across North America today. 100 Line has a maximum VOC content of 250 g/L for all colors – including solid colors, metallic colors and mid-coat layers – and does not contain the solvents PCBTF or TBAC. More information about 100 Line, including VOC wallcharts, TDSs and SDSs can be found on our website: <https://refinish.basf.us/brands/glasurit/>

BASF also offers several other waterborne basecoat systems which have a maximum ready-for-use VOC content of 420 g/L for all colors and including mid-coats, without PCBTF or TBAC. Lowering the proposed Phase I VOC limit for the Tinted Mid-Coat category from 750 g/L to 420 g/L could be another VOC emissions reduction opportunity for SCAQMD to consider, as compliant products are already commercially available today.

BASF has already provided the maximum VOC content data for 100 Line and our other products to SCAQMD via our timely response to the Rule 1151 Coating Manufacturer Survey. We note, however, that *Figure 2-4: Metallics and Solid Color VOC Content* on pg. 2-16 of the Preliminary Draft Staff Report released on August 16, 2024 does not accurately reflect the data BASF provided in the survey, which is that 250 g/L VOC content is achievable today for all colors, including solid and metallic colors. We request that SCAQMD consider correcting *Figure 2-4* for the Final Staff Report.

Given that compliant technology is commercially available today, BASF supports SCAQMD's ambition to implement the 250 g/L Phase II VOC limit for basecoats as soon as practical, to realize VOC emission reductions earlier.



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### VOC Limits for Primer Surfacer and Primer Sealer

BASF supports the Phase II VOC limit of 250 g/L for the Primer Surfacer and Primer Sealer categories, as proposed in the Revised Preliminary Draft Rule released on September 3, 2024.

This VOC limit will provide coatings manufacturers with some flexibility to develop different solutions to satisfy the gamut of body shop needs and provide the performance properties required for OEM certifications. Given that 250 g/L is the current VOC limit for primers in Rule 1151, maintaining 250 g/L as the VOC limit for Phase II will not lead to an increase in VOC emissions when compared to today. Any further lowering of the VOC limit for primers and primer surfacers will limit the types of technology coatings manufacturers can develop and could lead to lower productivity for body shops, decreased product performance and challenges passing OEM certifications for the coating system.

While waterborne primers with lower VOC levels may be suitable for quick repairs of small areas, they may not be suitable for full body repairs, nor provide all the properties body shops need for the wide variety of repairs and substrates they may need to deal with. Waterborne primers also have longer dry times than solventborne primers, which will slow down body shops and impact their productivity. Attempting to improve drying by introducing reactive primers and/or increased bake time could make the primers more difficult to sand. Further, this increased usage of heat for curing waterborne primers will lead to more energy usage from electric or gas sources at body shops. Repairs done using waterborne primers will also have a decreased likelihood of passing OEM certifications, as properties such as salt spray, humidity and stone chip resistance will be difficult to achieve. Water from the basecoat layer could penetrate into the primer layer, resulting in a shorter lifetime of the coating. If the coating system does not pass OEM certifications, body shops would not be able to complete OEM warranty repairs, resulting in business loss for shops in SCAQMD.

In summary, not all primers are interchangeable or universal in application usage. Coatings manufacturers need the flexibility of a higher VOC limit in order to develop a variety of primer surfacer and primer sealer solutions.

### Matte Clearcoat Definition

The proposed definition of Matte Clear Coating is too narrow, and does not encompass the full range of gloss levels that are considered matte. The typical range of gloss levels for matte clearcoats is between 0-85 units, measured at a 60 degree angle. The gloss level may vary based on the specific car part being coated. For example, trim pieces may require higher gloss levels than the main body and gloss levels for vertical coated panels may differ from horizontal coated panels. Further, matte clearcoats applied over light and pure silver colors may also require a higher gloss level.

Since automotive OEM matte clearcoats all have different levels of gloss, refinish coatings manufacturers need to provide products that are flexible enough for body shops to be able to match the appearance of the coating on any car.

Therefore, BASF requests SCAQMD revise the definitions of Matte Clear Coating and Gloss Clear Coating as follows:

**MATTE-CLEAR COATING** means any Automotive Coating that is formulated with materials that do not impart color and is specifically labeled and formulated for application over a Color Coating or a previous layer of a Matte-Clear Coating, that registers a gloss of less than ~~40~~ 85 units on a 60-degree meter, according to ASTM Test Method D523.

**GLOSS CLEAR COATING** means any Automotive Coating that is formulated with materials that do not impart color and is specifically labeled and formulated for application over a Color Coating or Clear Coating, which registers a gloss of ~~40~~ 85 units or greater on a 60-~~unit~~ degree meter, according to ASTM Test Method D523.



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### **PWMIR Requirement for Reducers and Thinners**

BASF requests that SCAQMD consider eliminating the proposed new PWMIR limit for Reducers and Thinners. The VOC content of Reducers and Thinners is already regulated via the VOC limits for ready-for-use coatings. Adding a PWMIR requirement on top of this is redundant and adds unnecessary constraints to coatings manufacturers' already limited formulation toolbox.

Alternately, if SCAQMD insists on introducing this new PWMIR requirement for Reducers and Thinners, BASF requests that SCAQMD consider updating the sell-through and use-through provisions for Reducers and Thinners in paragraph (d)(6) to 24 and 36 months, respectively, to align with the sell-through and use-through provisions for the other coatings categories set forth in paragraph (d)(5). Many National Rule or European products which comply with Phase I VOC limits rely on reducers with PWMIR values >1.0 when mixed to be ready-for-use. We appreciate that SCAQMD adjusted the effective date in Table 2 to align with the latest proposed Phase II effective date of 2030. Similarly aligning the sell-through and use-through provisions in paragraphs (d)(5) and (d)(6) will ensure that all phase-out timings match and prevent confusion for distributors and end-users.

### **Reporting Requirement**

BASF requests that SCAQMD consider removing or revising the new Quantity and Emission Report (QER) requirement set forth in paragraph (h)(4), as it will lead to increased administrative and recordkeeping requirements which will be burdensome to coatings manufacturers and distribution partners.

Subparagraph (h)(4)(F) introduces a requirement for coatings manufacturers to report "total annual volume sold into or within [SCAQMD], including products sold through distribution centers located within or outside [SCAQMD]." Details on product sales through third party distributors may not be readily available to coatings manufacturers, and distributors may be reluctant to share such details with manufacturers.

Additionally, the proposed reporting requirement for multi-component automotive coatings, as outlined in subparagraph (h)(4)(H), should be removed or revised. A vast majority of automotive refinish coatings are not supplied as ready-for-use coatings, but instead must be mixed with reducers, hardeners and/or additives in manufacturer-specified mixing ratios prior to application. Industry standard for communicating mixing ratios and maximum VOC content of ready-for-use coatings is via the TDS and/or Wallcharts. Examples of BASF wallcharts can be found on our website: <https://refinish.basf.us/?s=wallchart+south+coast>.

The specific reducer or hardener that a body shop painter chooses for a given job is dependent on many factors, including the temperature and humidity. It's not possible for a coating manufacturer to know exactly what products were mixed together for every job; therefore, it's not possible for the coatings manufacturer to correlate product sales volumes to specific product mixing combinations, since these decisions occur at the body shop level.

Further, for color coatings, each basecoat system consists of approximately 80 toners, which can be used in various combinations to match any color that has been painted on a car, amounting to tens of thousands of colors. Therefore, it would be incredibly burdensome to attempt to list every possible combination of toners, mixing clears, etc., and would again be impossible to tie these combinations to specific sales volumes. Such a list would also be so lengthy and complicated that it would not provide value to SCAQMD.

Instead, if SCAQMD insists on requiring manufacturers to report ready-for-use VOC content information on the products we sell, we suggest the agency consider limiting the requirement to report only maximum ready-for-use regulatory VOC for a given coating product or system. This could potentially be done in a format similar to the Coating Manufacturer Survey that was used for PAR 1151.



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### **Training Centers**

BASF appreciates SCAQMD's decision to incorporate a 10-year exemption for training centers, as outlined in subparagraph (k)(2)(B) of Revised Preliminary Draft PAR 1151. This temporary exemption from the PCBTF and TBAC prohibitions will enable coatings manufacturers with training facilities located in SCAQMD to continue to support all customers, including painters from other air districts, during this transition period. Due to the possibility that other jurisdictions may not adopt similar regulations within the 10 year period, we request that SCAQMD remain open to revisiting this exemption timeline in the future.

### **Alignment with Other Jurisdictions**

BASF encourages SCAQMD to minimize changes to coating category names in order to maintain alignment with existing VOC regulations in other jurisdictions as much as possible.

For example, since the ultimate Phase II limit is proposed to be 250 g/L for all solid color coatings, metallic color coatings and tinted mid-coats, BASF requests that SCAQMD consider maintaining only the existing "Color Coating" category, to reduce complexity and promote alignment with existing VOC regulations in other jurisdictions. Further, the proposed change of the category "Clear Coating" to "Gloss Clear Coating" is unnecessary and deviates from the categories laid out in other automotive refinish VOC regulations. The difference between "Clear Coating" and "Matte Clear Coating" should still be understood by end users, as these terms are commonly used today. Modifying the category name would lead to increased administrative burdens, such as the need to update product documentation and labelling.

BASF also encourages SCAQMD to promote alignment of VOC category names and limits in any future discussions with regulatory authorities in other jurisdictions contemplating similar changes to their VOC regulations.

Thank you for your consideration of these comments. Please do not hesitate to contact me by email or phone if you have questions or require additional information.

Best regards,

A handwritten signature in black ink that reads "Rachel Staran".

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