TECHNICAL SUPPORT DOCUMENT FOR A NEW AIR QUALITY REGULATION FOR THE 2015 OZONE NAAQS STATE IMPLEMENTATION PLAN

Background

On October 26, 2015, the U.S. Environmental Protection Agency (EPA) revised the primary and secondary ozone 8-hour National Ambient Air Quality Standards (NAAQS) from 0.075 parts per million (ppm) to 0.070 ppm. Within two years after setting or revising a NAAQS, EPA must designate areas as meeting (attainment) or not meeting (nonattainment) the standard. EPA's final designations are based on the most recent three years of air quality monitoring data, recommendations from the state, and additional technical information. If an area is not meeting the standard, the state is required to prepare a State Implementation Plan (SIP) that identifies how the area will attain or maintain the NAAQS to comply with the provisions of the Clean Air Act. The SIP includes regulatory control measures and nonregulatory provisions for reaching attainment by a specific deadline.

On June 4, 2018, EPA designated Hydrographic Area (HA) 212 (Las Vegas Valley) a marginal nonattainment area for the 2015 ozone NAAQS effective August 3, 2018 (in vol. 83, p. 25776 of the *Federal Register* [83 FR 25776]) and required the area to attain the standard by August 3, 2021. To achieve attainment by this date, the Department of Environment and Sustainability, Division of Air Quality (DAQ) was required to show that an HA 212 ozone design value based on 2018–2020 air quality data was equal to or less than 0.070 ppm. In 2021, DAQ submitted 17 exceptional event demonstrations to exclude 28 ozone exceedances in 2018 and 2020 that it maintained were caused by impacts from wildfire smoke or stratospheric intrusions and requested that EPA exclude the associated air quality data from the 2018–2020 design value calculation. On July 22, 2022, EPA proposed not to approve those demonstrations and to find that HA 212 failed to meet its attainment date based on a 2018–2020 design value of 0.074 ppm (87 FR 43764). On January 5, 2023, EPA issued a final rule reclassifying HA 212 as a moderate nonattainment area for the 2015 ozone NAAQS (88 FR 775) and requiring the area to achieve attainment by August 3, 2024, based on the 2021–2023 design value.

New Air Quality Regulation Section 130, "VOC Emissions Control for Architectural and Industrial Maintenance Coatings"

Section 130 implements volatile organic compound (VOC) content limits for architectural and industrial maintenance (AIM) coatings. AIM coatings consist of surface coatings such as paint, primers, varnishes, or lacquers, as well as solvents used as thinners and for cleanup. Specifically, the rule defines "architectural coating" as a coating that is applied to stationary structures, portable buildings, pavements, or curbs, but does not include coatings applied to airplanes, ships, boats, railcars, and automobiles in a shop. "Industrial maintenance coatings" are defined as high-performance architectural coatings (such as primers, sealers, undercoaters, intermediate coats, and topcoats) formulated for extreme environmental conditions. VOC emissions occur due to evaporation of water-based or solvent-based liquid carriers used in these coatings. The rule requires any person who supplies, sells, offers for sale, manufactures, applies, or solicits the application of any AIM coatings for use within Clark County on or after December 31, 2025, to comply with applicable provisions, including VOC content limits and labeling, reporting, and recordkeeping requirements.

Section 130 applies throughout Clark County. Several warehouses and retail spaces supply AIM coatings in the neighboring HAs, but the coatings are generally produced outside Clark County and shipped to retail spaces. Limiting Section 130 requirements to HA 212 would allow someone to purchase the product from a retail space outside HA 212 for use within HA 212. This would significantly reduce the control of VOC emissions within the nonattainment area.

Section 130 does not apply to any AIM coatings sold, supplied, offered for sale, applied, solicited for application, or manufactured for use outside of Clark County; aerosol coating products; or coatings sold in containers with a volume of 1 quart (1 L) or less. The VOC content limits are listed in Table 1 under Section 130.4, "Standards." If a coating is not specifically listed in Table 1, then per Section 130.4.1(c), it is categorized as flat, nonflat, or nonflat high gloss (depending on its gloss level). Section 130 offers several test methods that can be used in determining the VOC content of a coating, but Method 24 (40 CFR Part 60, Appendix A-7) is EPA's recommended method, and Method 24 results will govern if results from other methods are inconsistent.

Section 130 is based on the Ozone Transport Commission (OTC) model rule for AIM coatings, Phases I–II, which contain more stringent VOC content limits than the federal rule (40 CFR Part 59, Subpart D); in fact, the VOC content limits in the OTC model rule achieve 31% more emissions reductions than the federal rule. The Phase II OTC model rule is based on a 2007 California Air Resources Board model rule. By revising the VOC content limits for many coating categories, increasing the stringency of some standards, and improving the definitions of many coating categories, the OTC estimated the Phase II rule would achieve 34% emissions reductions over the Phase I rule (OTC 2016; OTC 2011). Both phases of the OTC model rule were used to achieve maximum VOC reductions that meet the 15% Rate of Progress (ROP) SIP requirement. The Clean Air Act requires areas in moderate nonattainment of EPA ozone standards (such as HA 212) to reduce VOC emissions by 15%.

The compliance date for the new Section 130 is December 31, 2025, because of the requirement to attain VOC reduction by fully implementing ROP control measures in time to prepare the emissions inventory for 2026. According to 68 FR 55472, "the area should demonstrate the required ROP as expeditiously as practicable once the statutory date for achieving such ROP had passed." DAQ has determined that VOC controls need to be in place by the end of 2025 to demonstrate the required ROP as expeditiously as practicable. This compliance date gives industry as much time as possible to comply with the requirement while allowing DAQ time to implement the regulation to achieve the required 15% ROP. The OTC model rules recommend a one-year compliance date after the rule becomes effective, and a three-year sell-through period after the compliance date to allow manufacturers and retailers to sell existing inventory (manufacturers and retailers may sell existing inventory during the period between rule adoption and the compliance date). DAQ opted to delay the compliance date to 2025 to align it with the sell-through period; combining these will provide industry with maximum flexibility on timing of process changes and managing inventory.

Comments Received (5/23-6/7/2024) and DAQ Responses

Comment Received: 6/6/2024 via email with letter dated 6/7/2024

Commentor: Rhett Cash, Counsel, Government Affairs for the American Coatings Association

(ACA)

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ACA COMMENT Compliance Date: ACA urges Clark County DES to adopt a compliance date of at least one year from the date of adoption of the final AIM coatings rule. The proposal does not contain a clear compliance or effective date. As a general matter, ACA members require sufficient lead time to adjust formulations and supply chain processes in order to ensure compliance with new VOC limits, labeling, and reporting requirements. Additionally, manufacturers will need sufficient time to properly communicate these changes to their distributors and retail customers to ensure compliance with new standards. One year from the date of adoption of a final rule will allow the coatings industry sufficient time to adjust production, labeling, and distribution networks to efficiently and effectively implement the new rule requirements. As such, ACA strongly urges the department to adopt a compliance date of one year from the date of adoption of the final rule.

RESPONSE: DAQ eliminated the one-year sell-through period and extended the compliance date from the rule effective date to December 31, 2025. This provides more time for manufacturers to adjust their products to comply with the VOC limits, labeling, and reporting requirements while managing their production and inventory. Section 130.4.1(a) now states, "On or after December 31, 2025, no person shall manufacture or blend for sale in Clark County any coating with a VOC content exceeding the limit in Table 1." And Section 130.4.1(b) now states, "No person shall supply, sell, offer for sale, repackage for sale, apply, or solicit for application in Clark County any coating that is manufactured or blended on or after December 31, 2025, with a VOC content exceeding the limit in Table 1."

ACA COMMENT Error in Definition of Wood Coatings: There is a minor error in the definition of "Wood Coatings" in Section 130.3. The second part of the definition should be titled, "Opaque Coatings."

RESPONSE: DAQ revised the second part of the "wood coatings" definition in Section 130.3 to "Opaque wood coatings" as recommended.

ACA COMMENT Error in Section 130.4.1(d): As currently written, Section 130.4.1(d) exempts the applicable list of coatings from having any VOC limits. After reviewing the OTC Phase II Model Rule for AIM, ACA believes the intent was to exempt this list of coatings from the provision relating to the most restrictive VOC content limit that applies when a coating is recommended for use in one or more coatings category (see 3.2.2. of the OTC Model Rule). ACA encourages Clark County DES to review and clarify the intent of this provision.

RESPONSE: DAQ added language from Section 3.2.2 of the Phase II OTC model rule to clarify that the most restrictive VOC content limit does not apply to the list of coatings in Sections 130.4.1(d)(1)–(17). The language referring to flat, nonflat, or nonflat high gloss has been separated into its own paragraph. The section now states:

- (a) The most restrictive VOC content limit shall apply if a coating is recommended for use in more than one of the coating categories in Table 1. This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf. This provision does not apply to the following categories:
 - (1) Aluminum roof coatings
 - (2) Bituminous roof primers
 - (3) Calcimine recoaters...

ACA COMMENT Sell-Through Provision: ACA requests that Clark County DES extend the sell-through provision in Section 130.5.1 of the proposed AIM rule to three years after the effective date of the final rule. This timeframe is consistent with the OTC Model Rule and other AIM rules in neighboring jurisdictions (e.g., California, Utah, Colorado). In addition, most architectural coatings have expiry periods of several years. A three-year sell-through period would provide additional time for manufacturers, distributors, and retailers to cycle through their inventory, reduce waste, and make the necessary changes to their production networks.

RESPONSE: A three-year sell-through period is not feasible because EPA's deadline to attain VOC reductions was 1/3/2023, so DAQ must demonstrate the required ROP as expeditiously as practicable. The sell-through date has been removed and Sections 130.4.1(a)–(b) revised to extend the compliance date to the end of 2025. This will give manufacturers time to sell inventory produced before and after the rule effective date without penalty. Removing the sell-through provision also simplifies compliance requirements for manufacturers, who will only have to comply with one date.

ACA COMMENT VOC Limits for Stains: The proposed VOC limits in Table 1 of Section 130.4 are aligned with the OTC Phase II Model Rule for AIM except for stains. ACA previously commented on this inconsistency and still does not understand the reasoning behind separating stains into two categories (exterior/dual and interior) with two different VOC limits. ACA encourages Clark County DES to fully align with OTC Phase II Model Rule for AIM, which has one category for stains with a VOC content limit of 250 g/L. This consistency in regulations will simplify the logistics of product restrictions for manufacturers and distributors.

RESPONSE: DAQ revised the VOC content limit for "Stains" in Table 1 to 250 g/L, which is consistent with the Phase II OTC model rule standard.

Comment Received: 6/11/2024 via DAQ website

Commentor: Anonymous

COMMENT Small Containers: Section 130 of the Proposed Rule Changes regarding volatile organic compounds (VOC) does not apply to any coating that is in a container with a volume of less than 1 L. While Section 130 applies to large-scale commercial projects, there needs to be an additional section that applies to small-scale projects. Community members doing home-scale maintenance coatings are not subject to OSHA regulations regarding appropriate respiratory equipment. As a result, they will be exposed to significant VOCs from both the unregulated coating

and the lack of respirator equipment. The implementation of regulation on containers 1 L or less with *[sic]* have a much greater impact on the health of community members than public education regarding appropriate use of respiratory equipment.

RESPONSE: No changes are proposed at this time. The rule's purview does not extend to individual exposure. Its intent is to address ambient air quality in Clark County.

END