

**RESPONSE TO COMMENTS RECEIVED CONCERNING
THE HOUSTON GALVESTON-BRAZORIA (HGB)
REASONABLY AVAILABLE CONTROL TECHNOLOGY
(RACT) ANALYSIS UPDATE STATE IMPLEMENTATION
PLAN (SIP) REVISION FOR THE 1997 EIGHT-HOUR
OZONE STANDARD**

Public hearings for this proposed RACT analysis update SIP revision and the associated rulemaking were held on July 18, 2011, at the Houston-Galveston Area Council offices in Houston and on July 22, 2011, at the Texas Commission on Environmental Quality (TCEQ) headquarters in Austin. Question and answer sessions were held 30 minutes prior to the hearings. The hearing in Austin was not officially opened because no party indicated a desire to provide comment. One person provided oral comments applicable to this HGB RACT SIP revision and the associated rulemaking at the Houston public hearing.

The comment period opened on June 24, 2011, and closed on August 8, 2011. The commission received comments from the American Coatings Association (ACA), Flexographic Technical Association (FTA), National Aeronautics and Space Administration (NASA), Texas Chemical Council (TCC), United States Environmental Protection Agency (EPA), United States Navy (US Navy), and one individual.

Comments more directly related to the concurrent rulemaking in 30 Texas Administrative Code Chapter 115 Volatile Organic Compounds (VOC) RACT Rule Revisions (Rule Project No. 2010-016-115-EN), which are incorporated by reference into this SIP revision, are responded to in the Response to Comments section of the preamble to the rulemaking. Those comments are included in this RACT update revision through the adoption of those rules. Some changes were made to the proposed version of this SIP revision in response to those comments.

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GENERAL

The ACA commented that the EPA's Control Techniques Guidelines (CTG) should be consistent with other EPA rulemakings for this industrial sector. The ACA commented that coatings manufacturers have provided the EPA product information to assist in the evaluation of the National Emission Standard for Hazardous Air Pollutants for Shipbuilding and Ship Repair

Operations, and that the industry supports rulemaking that will provide a consistent approach to reduce emissions of both VOC and hazardous air pollutants in this industry sector.

The commission appreciates the comment. However, ensuring consistency among future federal rulemakings for this coating category is beyond the scope of this rulemaking. The commission makes no change in response to this comment.

An individual commented that the one thing no successful businessman can handle is the constant changing of regulations that potentially require equipment and increased employment to support such equipment, when one never knows if he or she will be allowed to operate the purchased equipment. The individual commented that a reasonable and prudent businessman needs to be able to plan, and that has been impossible with the ever-changing regulations that the EPA has come forth with.

The commission appreciates the comment and acknowledges that the changing regulations can be challenging. The purpose of this rulemaking is to fulfill the state's obligation under Federal Clean Air Act (FCAA), §172(c)(1) and §182(b)(2), to submit a SIP revision that implements RACT for VOC emission sources located in nonattainment areas classified as moderate and above, addressed in a CTG issued from November 15, 1990, through an area's attainment date. When enacting rules, the commission considers the appropriate implementation deadlines. The commission makes no change in response to this comment.

The EPA commented that approval of the portions of the control requirements in §115.453 for the surface coating of large appliances, metal furniture, and miscellaneous metal and plastic parts and products of the proposed rules that replace emissions limits previously adopted as RACT with less stringent emissions limits would not be possible without a demonstration from the state showing that the SIP-approved limits are no longer RACT. On March 17, 2011, the EPA issued a memorandum entitled *Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories* indicating that:

"for situations in which a State has previously determined that more stringent applicability thresholds and/or control levels are RACT for one or more sources in a source category and the sources have complied with those requirements, then those existing controls should be considered RACT for such sources. If a state chooses to revise more stringent rules that are already in the approved SIP, so that those rules reflect the less-stringent recommended limits in the new CTGs, there are additional considerations . . . The state would need to first demonstrate that the SIP-approved control requirements are not reasonably available considering technological and economic feasibility, consistent with the EPA's definition of RACT."

The EPA requested the commission explain how the existing limits are no longer RACT for these sources that in some cases have been complying with these limits for 20 years or more.

By letter dated December 8, 2008, the TCEQ requested the EPA clarify several issues related to the recommendations in the following three CTG documents: *Control Techniques Guidelines for Large Appliance Coatings* (EPA 453/R-07-004), issued in 2007; *Control Techniques Guidelines for Metal Furniture Coatings* (EPA 453/R-07-005), issued in 2007; and *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings* (EPA 453/R-08-003), issued in

2008. A number of the recommended VOC content limits for specific coatings categories in these 2007 and 2008 CTG documents are less stringent than the more general VOC content limits specified in the following EPA guideline series recommendations: *Control of Volatile Organic Emissions from Existing Stationary Sources Volume V: Surface Coating of Large Appliances* (EPA-450/2-77-034), issued in 1977; *Control of Volatile Organic Emissions from Existing Stationary Sources Volume III: Surface Coating of Metal Furniture* (EPA-450/2-77-032), issued in 1977; and *Control of Volatile Organic Emissions from Existing Stationary Sources Volume VI: Surface Coating of Miscellaneous Metal Parts and Products* (EPA-450/2-78-015), issued in 1978. The TCEQ requested clarification to ensure that implementing the new 2007 and 2008 CTG recommendations would not be considered backsliding and to be certain that the TCEQ has the appropriate information to determine whether the CTG recommendations actually represent RACT for Texas. On March 17, 2011, the EPA issued a guidance memorandum regarding these three CTG categories entitled *Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories*. The EPA stated in the memorandum that: "... if a state believes the volume usage distribution among the general and specialty categories in the docket is representative of the distribution in the nonattainment area, we believe that if a state undertakes wholesale adoption of the new categorical limits in a specific CTG, the state may rely on the assessments in the docket to demonstrate that the range of new limits will result in an overall reduction in emissions from the collection of covered coatings."

Consistent with this EPA memorandum, on June 8, 2011, the commission proposed rulemaking (Rule Project Number 2010-016-115-EN) concurrent with this SIP revision to implement the 2007 and 2008 CTG-recommended RACT limits for these three emission source categories. The proposed rulemaking provided discussion regarding the estimated percent reductions for these CTG categories that supported the EPA's position that applying the new 2007 and 2008 CTG-recommended limits as a whole will result in net VOC emissions reductions. Despite the state's demonstration that implementing the 2007 and 2008 CTG-recommended approach would not interfere with attainment of, or reasonable progress towards attainment of, the ozone standard for the HGB area, the EPA commented that in order for the proposed rules to be approved as RACT, the state must also demonstrate that the existing Chapter 115 limits for these CTG categories, which were based on the EPA's original 1977 and 1978 recommendations, are no longer technologically or economically feasible.

The commission contends that by promulgating higher CTG-recommended RACT limits for these source categories in 2007 and 2008, the EPA has established that the original 1977 and 1978 recommended limits, and thus the existing Chapter 115 limits, are no longer technologically or economically feasible. The 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 (44 FR 53762, September 17, 1979). In the 2007 and 2008 CTG documents, the EPA provides recommendations for RACT for these source categories based on available information. The EPA claims the 2007 and 2008 CTG RACT recommendations were based on available

information and a review of existing federal and state regulations, including the original 1977 and 1978 recommendations for these emission source categories. The EPA goes on to indicate that 21 states have adopted the EPA's 1977 recommendations for large appliance coating; 32 states have adopted the EPA's 1977 recommendations for metal furniture coating; and as many as 36 states have adopted the EPA's 1978 recommendations for metal parts surface coating. Given that Texas had previously adopted the EPA's 1977 and 1978 recommendations for these three source categories, the Chapter 115 rules should have been included in EPA's review of existing regulations. If upon review of the existing Chapter 115 regulations the EPA had determined that the limits recommended in 1977 and 1978 were technologically and economically feasible, then those limits presumably would have been included in the final 2007 and 2008 CTG recommendations for these source categories.

In accordance with FCAA, §183(e)(3)(C), the EPA determined the 2007 and 2008 CTG documents issued for these three source categories would be substantially as effective as national regulations in reducing VOC emissions (72 FR 57215, October 9, 2007; 73 FR 40230, July 14, 2008). FCAA, §183(e)(3)(A) requires any regulations issued under FCAA, §183(e), including the 2007 and 2008 CTG documents, to be based on best available controls, which are defined under FCAA, §183(e)(1)(A) as the degree of emissions reduction that the EPA determines, on the basis of technological and economic feasibility, health, environment, and energy impacts, is achievable through the application of the most effective equipment, measures, processes, methods, systems or techniques, including chemical reformulation, product or feedstock substitution, repackaging, and directions for use, consumption, storage, or disposal. If the lower limits in the EPA's original 1977 and 1978 recommendations were in fact technologically or economically feasible for these specialty coating categories, the EPA presumably would have retained these limits in the 2007 and 2008 final CTG documents in accordance with FCAA, §183(e)(1)(A).

The Large Appliance Coatings and Metal Furniture Coatings draft CTG only recommended general coating limits for these source categories. However, in response to public comments (72 FR 57215, October 9, 2007), the EPA's final 2007 CTG recommendations for these two source categories also included higher limits for several specialty coatings. The specialty coating limits included in the 2007 CTG are higher than the EPA's 1977 recommendations for these two source categories. In the response to public comments, the EPA acknowledged that the higher specialty coating limits recommended in the final 2007 CTG were necessary to accommodate the range of coatings needed in these industries.

However, the EPA's 2007 and 2008 CTG documents do not specifically explain why the lower limits included in the EPA's original 1977 and 1978 recommendations for these source categories are no longer technologically or economically feasible. In absence of any specific information indicating that the existing Chapter 115 limits for these source categories are not technologically or economically feasible, and given the EPA's stated intention to disapprove the rules without such a demonstration, the commission is obligated under the FCAA to revise the proposed

limits for these source categories. Therefore, in response to this comment, the commission is revising the proposed limits for these three source categories to only include the EPA's 2007 and 2008 CTG-recommended limits that are equivalent to or lower than the existing Chapter 115 limits. Where the EPA's 2007 and 2008 CTG-recommended limits are less stringent than the EPA's original 1977 and 1978 recommended limits, the commission is retaining the original emission limit in the current Chapter 115 rule, except for the high performance architectural coatings limit for the miscellaneous metal parts and products category.

The EPA only addressed the technological and economic feasibility issues associated with high performance architectural coatings in support of its presumptive RACT recommendations in the 2008 CTG for Miscellaneous Metal and Plastic Parts Coatings. The commission agrees with the EPA that the 6.2 pounds of VOC per gallon of coating (lb VOC/gal coating) constitutes RACT for this coating type and that promulgating a VOC limit less than 6.2 lb VOC/gal coating may restrict the application of liquid high performance architectural coatings that are currently available and in use today. The cost of converting to powder coatings or installing and operating add-on controls to meet a lower limit is not a reasonable alternative compared to the emission reduction that would be achieved. In light of this information, as provided in the EPA's 2008 CTG, the commission has determined a VOC limit of 6.2 lb VOC/gal coating for high performance architectural coatings to be RACT. The commission contends that the adoption of this coating VOC limit for high performance architectural coatings, which is higher than in the existing Chapter 115 rules, does not interfere with attainment of, or reasonable progress towards attainment of, the ozone standard for the HGB area. Therefore, the commission is making no change to the proposed VOC limit of 6.2 lb VOC/gal coating for high performance architectural coatings in the Chapter 115 miscellaneous metal parts and products coatings rules in response to this comment; the commission is adopting to retain the EPA's 2008 Miscellaneous Metal and Plastic Parts CTG-recommended 6.2 lb VOC/gal coating limit for high performance architectural coatings in the adopted Chapter 115 miscellaneous metal parts and products coatings rules.

FLEXIBLE PACKAGE PRINTING

The FTA strongly disagreed with the requirement in §115.432(c)(1)(C) for flexible package printers to meet an 80% overall control efficiency regardless of the first installation date of the oxidizer. The FTA commented that this approach may require printers that installed oxidizers at an earlier date to replace equipment and would be a significant financial hardship, as new oxidizers start in the hundreds of thousands of dollars. The FTA commented that the EPA's Flexible Package Printing CTG recommends a more reasonable approach consistent with a RACT regulation, which allows add-on controls installed prior to specific dates to have lower overall control of VOC emissions. The FTA added that the commission's claim that the EPA's approach would create backsliding is not justified.

The commission maintains that the EPA's CTG-recommended approach for controlling VOC emissions from flexible package printing may encourage the installation of older, less efficient equipment and may create backsliding issues if a

source becomes subject to a lower efficiency standard as a result of equipment replacement.

The commission has determined that an 80% overall control efficiency represents RACT for flexible package printing processes in the HGB area. Based on a review of permits for flexographic printing and rotogravure printing processes, the only two types of printing processes identified in the CTG as conducting flexible package printing, the majority of printers are using add-on control equipment that achieves at least an 80% overall control efficiency, demonstrating that this level of control is reasonably available considering technological and economic feasibility.

Flexible package printers with the potential to emit greater than or equal to 25 tons per year of uncontrolled VOC emissions that choose to use a vapor control system to comply with the adopted rules, are not limited to operating at an 80% overall control efficiency. The adopted new control requirements in §115.432(c) provide different compliance options to provide flexibility for affected owners and operators. Flexible package printers can instead choose the compliance option that requires the use of coatings in conjunction with a vapor control system to meet the VOC limits. Under this compliance option, an owner or operator does not have to meet a certain VOC limit or meet a certain overall control efficiency; rather, the combined coating VOC content and the overall control efficiency must meet the VOC limits. The commission makes no change in response to this comment.

INDUSTRIAL CLEANING SOLVENTS

The ACA requested the commission exempt resin manufacturing from the Chapter 115, Subchapter E, Division 6, industrial cleaning solvents rules since the proposed VOC limits would not allow effective cleaning of resin manufacturing equipment. The ACA commented that both the Bay Area Air Quality Management District (BAAQMD) and South Coast Air Quality Management District (SCAQMD) rules, which the EPA relied on to develop the CTG recommendations, exempt resin manufacturing operations from solvent cleaning VOC limits as follows: the SCAQMD Rule 1171(g)(2)(E) exempts cleaning operations subject to Rule 1141 - Control of Volatile Organic Compound Emissions from Resin Manufacturing and Rule 1141.1 - Coatings and Ink Manufacturing; and the BAAQMD Regulation 8, Rule 4, Section 113 exempts operations that are subject to the requirements of other rules of Regulation 8, or which comply with appropriate limitations of those rules prior to their effective dates. The ACA commented that since the BAAQMD regulates resin manufacturing under Regulation 8, Rule 36, the BAAQMD solvent cleaning rule does not apply to resin manufacturing operations. As an alternative to completely exempting resin manufacturing operations from the Chapter 115 industrial cleaning solvents rules, the ACA suggested implementing a VOC limit of 1.67 pounds of VOC per gallon of solution (lb VOC/gal solution), work practices, and an overall control efficiency of at least 80% or 90% if incineration is used.

The commission agrees that requiring resin manufacturing operations to comply with the 0.42 lb VOC/gal solution VOC limit for cleaning solutions poses technical feasibility issues, as described in the ACA's formal comments and supporting documentation. The EPA's 2006 Industrial Cleaning Solvents CTG recommends excluding ink, adhesive, and coating manufacturing from the industrial cleaning solvents rule applicability because the 0.42 lb VOC/gal solution VOC content limit

is not technologically and economically feasible for these manufacturing processes. The commission expects that the same technological and economic feasibility issues associated with manufacturing inks, coatings, and adhesives also exist for resin manufacturing. The VOC limit established in the industrial cleaning solvents rules prevent the use of adequate cleaning solutions, potentially causing cross contamination of manufactured products and poor product quality resulting in disposal of off-specification products. The 0.42 lb VOC/gal solution VOC content limit is not technologically feasible for resin manufacturing operations and therefore does not represent RACT for this industry. In response to this comment, the commission is revising §115.461(d)(13) to exempt resin manufacturing from the VOC content limits for industrial cleaning solvents.

The TCC commented that §115.461(b) should specifically exclude processes or operations that are subject to and complying with Chapter 115, Subchapter B, Division 2 or Division 6, including any qualifying exemptions. Specifically, the TCC suggested revising §115.461(b) to exempt a cleaning operation from the requirements in Division 6 if all of the VOC emissions from the cleaning operation originate from a source for which another division within Chapter 115 has established a control requirement, emission specification, or exemption that applies to that VOC source category in that county.

The commission agrees with the TCC's suggestion to provide an exemption for cleaning operations that are controlled by emission specifications or control requirements established in another Chapter 115 division. As proposed, the rules for industrial cleaning solvents exempted cleaning operations subject to another division in Chapter 115 that establishes cleaning work practices or cleaning VOC limits used during a solvent cleaning operation. However, in light of this comment, the commission acknowledges that not all Chapter 115 rules contain cleaning requirements, but that owners and operators of some processes may consider cleaning activities to be a part of their production process or may find it to be more efficient to control emissions from cleaning activities in accordance with the process control requirements or emissions specifications.

However, the commission declines to incorporate the TCC's request to exempt a cleaning operation from this division if the cleaning VOC emissions originate from a source that qualifies for an exemption in another Chapter 115 division. Basing an exemption for a cleaning operation on a process-specific exemption in another Chapter 115 division, is inconsistent with the EPA's stated purpose that the CTG recommendations are intended to apply to all industrial cleaning operations that are not already subject to or complying with other control requirements.

Therefore, in response to this comment, the commission is adopting new §115.461(c) to exempt from this division a solvent cleaning operation where the process the cleaning operation is associated with is subject to another division in Chapter 115 and the VOC emissions from the solvent cleaning operation are controlled in accordance with an emission specification or control requirement of the division that the process is subject to. This exemption is intended to provide affected owners and operators with the flexibility to comply with control requirements or emission specifications in another Chapter 115 rule to minimize

compliance burden. The commission expects that an owner or operator choosing to comply with the control requirements or emission specifications for a cleaning operation is at least as effective as complying with the industrial cleaning solvent rule requirements.

MISCELLANEOUS INDUSTRIAL ADHESIVES

NASA commented that adhesives are applied to non-production mock-ups, prototypes, fixtures, and displays at manned spacecraft centers. NASA requested a complete exemption be added to §115.471 for adhesives or adhesive primers used on site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the Texas National Guard) and NASA. NASA requested the exemption because extensive field testing is required before adhesives can be approved for use and the proposed regulations would be impractical and extremely costly for NASA due to the complexity of adhesive operations, the number of adhesives used, and the number of different items and substrates bonded together.

The rules in Division 7 are necessary to implement RACT for miscellaneous industrial adhesives as required in FCAA, §172(c)(1) and §182(b)(2). The commission disagrees that a complete exemption for NASA is consistent with the EPA's recommendations for this CTG emission source category. Granting the categorical exemption requested for NASA and other military organizations could potentially result in EPA disapproval of the Chapter 115 RACT rules and corresponding SIP revisions. The commission does not consider the adopted rules any less technologically or economically feasible for NASA and the US Navy as the rules are for other affected entities, which includes some small businesses.

The EPA's 2008 CTG is intended to apply to adhesive and adhesive primer application processes at manufacturing operations that are not already regulated. For purposes of the rules, a manufacturing operation refers to a manufacturer that uses adhesives to join surfaces in the assembly or construction of a product involving the application processes listed in §115.473(a). Accordingly, the adopted rules in Division 7 do not apply to adhesives and adhesive primers used in the application processes specified in §115.473(a) that are subject to another division in Chapter 115. For example, owners and operators subject to the aerospace surface coating requirements in Division 2 qualify for the exemption in §115.471(c) because adhesives are regulated under the Division 2 aerospace rules. Additionally, the EPA's 2008 CTG explicitly states that the miscellaneous industrial adhesives rules are not intended to include adhesives that are addressed by CTG documents already issued for categories listed under FCAA, §183(e) or by an earlier CTG, which includes aerospace coatings. The commission makes no change in response to this comment.

MISCELLANEOUS METAL AND PLASTIC PARTS COATINGS

Pleasure Craft Coatings

The ACA commented that it is imperative to work with the federal, state, and local agencies to develop RACT rules given that the pleasure craft industry was not afforded the usual opportunity to comment on the EPA's CTG RACT recommendations because the draft Miscellaneous Metal and Plastic Part Coatings CTG did not mention pleasure craft surface coating operations. The

ACA commented that the EPA's final CTG-recommended pleasure craft coating limits do not represent RACT for the pleasure craft industry. The ACA commented that the SCAQMD Rule 1106.1, which was the basis for these CTG recommendations, should not be identified as RACT for pleasure craft coating operations in other areas since these requirements were adopted to address the severe ozone nonattainment conditions in the South Coast air basin. The ACA commented that the CTG-recommended VOC limits and compliance dates are too restrictive to allow coating manufacturers to formulate products that meet the VOC limits, while also maintaining adequate technical performance and meeting customers' aesthetic requirements. The ACA requested several revisions to the proposed rules to establish appropriate RACT requirements for pleasure craft coating operations.

For *extreme high-gloss coatings*, the ACA suggested implementing a VOC limit of 5.0 lb VOC/gal coating and revising the definition to any coating that achieves greater than 90% reflectance on a 60 degree meter. The ACA commented that the controlled application conditions that make the use of high solids and water-based technologies possible in other industries are not available for the pleasure craft coating industry. The ACA also commented that the low-VOC technologies available at this time do not provide the aesthetic properties, functionality, and durability required from an extreme high-gloss coating.

For *finish primer/surfacer coatings*, the ACA suggested implementing a VOC limit of 5.0 lb VOC/gal coating. The ACA commented that a higher VOC solvent is required for both the topcoats and the primers that go beneath them to achieve the finish that is extremely smooth, glossy, and durable. In addition, high solids or low-VOC primers often require additional sanding to achieve the necessary smooth surface and the use of these coatings necessitates a change in traditional working practices in yards to overcome the increased health hazard associated with the increased dust levels.

For *other substrate antifoulant coatings*, the ACA suggested implementing a VOC limit of 3.34 lb VOC/gal coating. Antifoulant coating formulations are currently registered with the EPA based on the percentage weight of biocide in the wet paint. Reducing the VOC content of the coating reduces the percentage of biocide in the dry film with a concomitant reduction in performance of the coating and increase in recoating frequency. In addition, low-VOC antifoulant coatings often result in a rougher film; the roughness of the hull contributes directly to drag.

For *antifoulant sealer/tie coatings*, the ACA suggested introducing a VOC limit of 3.5 lb VOC/gal coating and the following definition: a coating applied over a biocidal antifoulant coating for the purpose of preventing release of biocides into the environment, or to promote adhesion between an antifoulant and a primer or other antifoulants. The 2007 International Maritime Organization Antifouling Systems convention prohibits the use of certain biocides in the antifoulant coatings applied to the hulls of any marine vessels entering the waters of countries that are signatories to the convention. A specialized coating, an antifoulant sealer/tie coat, is required to seal in certain prohibited antifoulant coatings and to promote adhesion of biocide-free, non-stick foul release coatings when applied to vessels. As alternative compliance options, the ACA suggested implementing an averaging approach and extending the compliance date to allow the development, testing, and commercial introduction of low-VOC pleasure craft coatings.

In response to the ACA's request for reconsideration of the pleasure craft CTG VOC limits, the EPA issued a memorandum on June 1, 2010, entitled *Control Technique*

Guidelines for Miscellaneous Metal and Plastic Part Coatings-Industry Request for Reconsideration, "recommending that the pleasure craft industry work with state agencies during their RACT rule development process to assess what is reasonable for the specific sources regulated because the CTG impose no legally binding requirements on any entity, including pleasure craft coating facilities."

Based on the information submitted by the ACA, and in accordance with the EPA's guidance to work with the pleasure craft industry on this issue, the commission agrees that some of the pleasure craft coating VOC limits included in the EPA's CTG recommendations are not technologically feasible at this time. The commission agrees that the coating VOC limits requested by the ACA are technologically and economically feasible and therefore constitute RACT for the pleasure craft industry in Texas. In response to this comment, the commission is revising §115.453(a)(1)(F) to reflect the ACA's recommended VOC limits for *extreme high-gloss coating, finish primer/surfacer coating, other substrate antifoulant coating, and antifoulant sealer/tie coating*. The commission has also revised §115.450(c)(8) to include the commenter's suggested definitions for *extreme high-gloss coating, pretreatment wash primer, and antifoulant sealer/tie coating*. Because the commission is revising the rules to incorporate the suggested VOC limits, the commission does not agree it is also necessary to include the averaging approach and extended compliance period that were suggested as alternative compliance options.

The ACA requested a small container exemption for pleasure craft touch-up and repair coatings to allow minor repairs at the end of the painting line and avoid having to completely re-coat the pleasure craft.

In response to this comment, the commission is adopting new §115.451(n) to exempt touch-up and repair coatings from meeting the VOC limits in §115.453(a)(1)(F) if those coatings are supplied by the manufacturer in containers that do not exceed 1.0 quart and the use of those coatings at the site does not exceed 50 gallons per calendar year. The commenter did not suggest a quantity for the annual limit on touch-up and repair coatings. The 50-gallon limit is equivalent to the volume of coatings exempt in §115.451(i)(4) for miscellaneous plastic parts and products. In addition, the commission is including definitions for repair coatings and touch-up coatings in §115.450(c)(8)(I) and (K), respectively. The commission agrees that providing an exemption for touch-up and repair coatings used in small quantities eliminates the need to completely re-coat a pleasure craft and, as a result, reduces overall VOC emissions from pleasure craft coating. This exemption for coatings used in small quantities is also consistent with the EPA's recommended exemptions for other coating categories in the Miscellaneous Metal and Plastic Parts Coating CTG.

Miscellaneous Metal Parts and Products Coatings

NASA and the US Navy suggested the commission remove designated on-site maintenance shops from the rule applicability in Chapter 115, Subchapter E, Divisions 2 and 5 for the following reasons: there is no definition of this type of facility in the proposed rules; the frequency of what is considered routine is unclear; the federal maximum available control technology standards for

miscellaneous metal parts and products excludes facility maintenance operations; industrial maintenance coatings are already covered by the national Architectural and Industrial Maintenance rule; and the EPA's Miscellaneous Metal and Plastic Parts Coatings CTG does not include designated on-site maintenance shops in the applicability.

The existing Chapter 115, Subchapter E, Division 2 rules were revised in July 2000 (25 TexReg 6754) to reflect a rule interpretation that determined the miscellaneous metal parts and products coatings rules should be applied to original equipment manufacturers, off-site job shops that coat new or used parts or products, and designated on-site maintenance shops that re-coat used parts or products. Because this rulemaking was submitted as a SIP revision and approved by the EPA, providing an exemption for designated on-site maintenance shops that are currently complying with the existing Division 2 rules would be backsliding.

However, the commission has determined that it is not necessary to apply these RACT requirements to designated on-site maintenance shops that re-coat used parts or products in order to meet the mandates of FCAA, §172(c)(1) and §182(b)(2). The EPA's 1978 CTG recommendations for this source category, which were the basis for the Division 2 rules, were clearly not intended to apply to designated on-site maintenance shops that re-coat used parts or products. The commission also agrees that the EPA's 2008 Miscellaneous Metal and Plastic Parts Coatings CTG recommendations do not apply to designated on-site maintenance shops.

Therefore, in response to this comment, the commission is adopting §115.427(a)(8) to limit the rule applicability to the designated on-site maintenance shops in the HGB area that were subject to §115.421(a)(9) prior to January 1, 2012. Only those designated on-site maintenance shops that re-coat used parts or products that were exempt from §115.421(a)(9) in Division 2 prior to January 1, 2012, the beginning of the calendar year immediately following the approximate effective date of these rules, or that begin operation on or after January 1, 2012, are exempt from all requirements in Division 2. Additionally, in response to this comment, the commission is revising §115.450(a) to exclude re-coating of used miscellaneous metal parts and products at designated on-site maintenance shops from the coatings rule applicability in Division 5. The adopted revisions prevent any potential backsliding concerns by requiring sources that are currently complying with these rules in Division 2 to continue to meet these VOC limits. The adopted revisions are consistent with the intent of the EPA's 1978 and 2008 CTG RACT recommendations for miscellaneous metal parts and products coatings and the commission maintains the rules continue to satisfy RACT requirements for this CTG emission source category.

NASA and the US Navy requested an exemption be added to §115.451 for miscellaneous metal or plastic parts and product surface coating processes performed at on-site installations owned or operated by the Armed Forces of the United States or NASA, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States. NASA and the US Navy requested the exemption because extensive field testing is required before reformulated coatings and solvents can be approved for use and because the proposed regulations would be impractical

and extremely costly for NASA and the US Navy due to the complexity of coating operations, the number of coatings and solvents used, and the number of different items and substrates coated. NASA and the US Navy also requested exemption from the miscellaneous metal and plastic parts coatings rules because historically accurate coatings for these items must be used.

The rules in Division 5 are necessary to implement RACT requirements for miscellaneous metal and plastic parts coatings as required in FCAA, §172(c)(1) and §182(b)(2). The commission disagrees that a complete exemption for the Armed Forces of the United States or NASA is consistent with the EPA's recommendations for this CTG emission source category. Some of the specific coating categories recommended by the EPA for miscellaneous metal and plastic parts and products are specific to military application. Granting the categorical exemption requested for NASA, the US Navy, and other military organizations could potentially result in EPA disapproval of the Chapter 115 RACT rules and corresponding SIP revisions.

However, the miscellaneous metal and plastic parts coatings rules do not apply to the other coating categories specifically regulated in Divisions 2 or 5. The commission recognizes that an explicit exemption for those specific coating categories from the miscellaneous metal and plastic parts coatings rules in Division 5, similar to the exemption provided in Division 2, was not incorporated into the proposed rules and may have created confusion. In response to this comment, the commission is adding an exemption in §115.451(b)(4) to reflect the exclusion of all other coating categories in Divisions 2 and 5 from the miscellaneous metal and plastic parts coatings rules. Adopted new §115.451(b)(4) clearly indicates that any item characterized by the other coating categories specified in Division 2 and Division 5 is not considered miscellaneous metal or plastic parts and products and is therefore not subject to any of the corresponding requirements. Additionally, the commission does not consider the adopted rules any less technologically or economically feasible for NASA and the US Navy as the rules are for other affected entities, which include some small businesses.

The EPA commented that the alternate control requirements proposed in §115.454(b) should be revised to make clear that any alternative requirements to §115.453(a)(1)(A), approved by the executive director would need to be submitted as a site-specific SIP revision for approval by the EPA to ensure it meets the requirements for enforceability and public hearings.

The adopted alternate control requirement in §115.454(b) is identical to the existing SIP-approved requirement in §115.423(4), except that the rule citations reference the applicable process in the adopted new Division 5 rules. The commission notes that the rule citation in the proposed rules incorrectly referenced large appliance coating, and the commission is revising §115.454(b) to accurately reference miscellaneous metal parts and products surface coating processes in §115.453(a)(1)(C).

The commission agrees that any alternate control requirement approved by the executive director under §115.454(b) would need to be submitted as a site-specific SIP revision for EPA approval. However, the commission does not agree that revisions to adopted §115.454(b) are warranted to clarify that EPA approval of

alternate control requirements is necessary. The commission makes no change in response to this comment.

The TCC requested clarification on whether it is the commission's intent to regulate the coating of newly fabricated piping or other equipment at an on-site maintenance shop, which appears to fall outside of the miscellaneous metal parts and products definition, while the re-coating of some equipment at an on-site job shop appears to be included. In addition, the TCC requested clarification on whether the coating of newly fabricated piping or other equipment at an on-site lay-down yard would be a regulated activity. The TCC stated that the EPA excludes the coating of new and existing support structures, piping, and equipment as part of routine maintenance activities, considered to be facility maintenance operations, from 40 Code of Federal Regulations, Part 63, Subpart M for Surface Coating of Miscellaneous Metal Parts and Products.

In response to other comments on this rulemaking, the commission is revising §115.450(a) to exclude designated on-site maintenance shops from the miscellaneous metal parts and products coatings rule applicability in Division 5. Additionally, the commission is adding §115.427(a)(8) to limit the Division 2 rule applicability to only those designated on-site maintenance shops that re-coat used parts and products that were required to comply with the emission specifications in §115.421(a)(9) prior to January 1, 2012, which is the beginning of the calendar year immediately following the approximate effective date of this rulemaking. The re-coating of used miscellaneous metal parts and products at a designated on-site maintenance shop that was exempt from §115.421(a)(9) prior to January 1, 2012, or that begins operation on or after January 1, 2012, is exempt from all requirements in Division 2.

The coating of newly fabricated miscellaneous metal parts and products, including piping or other equipment, for a site's own use does not constitute coating at a designated on-site maintenance shop and does not meet the miscellaneous metal parts and products coatings rule applicability in Division 2. Only designated areas where the routine re-coating of miscellaneous metal parts and products takes place is considered a designated on-site maintenance shop. The location of the designated on-site maintenance shop is irrelevant for purposes of the Division 2 rules; the designated on-site maintenance shop may be an area reserved inside a site building or a location on the site's grounds outdoors.

The TCC requested clarification on whether extreme performance coatings applied to newly fabricated piping and equipment, which do not meet the corresponding definition in the Division 5 rules, would now be considered a general-use coating.

Coatings that do not meet a specific coating category definition in Division 5, are considered general-use coatings and are subject to the VOC content or emission limit for general-use coatings. This requirement is adopted directly from the EPA's 2008 Miscellaneous Metal and Plastic Parts Coatings CTG recommendations. Conversely, the commission recognizes that some coatings may meet more than one coating category definition. For these instances, the commission is revising the rules to indicate that the least stringent VOC limit applies.