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Pollution Control Board

NPCA/FSCT Comments on the Inclusion of South Coast Rule 1106.1 as RACT for Coating of Pleasure Craft (and Associated Parts and Products) into Final CTG for Miscellaneous Metal and Plastic Parts

Respectfully submitted in connection with Illinois Proposal to adopt the Pleasure Craft CTG. Case Number R2010-020

On May 7, 2010



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ORIGINAL

September 14, 2009

Introduction

We do not agree with the EPA's recommendation that South Coast Air Quality Management District Rule 1106.1 ("Rule 1106.1") is suitable for consideration as Reasonably Achievable Control Technology (RACT) for the coating of pleasure craft (and/or associated parts and products) in the final Control Technique Guideline for Miscellaneous Metal and Plastic Parts published by the EPA in September 2008 (the "CTG").

NPCA/FSCT companies manufacture the vast majority of the coatings sold in the pleasure craft coating industry and has a long record of working with USEPA on providing marine coatings technology information in USEPA's efforts to develop VOC and HAPs standards for the marine and pleasure craft industry. Most recently, member companies have provided the Agency with extensive current coatings information in the development of a NESHAP for pleasure craft coatings. This data might be usefully examined to help determine the RACT VOC recommended CTG standard for the coatings as well.

The CTG program as developed and implemented by the EPA is intended to identify VOC emission control techniques and technology that meet the criteria of the federal Clean Air Act's "Reasonably Available Control Technology" (RACT). A CTG represents EPA's recommendations to be adopted by the States in their federally-mandated State Implementation Plans (SIPs). As such, CTGs have a long tradition of careful selection of existing technologies only after extensive review. Traditionally this process has sought the views of the industry or sector to which the standard would apply.

The proposed Miscellaneous Metal and Plastic Parts CTG did not mention pleasure craft surface coating operations. This additional recommendation appeared first in the Final CTG. Compare the Proposed Determination and Draft CTG in the Federal Register at <http://www.epa.gov/ttn/atw/183e/gen/r14iv08.pdf> (no mention of pleasure craft) to the Final Determination and final CTG in the Federal Register at <http://www.epa.gov/ttn/atw/183e/gen/r07oc08.pdf> (pleasure craft is discussed for first time).

Thus industry as a whole did not have the opportunity to raise issues of concern about the CTG identifying Rule 1106.1 from the SCAQMD as a national RACT standard.

R 10-20
EXH 2
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5-19-10

In reconstructing events, the introduction of the pleasure craft standard in the final document occurred in part because of EPA's concern that pleasure craft coatings might otherwise be subject to the very low VOC limits set generally for Miscellaneous Metal and Plastic Parts in the CTG (even lower than those specified in Rule 1106.1).

Additionally it received a comment after issuing the proposed CTG from a yacht coatings manufacturer, which requested that separate VOC limits be set for pleasure craft coatings using Rule 1106.1's coatings categories. The manufacturer apparently did not mean to endorse the rule's limits—only its categories of coatings—and has sent a clarification to EPA to that effect.

We wish to make clear that our comments here are not intended to criticize the USEPA in any way. The Agency has traditionally reached out to industry in developing CTGs and did so here as well. We have contacted EPA regarding our concern and have offered to work with the Agency to develop recommendations for a national RACT recommendation that is economically reasonable and technologically feasible.

As our comments will demonstrate, the Rule 1106.1 limits do not represent RACT for the national pleasure craft coatings industry.

As a technical matter, Rule 1106.1 was developed on the basis of the "best available retrofit control technology" (BARCT) under the California Clean Air Act, which is more stringent than the national RACT standard. As characterized by California Air Resources Board staff documents¹:

"BARCT is a state version of RACT, although it has stringency more akin to BACT ["best available control technology"] as defined by the federal Clean Air Act. BARCT is required under certain conditions in California districts having moderate, serious, severe, or extreme air pollution as defined by Section 40921.5, Chapter 10, Part 1, Division 26 of the Health and Safety Code."

While a long-lived BARCT standard may evolve into a national RACT standard with the passage of time and with industry effort to improve technology and application techniques, this has not occurred with 1106.1 standards. As will be shown later in this document, industry has made significant efforts to develop lower VOC coatings for the pleasure craft industry. However, a review of the history of Rule 1106.1 itself demonstrates that the SCAQMD had to revise the rule after its adoption to allow an additional two-year period to comply with higher VOC limits when it was demonstrated that the limits originally mandated were technologically infeasible².

These limits became effective in 2001, and as we will discuss later in this document, the pleasure craft industry responded in the extended two-year period to 'extract itself from the SCAQMD'.

This document explains why we consider Rule 1106.1 to be unsuitable for reference as RACT, and highlights the impact its implementation by non-attainment states and areas will have on the economy and pleasure craft building and surface coating industry.

In light of the significant changes that the EPA made to the draft CTG as published in the final CTG, we would like to use this document to suggest a proposal which we believe is much more economically reasonable and technologically feasible.

Unsuitability of South Coast AQMD Rule 1106.1 as RACT

The following key points explain why South Coast AQMD Rule 1106.1 is unsuitable for consideration as RACT by ozone non-attainment states and areas:

¹ For more details see <http://www.arb.ca.gov/bact/docs/as/california.htm>

² For more information use the following link <http://www.scaqmd.gov/hb/1999/99012a.html>

1. The VOC limits within Rule 1106.1 are too restrictive to allow coating manufacturers to produce products which meet both technical and customer requirements. The industry does not currently have compliant coatings to sell in states and areas where they will be required if guidance in the CTG on pleasure craft coating operations is followed. Rule 1106.1 has had a negative effect on South Coast's pleasure craft business since it was introduced in 1992. In the 1970's and 80's, California was considered by many to be the pleasure craft building capital of the world, with the following pleasure craft builders operating there: Catalina Yachts, Columbia Yachts, Islander Yachts, Capital Marine, Corsair Marine, Ericson Yachts, Laguna Yachts, Westsail, Pacific Seacraft, Bill Lee Yachts, Pacific Boats, Moore Bros, Express, and Wilderness Boats. The introduction of pleasure craft rules such as Rule 1106.1 into Air Quality Districts like the South Coast has been a pivotal factor to these builders either moving out of these areas into other parts of the US, or to other countries.

At one time, 75% of Catalina Yachts production came out of the California plant based in South Coast district, but this has now been transferred to a newer site based in Florida (where there are currently no pleasure craft coating VOC restrictions). Ericson Yachts has undergone reorganization and now operates as Pacific Seacraft in North Carolina. Corsair Marine, which at one time operated out of San Diego, has now moved production to a plant in Vietnam. The yacht construction business has largely died out or relocated to neighbouring districts or states which have no pleasure craft VOC rules.

The pleasure craft surface coating industry is a mobile one, and pleasure craft (especially the larger ones) can dock anywhere in the US or even around the world. According to the 2002 Census (US Census Bureau; NAICS codes 338612 and 338611), the Boat Building and Repair Industry in the US had a revenue of \$20 billion and employed approximately 140,000 people. Since 2002 the industry has been in general decline – losing share and status to non-US suppliers. There is a very real concern that California's experience will be repeated elsewhere if the wider adoption of Rule 1106.1 goes ahead. This would be disastrous for the general economy.

2. The pleasure craft coatings industry has been given insufficient time to produce compliant coatings which meet the performance and aesthetic requirements of pleasure craft owners and meet the pleasure craft coating limits of Rule 1106.1 before ozone non-compliant states adopt the rule into State Implementation Plans (SIP). Because of the likely lack of compliant products, it is conceivable that other states forced to implement Rule 1106.1 will find themselves in a similar position to that of South Coast with a declining pleasure craft coating business contributing to dwindling economy and increased unemployment.
3. South Coast AQMD has serious ozone problems and has been allocated the ozone classification of 'Severe-17' by the EPA. In order to reduce the extent of its ozone problem, South Coast AQMD has implemented a series of VOC rules (including Rule 1106.1) which are the most restrictive in the world. Table 1 contains different ozone 'design values' for the ozone non-attainment areas in a state in which pleasure craft coating business is currently thriving (Florida) and from San Bernardino in South Coast AQMD in California. The values are taken from a sample from the EPA's document titled 'Design Values by County for 2008 Ozone Standard'³. The table shows that the ozone problem in South Coast is significantly worse, between 46 – 57% higher, than in Florida.

Table 1- Ozone Design Values for 2008 ozone standard taken from monitored air quality data between the years of 2004 and 2006

³ Follow this link for full table

http://www.epa.gov/air/ozonepollution/pdfs/2008_03_design_values_2004_2006.pdf

State	County	Design Value /ppm (three year average used to compare level of 2008 ozone standard (0.075ppm) to determine compliance)	Comparison to San Bernardino
California	San Bernardino	0.121	-
Florida	Bay	0.078	55% less
Florida	Duval	0.077	57% less
Florida	Escambia	0.083	46% less
Florida	Hillsborough	0.080	51% less

4. Even in the State of California, only five other Districts have found the need to introduce rules which regulate the VOC content of pleasure craft coatings, as follow:

Antelope Valley AQMD	Rule 1106-1
Mojave Desert AQMD	Rule 1106
Ventura County APCD	Rule 74-24-1
San Diego APCD	Rule 67.1B
Bay Area AQMD	Rule 8-43

Some of these rules have exclusion statements to prevent applicability to small boat owners / users, i.e. the Do-it-Yourself (DIY) market.

Mojave Desert AQMD Rule 1106 provides an exemption for facilities whose rate per day of coating use is less than one gallon, including any VOC-containing materials added to the original coating as supplied by the manufacturer.

Bay Area AQMD Rule 8-43 provides an exclusion for coating of pleasure craft or commercial fishing vessels using coatings purchased in containers of one gallon or less.

San Diego County APCD Rule 67.1B provides an exemption for non-commercial marine coating operations performed by individuals at their personal residence for the purpose of coating their own pleasure craft(s).

Rule 1106.1 was developed to tackle serious ozone non-attainment in South Coast AQMD in California by significantly restricting the VOC levels of pleasure craft coatings and is not necessary for adoption in non-attainment areas which EPA classifies as 'Moderate' like those in Florida; that is, the majority of non-attainment areas nationwide.

Therefore we consider that adopting Rule 1106.1 as a national RACT recommendation is excessive, as it was developed to address situations where non-attainment areas are defined as 'Severe'.

5. SCAQMD Rule 1106.1 itself requires an additional speciality category to allow for recent regulatory developments resulting from the International Maritime Organisation (IMO) Antifouling Systems Convention (2001). Further information on this can be found in the 'Industry Proposal' section of this document.

Current Situation

The industry continues to work to develop lower VOC coatings for the US pleasure craft market. However, high solids and water based technologies have not been immediately successful in providing compliant coatings which also meet technical and customer demands. Coating manufacturers will not have complete portfolios of compliant products to meet the

VOC limits of Rule 1106.1 to market by the time States will have updated their SIPs and established compliance dates for the requirements for pleasure craft surface coating operations. In addition, end-use customers will have insufficient time to adapt their working practices to accommodate new coating products – one of the strategies advocated by the CTG.

The pleasure craft coatings market is a global one with increasing competition from Asia and Europe. The professional market segment is growing year by year, and none more so than the large yacht market dealing in vessels greater than 80' Length Over All (LOA) or the 'superyacht' market as it is commonly referred to. The following figures illustrate the relative size and state of the US superyacht business:

- 2008 statistics show ten US yards signing up for over one mile of superyacht hull (1503 yards) worth of new orders, with an average hull value estimated at one million dollars per cubic meter.
- US builders share of the global superyacht market was 15% in 2008, compared to 17.8% in 2007, and 19.4% in 2006
- Superyacht deliveries in 2007 were 23 from the US, compared to 121 from Europe

Of equal importance is the refit/repair market sector in the US. The growth rate of the repair market (as seen over the last 10 years) has been essential to the North American pleasure craft industry. Some regions and states rely heavily on the income that the pleasure craft industry provides. Laws, regulations, and/or boatyard practices that potentially limit the competitive edge could seriously impact the regional and even national economy by deterring foreign and domestic clientele. If boats can not be completed to the aesthetic standards demanded in North America (due to limitations on products and/or applications), it is highly likely that business in this sector, including charter business, will be lost to South America, Mexico and Europe. This risk is also present when making decisions that will narrow the choice and ability to effectively paint and supply pleasure craft related projects.

Florida is a good example of how important economically the pleasure craft sectors are. The Florida market relies on competitive rates, access to skilled labor resources, and the ability to service both domestic and foreign vessels. The Broward-Dade-Palm Beach "Tri-County Region" has remained at the forefront of superyacht service and repair sector, where industry growth has doubled in the last ten years. The direct economic impact of superyacht repair and maintenance projects at local boat yards in the Tri-County Region was estimated to be \$219.8 million during 2008.

Between 1997 and 2007, the financial contribution of the superyacht refit sector in Florida can be summarized as follows⁴:

- 48% of routine maintenance projects in Tri-County boatyards were from non-U.S.-based vessels during 2008 alone. Over half of major overhaul projects were completed on foreign yachts at Tri-County boatyards.
- Each of the 1400 superyachts serviced by Tri-County boatyards in 2008 supported five full-time personnel per vessel at area boatyards and related industries, supporting an estimated 7300 jobs.
- An estimated \$204 million in superyacht charter fees were paid via Tri-County charter firms which received commissions of approximately \$30.8 million in 2008; twice that of 1997.
- One 164-foot charter vessel will have direct impact on a region with expenditures of approximately \$2.8 million. The direct impact, if occurring in the Tri-County region, would result in a total economic impact of \$5.1 million from a charter superyacht's operation.

⁴ Source: Growth, current activity and Economic Impacts of Mega Yachts in South Florida 1997 – 2007. T.J Murray & Associates, prepared on behalf of Marine Industries Association of South Florida and the Broward Alliance

Add to this some 20,000 boats manufactured or repaired/refitted yearly in the US outside the superyacht sector, and it is clear that a multitude of facilities could be affected by the pleasure craft coating guidance in the CTG. As with many other industries, the US pleasure craft industry is suffering a downturn due to the current economic climate. The smaller boat industry has been significantly affected, with one major company quoting sales of boats down by as much as 64%.⁵ The restrictive nature of the VOC limits contained within Rule 1106.1 will significantly limit any competitive advantages for US pleasure craft builders with cost, technical, and aesthetic requirements severely compromised.

Setting Rule 1106.1 as RACT for pleasure craft coatings in the CTG will adversely affect the pleasure craft coatings industry in ozone non-attainment areas, resulting in increases in unemployment as the industry struggles to comply. This puts additional pressure on an industry already in decline in the US, as more business moves to Europe and Asia.

In Europe legislation to control VOC emissions permits pleasure craft builders and painters more flexibility by allowing them to operate an "averaging" approach. This strategy works well since it allows facilities to use a combination of high and low VOC products providing, at the end of the year, the average value is below a certain target level. This allows emission targets to be met without forcing facilities and paint manufacturers to compromise on critical product performance. For example, yards can attain an overall VOC reduction by using low VOC primer and filler systems with compatible high VOC extreme gloss topcoats to deliver a solution that is competitive, durable and best meets the customer's expectations.

In Asia there is little VOC legislation to restrict the pleasure craft coatings market from continuing to grow (at the potential expense of losses in market areas with more restrictive requirements).

Industry Proposal

We acknowledge that VOC emission reductions are required from pleasure craft coating operations, but we urge the EPA to take an approach which will minimize adverse impact on the pleasure craft industry in the US. In doing so, the EPA should consider the following proposals, which involve modification to the current pleasure craft coating guidance in the final Miscellaneous Metal and Plastic Parts CTG.

Consideration of an Averaging Approach

Experience in Europe indicates that an effective means of regulating VOC emissions from pleasure craft surface coating operations is to offer facilities the option to average emissions over a specified time period (in the case of the European rules, the time period is a year). This provides flexibility to coatings manufacturers and end-use customers, to allow VOC emission reductions while minimizing adverse impacts on each facility.

This approach requires affected facilities to maintain an inventory of all products used in their surface coating operations, including any additional solvents required for surface preparation, thinning of coatings for proper application, and cleanup. These record-keeping requirements are similar to those already used in existing EPA and State VOC regulations for other surface coatings operations.

The average VOC emission figure over the specified time period would be maintained at or below the level defined by the EPA, in consultation with the pleasure craft industry. A properly-vetted averaging approach could replace the current CTG category-and-limit approach, or it could be offered as an alternative compliance option to a category-and-limit approach.

⁵ Brunswick 2009 Q1 results <http://www.brunswick.com/news/newstories/releases/11282727.php>

With regard to the current category-and-limit approach taken from Rule 1106.1, we strongly encourage the EPA to consider and implement the following modifications to the current Final CTG pleasure craft coating guidance:

1. Extended time for compliance

Adequate opportunity was not provided for industry to explain why South Coast AQMD Rule 1106.1 was inappropriate for inclusion in the Final CTG for Miscellaneous Metal and Plastic Parts CTG. Now, it is vital to the continued success of the multi-billion dollar US pleasure craft industry that more time is provided for paint manufacturers to develop and introduce lower-VOC coatings, and for customers to adjust their operations to the use of these new coatings.

In order to comply with the VOC limits in Rule 1106.1, new technologies and formulations will need to be developed and implemented before realistic reductions in VOC content will occur. In turn, these technologies and formulations need to be validated. It takes significant time to develop and test new products to satisfy this technically demanding market, and which will ensure minimum disruption to the pleasure craft building and coating industry. Rushing inferior products to market has the potential to be disastrous as customers in this sector tend to be conservative, choosing products with a known track record and that best protect the value of their investment. If customers cannot apply a preferred product, they are likely to seek this product elsewhere i.e. the business will be lost to an alternative district, state or even country.

In addition, it is vital that pleasure craft coating users have sufficient time to implement the necessary procedural changes required to work with low VOC products. Users will also want to have flexibility in choice of coating products and schemes which means that they will need time to adequately assess them making sure productivity and quality are not negatively impacted, leading to reduced competitiveness.

It is also necessary to allow coating manufacturers sufficient time to register any new low VOC antifouling coatings under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and corresponding State programs that regulate biocidal products prior to sale, a process which can take upwards of one year.

For these reasons, industry requires an interim period of at least four years (until August 2013) to allow sufficient time for coating manufacturers and users to adequately prepare. For the duration of this interim period industry requires that the provisions of Rule 1106.1 in the CTG are modified according to section 2. In addition, the provisions of Rule 1106.1 in the CTG should also be modified according to section 3 to provide categories and VOC levels that represent RACT through the interim period and beyond.

2. Modification of Rule 1106.1 categories and VOC limits (4 years Interim period)

To allow coating manufacturers to continue trading in ozone non-compliance areas the following minor modification is recommended to Rule 1106.1 for a four years interim period only.

Revised VOC limits for the "Finish Primer/Surfacer" Category

Boat owners have very high expectations for the final look of their boats. The finish is expected to be super smooth, super glossy (almost 'mirror-like') and durable. Coatings can be applied by a variety of application methods (brush, roller or spray) and must flow out to give a smooth, glossy finish. In order to achieve such effects, products with a higher solvent content (lower solids content) are required for both the topcoats and the primers which go beneath them. Introducing high solids/low VOC primers that provide a smooth, easy-to-sand surface necessary to provide the aesthetics demanded by owners will require significant time to develop and evaluate. Currently, high solids/low VOC primers often require additional sanding, creating more dust, to achieve the same smooth surface that is obtained with

currently available products. This would necessitate a change in working practices in yards to overcome the increased health hazard associated with the increased dust levels.

In order to ensure products can continue to be supplied into ozone non-compliance areas during the next four years that continue to meet the aesthetic and performance requirements demanded by boat owners, the industry strongly suggest the VOC levels of the Rule 1108.1 "Finish Primer/Surfer" coating category should be revised from 420 g/L to 600 g/L.

3. Permanent changes required to Rule 1106.1

In addition to the temporary changes suggested in section 2 for the four year interim period, industry also requires EPA to implement the following permanent changes to the categories and levels taken from Rule 1108.1 for use in the CTG with immediate effect.

Additional Speciality Category and VOC Limit: Antifouling Sealer/Tie Coat

Rule 1108.1 is dated and there are more recent requirements for an additional category to reflect pleasure craft coatings of the modern day which are more environmentally friendly and/or compliant with International law.

A new category is required as a result of the IMO Antifouling Systems convention (IMO AFS) and should be added to the categories taken from Rule 1108.1. The category should be named 'Antifouling Sealer/Tie Coat' with a maximum VOC content of 420 g/L. Antifouling Sealer Coats and Tie Coats have been introduced into the market largely to facilitate compliance with Annex 1 of the IMO-Antifouling Systems Convention (2001)⁶. This coating type is required to promote adhesion of biocide-free, non-stick foul release coatings when applied to vessels. The use of biocide-free coatings brings significant environmental benefits.

Antifouling Sealer/Tie Coats must contain a VOC up to 420 g/L in order to facilitate adequate penetration into an underlying paint film for maximum adhesion. They also contain a high degree of polymeric material (hence need a higher VOC content to maintain an acceptable application viscosity) so the coating can form a flexible yet complete barrier over an underlying paint film. An appropriate definition for this type of coating would be...

" a coating applied over Biocidal antifouling coating for the purpose of preventing release of biocides into the environment and/or to promote adhesion between an antifouling and a primer or other antifouling."

Revised VOC Limit for Antifouling Category

Significant time and effort have been invested by industry to develop low VOC antifouling coatings suitable for use on pleasure craft. It is possible to reduce the VOC content of antifouling coatings to a certain level, after which product performance becomes significantly compromised i.e. the coating begins to foul after a much shorter time as the performance lifetime of the product is reduced. If this happens the antifouling must be reapplied more frequently resulting in a greater overall VOC contribution. This nullifies the merit of producing the lower VOC antifouling in the first instance.

The current Federal HAP level for Antifouling in the US is 400g/L⁷ as is the CTG⁸ which covers the same sector. South Coast AQMD Rule 1106 which applies to Marine coating operations also contains a VOC limit for antifouling coatings of 400g/L. This limit is more suitable to represent RACT for this coating category and we suggest the following VOC limit amendment;

⁶ For compliance with the IMO-AFS Convention, boats previously coated with a non-compliant antifouling are able to comply if they overcoat with a sealer coat prior to application of a compliant coating.

⁷ National Emission Standard for Hazardous Air Pollutants from Shipbuilding and Ship Repair (Surface Coating) Operations

⁸ Control Techniques Guidelines for Shipbuilding and Ship Repair Operations (Surface Coating)

Category of "Other Substrate Antifoulant Coating" -- amend from 330g/L to 400g/L

Revised VOC Limit for Extreme High Gloss Coatings

The *Extreme High Gloss Coatings* category represents a comparatively small but critical, high value segment of the overall pleasure craft market.

High solids topcoats have not been well received in the North American pleasure craft coating market. In general, users have found the finish that these products provide to be inferior to traditional, higher VOC containing products. Although high solids and water-based technologies are available and in use in other industries (e.g. car refinishing and aviation) the controlled application conditions which make the use of these coatings possible in those industries are neither available nor possible for the pleasure craft coating industry.

Additionally, some low VOC topcoats, originating from the car refinish market and now being marketed for pleasure craft usage, are based on a polymer type which provides reduced durability. These coatings have a reduced lifetime and their use will necessitate a more frequent recoating schedule which means in relative terms, more VOC is emitted.

The aesthetic properties that topcoats give to the topsides of pleasure craft are of primary importance to boat owners. This should not be underestimated or dismissed. If boat owners cannot achieve the desired super-glossy, mirror-like finish, they will not settle for an inferior solution -- they will simply have their boats painted elsewhere. These coatings are professionally applied so any restriction on their use that reduces the competitiveness of individual yards will have a direct and immediate bearing on employment levels and state revenues.

In a typical *extreme gloss coatings* scheme, the topcoat represents less than 40% of the overall VOC burden and less than 10% of total yacht coatings on an annualised basis. Rule 1106.1 was developed to tackle serious ozone non-attainment in South Coast AQMD in California. It is overly severe and restrictive for adoption for the majority of non-attainment areas where the problem is 'Moderate' according to the EPA. The industry feels that restricting the VOC of the other coating categories and setting the VOC limit for Extreme High Gloss topcoats to 800 g/L, provides individual states with a balanced VOC reduction strategy that is appropriate to the challenge and that does not seriously impact the competitiveness of the industry in the state.

Revised Coating Category Definition for Extreme High Gloss Topcoat

As mentioned above, application of topcoats is undertaken in a variety of environmental conditions which can have an affect on the final gloss level of the product at the point of application. To manage this variation it is suggested that the gloss level stated in the definition of the Extreme High Gloss Topcoats category be lowered slightly to read...

"Extreme high gloss coating means any coating which achieves greater than 80 percent reflectance on a 60° meter when tested by ASTM Method D 523-89"

4. EPA's development of Pleasure Craft MACT Standard

The industry is also aware that separate EPA staff are currently determining a Maximum Achievable Control Technology (MACT) Standard to control Hazardous Air Pollutant (HAP) emissions from pleasure craft coating operations in the US. Pleasure craft coating manufacturers have submitted a substantial amount of information to help the EPA develop a rule which meets the requirements of all parties concerned. The industry is keen to ensure that the recommendations the EPA make for pleasure craft coating operations in the Miscellaneous Metal and Plastic Parts CTG are consistent with what is planned for the Pleasure Craft MACT standard (proposal due out early next year).

Summary

The pleasure craft industry was not given the normal opportunity to consult with the EPA sufficiently during the drafting of the CTG. It therefore feels that it is imperative that even at this stage, the changes to the provisions of Rule 1106.1 in the CTG put forward in this document are fully considered in order to safeguard an industry that is critical to the US

economy and already under significant pressure.

There can be no doubt that the implementation of the provisions of South Coast AQMD Rule 1106.1 (in its present form) in the CTG to regulate the VOC content of pleasure craft coatings, into the SIP's of ozone non-attainment states is overly severe and will have serious negative effects on the pleasure craft coating industry in these areas. NPCA respectfully ask the EPA to revise the CTG in the following way, to make it more relevant for the US pleasure craft coating industry;

1. Regulate VOC emissions from facilities using pleasure craft coatings by including an averaging approach as a compliance option

If this is not deemed possible then points 2 and 3 should apply.

2. Amend the CTG "Finish Primer/Surfacer" VOC limit from 420 to 600g/L for a 4 year interim period to allow coating manufacturers and users sufficient time to develop and implement compliant coatings.
3. Make changes that are required to the Rule 1106.1 provisions of the CTG with immediate and permanent effect as follows,
 - Add an additional speciality category of "Antifouling Sealer/Tie Coat" with VOC limit of 420g/L to align the CTG with the IMOAFS;
 - Amend "Other Substrate Antifoulant Coating" VOC limit from 330g/L to 400g/L;
 - Amend the "Extreme High Gloss" VOC limit from 420 g/L to 600 g/L, reflecting the very specialised nature of the coatings in this category;
 - Revise the coating category definition of "Extreme High Gloss Topcoat" to read: *"Extreme high gloss coating means any coating which achieves greater than 90 percent reflectance on a 80° meter when tested by ASTM Method D 523-89"*

In addition, the pleasure craft industry has already worked with EPA staff to provide information to support the development of a Pleasure Craft MACT Standard. Thus we request

4. Provisions of the pleasure craft categories and VOC limits of the CTG must be consistent with the development of requirements in the planned Pleasure Craft MACT Standard.

NPCA, with the help of the pleasure craft coatings industry, would like to work with the EPA on this issue and we would welcome an opportunity to discuss this proposal in more detail during a face to face meeting at the EPA offices.

Respectfully submitted in connection with Illinois Proposal to adopt the Pleasure Craft CTG.

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
REASONABLY AVAILABLE CONTROL)
TECHNOLOGY (RACT) FOR VOLATILE) R10-20
ORGANIC MATERIAL EMISSIONS FROM) (Rulemaking – Air)
GROUP IV CONSUMER & COMMERCIAL)
PRODUCTS: PROPOSED AMENDMENTS)
TO 35 ILL. ADM. CODE 211, 218, and 219)

TESTIMONY OF DAVID HALCOMB

My name is David Halcomb. I am Senior Vice President- Global Awlgrip Business Development, based in Waukegan, Illinois. The Awlgrip® brand is an undisputed world leader in the Yacht Professional Topsides coatings sector. Within the pleasure craft industry, the reputation of Awlgrip is one of universal trust and respect. This reputation has been built upon consistent technical innovation, stringent quality controls and the superlative finish of Awlgrip products, which have long represented the standard against which all others are measured.

After graduating from the University of North Carolina in 1972, I joined the US Coast Guard and began my career with Awlgrip in 1973. During the early 1990's I had some involvement with the regulatory work with SCAQMD on Rule 1106.1.

I am here today on behalf of Mr. James Sell, Senior Counsel of the American Coatings Association. Although Mr. Sell is unable to participate in today's proceedings, he has previously submitted written testimony: "NPCA/FSCT Comments on the Inclusion of South Coast Rule 1106.1 as RACT for Coating of Pleasure Craft (and Associated Parts and Products) into Final CTG for Miscellaneous Metal and Plastic Parts" in connection with Illinois Proposal to Adopt the Pleasure Craft Provisions of the EPA CTG , Case

EXH. 3
R10-20
TJF
5-19-10

Number R10-020, as Proposed Amendments to 35 Illinois Administrative Code 211, 218, and 219. For the sake of brevity, the “EPA Control Technique Guideline for Miscellaneous Metal and Plastic Parts” will be subsequently referred to as “the EPA CTG”.

With reference to Mr. Sell’s written testimony, the following points are offered for the Board’s consideration:

The Pleasure Craft provisions of the EPA CTG do not represent Reasonably Available Control Technology (RACT) for this industry sector.

The Draft EPA CTG did not mention pleasure craft surface coating operations. EPA introduced the language of South Coast Air Quality Management Division Rule 1106.1 “Pleasure Craft Coating Operations” into the Final EPA CTG. This was apparently done with concern that pleasure craft surface coating operations might otherwise be subject to the various general categories and more restrictive VOC limits for Miscellaneous Metal Parts and Products (based on SCAQMD Rules 1107 and 1125) and Miscellaneous Plastic Parts and Products (based on SCAQMD Rule 1145 and Michigan Rule 336.1632). However, there was no opportunity for the pleasure craft industry to provide comments on this EPA action.

Had that opportunity been extended, the pleasure craft industry would have provided the following reasons to support our contention that SCAQMD Rule 1106.1 does not represent RACT:

1. The VOC limits in SCAQMD Rule 1106.1 are too restrictive to allow coating manufacturers to formulate products that meet the VOC limits, while also meeting customer's aesthetic requirements and maintaining adequate technical performance. As a result, pleasure craft manufacturers relocated from the South Coast area to other locations in the US.
2. The compliance dates in SCAQMD Rule 1106.1 and the EPA CTG do not provide sufficient time for the coating manufacturers to formulate products that comply with the restrictive VOC limits, while also meeting the technical performance and aesthetic requirements of pleasure craft manufacturers and owners. An example is antifouling coatings, which must be registered as biocidal products under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and corresponding State programs. This process can add years to the actual development and performance testing of new lower-VOC antifouling coatings
3. SCAQMD Rule 1106.1, like other SCAQMD rules, was developed and adopted to deal with the severe ozone non-attainment conditions in the South Coast air basin. These conditions are not experienced in other areas of California and the US, and thus the provisions of South Coast regulations should not be identified as "RACT" for other areas.
4. Even in the State of California, only five other Districts have found the need to introduce rules to regulate pleasure craft surface coating operations. These rules differ from SCAQMD Rule 1106.1 in varying degrees.
5. SCAQMD Rule 1106.1 was adopted in 1992. Since then, there have been developments in the marine and pleasure craft industry that provide the basis for

revised VOC limits for some coating categories, and the introduction of new categories and VOC limits for other coatings. An example is a new category of “Antifouling Sealer/Tie Coat” to allow the use of non-biocidal coatings that comply with Annex 1 of the International Maritime Organization Antifouling Systems Convention (IMO-AFS), which was written in 2001.

Development of RACT that is appropriate for Pleasure Craft Surface Coating operations should address the following points:

1. Consideration of an “Averaging Approach” as an alternative compliance option. This approach is successfully used in Europe to provide flexibility to coating manufacturers and end-use customers to provide VOC emission reductions while minimizing adverse economic and productivity impacts on each affected facility.
2. Provide appropriate time until the final compliance date to allow the development, testing, and commercial introduction of low-VOC pleasure craft coatings. Rushing products into this market has the potential for disastrous consequences, as boat builders and pleasure craft owners tend to be conservative; they choose coatings with demonstrated performance that best protect the value of their products/investments. A period of four years is suggested to allow completion of existing development projects to bring lower-VOC pleasure craft coatings to the US market.
3. Revise the categories and VOC limits in the CTG to address current and future product developments in the pleasure craft industry. Examples include

revised VOC limits for several coating categories; a revised definition of “Extreme High Gloss” topcoats; and the introduction of a new category definition and VOC limit for “Antifouling Sealer/Tie Coat” coatings.

The EPA CTG should be consistent with other EPA rulemaking for this industrial sector.

The pleasure craft industry is aware that EPA is currently evaluating the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for Shipbuilding and Ship Repair Operations (40 CFR Part 63 Subpart II). This process may result in a revised Subpart II MACT Standard and/or a new Area Source Standard for HAPs emissions from Pleasure Craft Surface Coating operations. Coatings manufacturers have already provided product information to EPA to assist in this process, and the industry supports rulemaking that will provide a consistent approach to reduce emissions of both VOC and HAPs in this industrial sector.

EPA has indicated that they are reviewing the Pleasure Craft provisions of the EPA CTG.

In response to industry concerns regarding the Pleasure Craft provisions of the EPA CTG, EPA has held a number of internal meetings to discuss the CTG. We understand that EPA is developing guidance to the Regional Offices and to State and Local air agencies on this issue; and that this guidance will be forthcoming in the near future.

The Pleasure Craft Industry is ready and willing to work with Federal, State, and Local air agencies on this issue.

The pleasure craft industry was not afforded the usual opportunity to consult with EPA during the development of the EPA CTG. We therefore feel it is imperative to work with EPA and the Illinois EPA to develop RACT rules that provide reductions in VOC emissions, while meeting the performance and productivity requirements of an important US industry that is under increasing pressure from economic conditions and global competition.

Thank you for your attention and consideration.



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I.E.P.A. Hearing
May 19, 2010

Thank you for allowing me to speak to you today. My name is Robert Raymond. My wife and I founded RayVac Plastic Decorators in 1968. Our son, Robert J. Raymond joined the firm in 1983. He is now an equal share holder. It is our hope his teenage son's may one day continue the family operation. We have been at our current location since 1972. We employ twenty people and sometimes utilize temporary employees. Our gross sales average is about \$1,500,000 per year, but in the current economy we are suffering like many others.

We rely on outside firms for advice on how to be in full compliance with all regulations. I am pleased with our record to date and wish to continue to make progress in reducing our VOC emissions. In the early 90's our VOC emission were in the 40 to 45 tons per year range, which is significantly higher than our ten year average of 11.2 tons.

We currently have an I.E.P.A. (C.A.A.P.P.) permit because our MTE for VOM > 25 TPY. We are exempted out from Subpart PP by permit restriction of < 100 Tons VOM per year. Our actual VOM emission history (<15 Tons VOM/year for last 10 years). Average of 11.2 Tons VOM per year in that period. Normally we run two shifts per day but recently have been limited to one shift. RayVac Plastics is located on Route 30, four miles from the DeKalb County line. If we had built our factory in my wife's home town like she suggested, we would be outside the non-attainment area.

Our present reduction in emissions was achieved in several ways. A large part of the reduction is do simply because of educating ourselves and our employee's. We are sensitive to the issue. In some cases we have decided not to accept jobs that require solvent cleaning or other extra processing. Finally, we invested in two new machines that eliminate the need for basecoats and topcoats in some projects. Unfortunately we can not use this technology over all plastics.

I would invite you to look at our web-site at www.rayvac.com to learn more about our process. On plastics such as polystyrene or ABS traditionally a primer or basecoat needs to be applied. The parts are then baked for one hour at 150 degrees and then processed in our vacuum metalizer where they emerge bright silver. In some cases a clear or tinted topcoat needs to be applied to add abrasion resistance or color.

EXH. 4
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Another problem is that different plastics require a different formulation of basecoat. Currently we inventory small quantities of several basecoats and topcoats. The different formulations require different combinations of solvents. We are hopeful that some deregulated solvents can be incorporated into our formulations, thereby reducing emissions.

I know we can continue to reduce our total emissions by working with our suppliers. The new proposed standard of 2.3# per gallon as applied will be difficult to reach. My request is that coaters of plastic, such as ourselves, be allowed to continue operations under existing regulations. An option would be to decrease the current standards but perhaps to 3 ½ or 4# per gallon. More time may be needed to achieve the desired reduction, so perhaps an extension could be considered. The short compliance period of May, 2011 does not give enough time to test alternatives.

Finally a small company like ours can not afford to purchase capture and control equipment. Even if the equipment was given to us, it is doubtful we could afford to operate it. Ten tons of emissions per year just makes this impractical. Assuming a purchase price of \$250,000 and operating costs of \$75,000.00 per year.

Sincerely,

A handwritten signature in cursive script that reads 'Robert D. Raymond'.

Robert D. Raymond
RayVac Plastic Decorators, Inc.