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Certified Mail Return Receipt 91 7113 3376 8270 0280 8565 Commonwealth of Pennsylvania Environmental Quality Board P O Box 8477 Harrisburg, PA 17105-8477

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ENVIRONMENTAL QUALITY BOARD

DEC

Subject: Comments on Proposed RACT for Flat Wood Paneling Surface Coating Operations (SCO's)

Dear Environmental Quality Board Members:

INDEPENDENT REGULATORY REVIEW COMMISSION

RECD

Please consider the attached comments on the proposed rulemaking that would limit VOC's from Flat Wood Paneling SCO's by adopting US EPA's 2006 Control Techniques Guidelines (CTG) as Reasonably Available Control Technology (RACT). CraftMaster operates five SCO's at its Towanda, PA facility that are possibly subject to the proposed regulations. Apparently, CraftMaster is the "highest emitting" facility in the Commonwealth, per Section F of the preamble. A one-page summary of comments is also attached.

CraftMaster has been a pioneer in the use of low-VOC's (and VHAP's) content coatings since the 1970's, and uses water-based coatings exclusively. It has been determined that our coatings are meeting Best Available Control Technology (BACT), PA Best Available Technology (PA BAT), RACT (under the existing RACT permit), and Maximum Achievable Control Technology per the 2003 Wood Building Products National Emissions Standards for Hazardous Air Pollutants (NESHAP's). No coating solvents other than water and no VOC'scontaining cleaners are used. Liquid coating wastes are treated on-site, with the waste solids deemed non-hazardous solid waste and disposed of at a local municipal/ residual waste landfill. Water is recycled.

CraftMaster is concerned about the economic impact that the proposed regulations could have on our business, especially during the severe recession now affecting our residential building products industry. As currently proposed, the regulations could require the installation of a control device which, we believe, would not be cost-effective. The probable result would be for CraftMaster to discontinue one of its product lines. Thirteen manufacturing jobs in the Commonwealth could be affected.

If you have any questions or require additional information, please contact the undersigned at (570) 268-8737 or by email: <u>mick.steele@cmicompany.com</u>.

Sincerely.

MilSteele

Michael L. Steele Environmental Engineer

cc: C. W. Benton

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Summary of Comments on PADEP Proposed RACT Regulations for Flat Wood Paneling Surface Coating Processes

1. Applicability: The Department needs to clarify what Surface Coating Operations (SCO's) would be subject to the proposed RACT. A listing of Wood Building Product (WBP) subcategories from the 2003 WBP SCO National Emission Standards for Hazardous Air Pollutants (NESHAP's) is presented for consideration.

2. Coatings VOC's Content Limit: According to § 129.52c.(c)(1) <u>each</u> "as applied" coating must meet the limit in Table I of 2.9 Lbs VOC's per gallon coating solids. The limit should be applicable to an entire SCO or category of Flat Wood Paneling Product processed on a SCO, on a <u>weighted-average basis of all coatings applied</u>, rather than to each individual coating.

3. VOC content "as applied": A facility should be able to use "as purchased" VOC's data in lieu of calculating "as applied" data. Calculation of "as applied" should be limited to a situation where one or more components of a blend are not a "complying coating" on its own.

4. Required Overall Efficiency of a Control System: When multiple coatings are applied on a SCO in multiple steps, what VOC content shall be input to the equation to calculate the required overall control efficiency (O)? Also please specify that capture efficiency and destruction efficiency testing be performed per the 2003 WBP SCO NESHAP's, §§ 63.4765 and 63.4766.

5. Daily Recordkeeping: Daily recordkeeping is an unnecessary burden with no known benefit, especially for SCO's where "complying coatings" are used exclusively. The 2006 USEPA Control Techniques Guidelines (CTG) makes no mention of daily recordkeeping.

6. Coating Application Methods: The application methods noted in the proposed regulations may not be technically feasible for all SCO's subject to the proposed RACT regulations. The 2003 WBP SCO NESHAP's and the 2006 CTG do not specify requirements for coating application methods.

7. De minimus quantity: Please specify if an individual VOC can be considered de minimus exempt if it is present in an as-purchased coating at less than 1% by weight, or 0.1% by weight for carcinogens. This is the federal criteria used in Material Safety Data Sheet (MSDS) preparation and in the 2003 WBP SCO NESHAP.

8. Potential VOC Reductions: It is estimated that the Flat Wood Paneling SCO emissions in PA are about 141.1 tons. This is significantly less than the 440.4 tons noted in the preamble. The possible VOC's reductions for the highest emitting facility range from 5.3 to 9.0 tons per year. This is substantially less than the 15.2 tons per year estimated in the preamble.

9. Compliance Costs: The costs noted in the proposed RACT represent only those costs associated with changing from solvent-based coatings to water-based coatings. For one SCO it is estimated that the capital costs to install a Regenerative Thermal Oxidizer (RTO) control device would be \$3.46 million, with annual costs of \$1.51 million. The cost per ton of VOC's controlled is \$43,000 – far greater than any known RACT cost-effectiveness criteria.

10. Work Practice Requirements: The requirement to fully enclose coatings, coating-related wastes, and coating-related clean-up materials handling systems should not be applicable in all instances. Under the 2003 WBP SCO NESHAP's, work practice requirements such as these are not applicable to "complying coatings".

11. Cost-Effectiveness: The proposed RACT should consider cost-effectiveness in a similar manner as the "case-by-case" RACT of PA Code 25 § 129.92(b)(4).

Comments on PADEP Proposed RACT Regulations for Flat Wood Paneling Surface Coating Processes

1. Applicability

Please clarify the Department's intent regarding what Wood Building Product (WBP) subcategories, from the following list, would be subject to the proposed Reasonably Available Control Technology (RACT) regulations for Surface Coating Operations (SCO's). Subcategories are from the 2003 WBP SCO National Emission Standards for Hazardous Air Pollutants (NESHAP's), § 63.4681(a)(1) through (5):

1) Doors, windows, and miscellaneous including:

Doors,

Windows,

Finished doorskins,

Door and window components including:

- Millwork,
- Moulding,
- Trim.

Miscellaneous, including:

- Moulding,
- Trim,
- Shingles,
- Shutters,
- And others.
- 2) Flooring, including:
 - Solid wood flooring, Engineered flooring,
 - Laminate flooring
- Interior wall paneling and tileboard, including: Interior wall paneling, Tileboard.
- 4) Other interior panels (other than interior wall paneling), including: Coated particleboard, Coated hardboard,
 - Coated perforated panels.
- 5) Exterior siding and primed doorskins, including:

Lap siding, Panel siding, Trimboard, Primed doorskins.

Based on Table I and the definitions of § 121.1, the proposed RACT would seem to apply to subcategories 3) and 4) and to the Siding and Trimboard products of subcategory 5). Then activities under subcategories 1) and 2), and the "Primed doorskin" product under subcategory 5), would <u>not</u> be subject to the proposed RACT. Please confirm that this is the Department's intent.

SCO's that are already subject to the following programs should not be subject to RACT:

- Maximum Achievable Control Technology (MACT) under the 2003 WBP SCO NESHAP's,
- A PA Best Available Technology (PA BAT) determination within the past ten years,
- Emissions offset provisions of PA New Source Review (PA NSR).

Controlling VOC's and VHAP's emissions at the MACT or PA BAT level would seem to be by definition beyond the level considered "reasonably available". A SCO subject to the emissions offsets requirements under PA NSR has already contributed to the state-wide annual reduction in actual VOC's emissions which is the purpose of RACT.

2. Coatings VOC's Content Limit:

According to § 129.52c.(c)(1) <u>each</u> "as applied" coating must meet the limit in Table I of 2.9 Lbs VOC's per gallon coating solids. The limit should be applicable to an entire SCO or category of Flat Wood Paneling Product processed on a SCO, <u>on a weighted-average basis</u> of all coatings applied, rather than to each individual coating.

This is consistent with the 1978 USEPA Control Techniques Guidelines (CTG) for Factory Coating of Flat Wood Paneling, the 2003 WBP SCO NESHAP's, the 2006 CTG, and the equivalency provisions of § 129.51. Then, where a number of individual coatings are applied to a Flat Wood Paneling Product, lower VOC's content basecoats could offset higher VOC's content topcoats in a weighted-average approach. Units would be on a uniform basis of Lbs VOC's per gallon of coating solids.

This approach is consistent with the 1978 CTG, where the limits are expressed as Lbs VOC's per 1000 ft2 of Flat Wood Paneling product coated for a particular product category. The product categories noted in Table 1 (of the 2006 CTG), for example Class II hardboard panels, require a number of individual coatings to be applied. Then to determine compliance with the limit, all coatings used must be combined and considered.

The weighted-average approach directly follows the 2003 WBP SCO NESHAP's under compliance option (b), "Emissions Rate without Add-on Controls". See §§ 63.4691 (b) and 63.4751

In the 2006 CTG, the coating system limit from the 1978 CTG is converted from Lbs VOC's per 1000 ft2 product to its equivalent as Lbs VOC's per gallon coating less water and exempts. This value in turn is converted to its equivalent as Lbs VOC's per gallon of coating solids. It follows then that if one begins with a limit where all coatings used must be combined and considered, then its equivalents must also consider all coatings used as well - not each coating individually.

Table 2 of the 2006 CTG is titled "Recommended Emissions Limits for Flat Wood Paneling Coating Operations". It does not specify "individual coatings" or even "coatings". The limits are for "Coating Operations". Section VI. A. contains the following statement: "An equivalent limit, expressed as units of weight of VOC per volume of solids in all coatings would be is 350 grams of VOC per liter solids (2.9 Lbs VOC per gallon of solids)." Underline added. If this were intended to be a maximum value not to be exceeded by an individual coating, it would say "in any coatings". Nothing in the 2006 CTG would seem to prohibit the weighted-average approach to be used by the States in establishing their RACT regulations.

The US EPA's intent was discussed with Mr. Lynn Dail of the Office of Air Quality Planning and Standards (OAQPS) who was designated in the October 5, 2006 Federal Register as the technical contact for the 2006 CTG. The feedback from Mr. Dail was that the weighted-average approach would meet the intent of the rule.

3. VOC content "as applied":

A facility should be able to use "as purchased" VOC's data in lieu of calculating "as applied" data. In many instances the "as applied" and "as purchased" values will be the same when only water or solids and VOC's-free catalysts are blended with the coating prior to application. When two or more "complying coatings" (each less than 2.9 Lbs VOC's per gallon coating solids) are combined, the resulting blend must also be compliant. To require a calculation to prove this is an unnecessary burden with no known benefit in reduced emissions. Calculation of "as applied" should be limited to a situation where one or more components of a blend are not a "complying coating" on its own.

4. Required Overall Efficiency of a Control System

When multiple coatings are applied on a SCO in multiple steps, what VOC content shall be input to the equation to calculate the required overall control efficiency (O)? The highest VOC content coating? The weighted average VOC content? The weighted average of non-complying coatings? Please clarify the Department's intent.

Also please specify that capture efficiency and destruction efficiency testing be performed per the 2003 WBP SCO NESHAP's, §§ 63.4765 and 63.4766.

5. Daily Recordkeeping:

Daily recordkeeping is an unnecessary burden with no known benefit, especially for SCO's where "complying coatings" are used exclusively. SCO's currently subject to monthly recordkeeping that are satisfying the applicable Title V OP and 2003 WBP SCO NESHAP requirements, should be allowed to continue on that basis. Emissions calculations can be based on certified VOC's data sheets provided by the coatings Manufacturers and monthly coating receipts and change in inventory. Results can be audited and should not be subject to the errors and inconsistencies found in daily records. The proposed RACT regulations have no daily emissions limits to compare daily recordkeeping results to. The 2006 CTG makes no mention of daily recordkeeping.

Also, how does one calculate the VOC content in Lbs VOC's per gallon of coating solids for a cleaning solvent as required under § 129.52c (d) (2)?

6. Coating Application Methods:

The application methods noted in the proposed regulations may not be technically feasible for all SCO's subject to the proposed RACT regulations. Airless Sprays are used in many instances. It is requested that the requirements regarding coating application methods be removed from the RACT regulations. This is consistent with the 2003 WBP SCO NESHAP's and the 2006 CTG that make no mention of requirements for coating application methods.

7. De minimus quantity:

A single coating with annual usage of less than 50 gallons should be considered de minimus regardless of the amount of coatings used elsewhere in the facility.

Please also specify if an individual VOC can be considered de minimus exempt if it is present in an as-purchased coating at less than 1% by weight, or 0.1% by weight for carcinogens. This is the federal criteria used in Material Safety Data Sheet (MSDS) preparation and in the 2003 WBP SCO NESHAP.

8. Potential VOC Reductions:

If the ten facilities in PA other than the highest emitting (CraftMaster Manufacturing, Inc.) had VOC's emissions of 41.7 tons in 2008, then the Flat Wood Paneling SCO emissions in PA, including 99.4 tons of SCO emissions possibly applicable from CraftMaster, could not be more than about 141.1 tons. This is significantly less than the 440.4 tons noted in the preamble. The possible VOC's reductions for CraftMaster from 2008 levels range from 5.3 (reducing VOC's content to 2.9 Lbs per gallon coating solids) to 9.0 (control device at 90% capture and control efficiency) tons per year. This is substantially less than the 15.2 tons per year estimated in the preamble to the proposed RACT regulations.

9. Compliance Costs:

The costs noted in the proposed RACT represent only those costs associated with changing from solvent-based coatings to water-based coatings, which are indeed negligible. If existing coatings are already water-based and no technically feasible, lower-VOC substitutes are available, the cost to install a control device would be substantially higher. For one SCO it is estimated using the US EPA OAQPS Control Cost Manual, that the capital costs to install a 90% efficient capture system and a Regenerative Thermal Oxidizer (RTO) control device would be \$3.46 million, with annual costs of \$1.51 million. The cost per ton of VOC's controlled would be almost \$43,000 – far greater than any known RACT cost-effectiveness criteria.

NOx emissions associated with operating the RTO are estimated at 4.7 tons per year.

The additional costs associated with daily recordkeeping and the enclosing of all coatings, coating-related wastes, and coatings-related clean-up materials handling systems have not been evaluated. These could be significant as well.

10. Benefits of associated HAP's reductions:

WBP SCO's which include the SCO's affected by the proposed RACT, are already subject to the 2003 WBP SCO NESHAP's for HAP's. The "serious health threat" from the remaining HAP's is believed to be overstated.

11. Work Practice Requirements:

The requirement to fully enclose coatings, coating-related wastes, and coating-related cleanup materials handling systems should not be applicable in all instances. Exceptions should be made where coatings are water-based "complying coatings", the cleaning material is limited to water, and wastes are treated on-site. It would not be technically feasible to enclose these operations in all instances nor would it be cost-effective. VOC's emissions from coating-related wastes can already be accounted for by the change in as-purchased coating inventory. Then no actual reductions in VOC's emissions would be realized by enclosing the handling systems – only a change to the emissions pathway.

Under the 2003 WBP SCO NESHAP's, work practice requirements such as these are not applicable to "complying coatings".

12. Cost-Effectiveness

The proposed RACT should consider cost-effectiveness in a similar manner as the "case-bycase" RACT of PA Code 25 § 129.92(b)(4). It is expected that the installation of a control device on a SCO already complying with the 2003 WBP SCO NESHAP's would have a poor cost-effectiveness. The same may be said for enclosing of all coatings, coating-related wastes, and coatings-related clean-up materials handling systems where "complying coatings" are used.

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